

# Secretary of State Audit Report

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## Oregon State Hospital: Significant Actions Taken to Improve Safety and Promote Patient Recovery, but Further Improvements are Possible

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### Executive Summary

The Oregon State Hospital has undergone enormous change. To better promote patient recovery, management has taken significant action to improve safety and patient care. The hospital offers more treatment options and strategies to create a safer environment. It has also undertaken efforts to reduce overtime, and implement an electronic health record system. However, more action is needed in these areas to further improve safety and promote patient recovery.

### Oregon Moves Towards Recovery- Oriented Mental Health Care



The first treatment mall opened at the hospital in 2006, marking a shift from decades of unit-based treatment. The hospital operates much like a college campus. Patients reside on the living units, attend class-like treatment groups on the treatment malls separate from their living space, and eat in cafeteria-style dining rooms. Treatment groups help patients learn skills like handling difficult emotions, developing healthy relationships, managing medication, and understanding the legal process.

New Salem campus facilities were completed in 2011 to further create a sense of well-being. Architectural features incorporate design elements intended to minimize physical safety risks while promoting patient recovery. The buildings look and feel similar to a college campus with plenty of green space. Holding an average of about 600 patients, the facility offers them opportunities to interact with their peers and simulate community experiences such as visiting a coffee shop or a salon.

The adoption of treatment malls is part of Oregon's larger move towards recovery-oriented mental health care. This approach takes the view that individuals with mental illness can improve their health and wellness, live a self-directed life, and strive to reach their full potential through the

recovery process. The recovery focus guides mental health services in Oregon, including the Oregon State Hospital.

## Improving Treatment Plans and Groups Could Help Patient Recovery



Hospital staff work with patients to develop treatment goals to address challenges that stand in the way of patient recovery. Patients attend treatment groups directed toward their treatment goals and group leaders evaluate their progress.

Case formulation is an important tool to help clinicians create effective treatment care plans that guide patient treatment. Formulations identify the signs and symptoms of mental illness, motivations behind patient behaviors, and patient strengths and skill deficits at a particular point in time. The process distills critical elements from the huge amount of information available and places them into a narrative context. It can be used to help develop treatment goals and guide patients to the treatment groups most likely to benefit them. We found that the hospital provides very little guidance and training on how case formulations are developed. As a result, case formulations are not consistent.

Treatment groups should be aligned with patients' treatment goals given their importance in addressing patient challenges and evaluating patient progress. However, it is unclear whether hospital staff designed therapy groups to help patients address these goals. Hospital staff did not use patients' treatment goals when selecting classes to offer on the treatment mall.



Also, the hospital does not have policies and procedures to ensure patients schedule classes that address their treatment goals and hospital staff do not use treatment goals to evaluate class effectiveness.

The hospital initiated improved treatment by first implementing strategies to improve patient safety and adopting a new culture centered on patient recovery. Management is committed to further treatment improvements. However, the hospital has not yet developed a formal plan for implementing additional treatment improvements.

We recommend Oregon State Hospital management develop a formal plan for implementing treatment improvements to ensure the consistency of case formulations and integrate treatment goals with the treatment mall groups offered. The plan should include steps for communicating the needs for continual improvement, strategies, and timelines for implementation, milestones to monitor progress, and measures designed to evaluate the plan's success.

We also recommend Oregon State Hospital management develop policies and procedures for developing and documenting case formulations; and designing, selecting, and scheduling treatment mall classes that consider treatment goals.

## Fewer Incidents of Seclusion and Restraint Improved Patient and Staff Safety



NASMHPD's Six Core Strategies for Reducing Seclusion and Restraint

Patients need to feel safe in order to make progress towards recovery. Hospital staff also need to feel safe to form therapeutic relationships with patients that support their recovery. Reducing patient aggression can reduce the safety risks their behavior can pose, and so reduce the need for staff to place patients in either seclusion or restraint.

The hospital adopted the National Association of State Mental Health Program Directors' (NASMHPD) strategies for safely reducing seclusion and restraint (S/R) use. These strategies address underlying reasons for patient aggression and, if implemented, can help organizations reduce the need to use seclusion or restraint. Management has made progress in implementing each of the six strategies, and their continued efforts can further reduce the use of S/R, and improve safety.

To improve safety at the hospital, we recommend Oregon State Hospital management:

- continue to address organizational culture, training needs, and attitudes;
- continue to use data to inform decision-making and practice in S/R reduction efforts;
- continue Collaborative Problem Solving and Safe Containment implementation to ensure staff competency;
- update policies and procedures that guide the on-the-job training of nursing staff to ensure consistency among the programs;
- consider reestablishing the nursing staff mentoring program;
- continue efforts to integrate S/R reduction tools and assessments into individual patient treatment;
- provide adequate resources to the Peer Recovery Services Director to help ensure the department's success;
- continue to ensure stakeholders and consumers have a role in S/R reduction efforts;
- continue to work with the Governor and legislature to fill vacant seats on the Oregon State Hospital Advisory Board; and
- continue efforts to finalize the hospital's debriefing policy.

## Overtime Has Been Reduced— Fatigue Concerns Remain



Excessive overtime can lead to fatigue, affecting nursing staff's ability to deliver good patient care, make good clinical decisions, and communicate effectively. Nursing staff provide the bulk of direct-patient care at the hospital, comprising registered nurses (RNs), licensed practical nurses (LPNs), mental health therapists (MHTs) who are licensed certified nursing assistants, and habilitative therapy technicians (HTTs).

The hospital has worked to reduce overtime by hiring nursing staff to fill vacancies, using ratios to ensure appropriate staffing levels, creating a float pool of nursing staff to cover unscheduled absences, revising weekend shift times and hours, and addressing patient aggression to reduce the need for additional staff. Additional actions could further reduce overtime and its effects on patient care.

We identified several staff whose overtime hours indicate they may be at risk for fatigue and its effects. There are no policies that limit overtime hours or consecutive days staff can work. Nor does the hospital offer training on fatigue and its effects, recognizing fatigue, or on employee obligation to ensure they can provide safe patient care.

To reduce overtime and its adverse effects on patient care, we recommend Oregon State Hospital management develop strategies to limit unscheduled absences and manage individual staff's overtime. Management should also provide training to staff on fatigue and its effects on patient care.

We further recommend Oregon State Hospital management consider the analytical framework used in our 2012 audit of the Department of Corrections to explore other strategies to further manage personnel costs while meeting patient treatment needs and maintaining a high level of patient and staff safety.

### **Automation Can Improve Patient Care**

The hospital is implementing an electronic health record system, but parts of the system remain incomplete. The incomplete system adversely affects organizational efficiency and potentially, the quality and cost of patient care.



Completing the system would help automate several key manual processes. For example, the hospital could replace its manual process for dispensing patient medication with an automated system it purchased several years ago. The automated system would provide safeguards designed to prevent medication dispensing errors.

The hospital is working to convert patient records from paper to electronic records but critical medical records such as patient prescriptions, allergy information, and “do not resuscitate” and “advanced directive” documents are still maintained as paper. Hard copy record systems can lead to additional costs, lost productivity, and limited accessibility.

We recommend Oregon State Hospital management complete implementation of its electronic health record system, prioritizing automation of processes that significantly impact patient care and conversion of critical patient information to electronic format.

## **Agency Response**

The agency generally agrees with our findings and recommendations. The full agency response can be found at the end of the report.

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## Background

### Mental Illness Impacts Many Oregonians



*One in five adults experiences a mental illness.*

Mental illness is common. According to the National Alliance on Mental Illness, one in every five adults in America experiences a mental illness in any given year. At some point in their lives, half of adults will develop at least one mental illness— affecting their mood, thinking, and behavior. Over half a million Oregonians could be living with mental illness.

Mental illness becomes disabling when it seriously impairs an individual's functioning in daily life. About 4% of adults nationwide are estimated to have a serious mental illness, such as schizophrenia or bipolar disorder. These adults are more at risk for developing chronic medical conditions. On average, individuals living with a serious mental illness die 25 years sooner than their peers, mostly from treatable medical conditions.

Suicides are also strongly linked to mental illness. About 70% of Oregonians who die by suicide have a diagnosed mental illness, depressed mood, or substance abuse disorder. According to a 2012 Oregon Health Authority (OHA) report, suicide rates have climbed since 2000 and are the second leading cause of death for Oregonians aged 15-34.

Those with mental illness do not suffer alone. Mental illness also affects their families, friends, and communities. It is estimated that nearly half of adults in homeless shelters live with severe mental illness or a substance abuse disorder. Nationally, the economic impact of serious mental illness exceeds \$193 billion each year in lost earnings alone.

#### ***Oregon's mental health system operates on a service continuum***

Oregon's mental health system operates on a service continuum, operating on the premise that communities provide "front" and "back" end services. Front-end services include psychiatric treatment and medication, case management, crisis intervention, supported employment, respite, and short-term care. Those with the most serious mental illnesses at times receive treatment at state psychiatric hospitals.

State psychiatric hospitals are an important part of the mental health care system. They assess, evaluate, and treat patients with serious and complex psychiatric conditions who cannot be served in their community. Patients are committed to the hospital by Oregon's civil or criminal court system. The goal of state psychiatric hospitals is to eventually transition patients to a less restrictive community setting.

Individuals with serious and persistent mental illnesses, including those who have been released from a state hospital, can require intensive outpatient and residential treatment. Communities also are responsible for providing these back-end services.

*"The hospital, as an element in the spectrum of mental health services, has a specific role to play, which is to receive people from the community when they need to be here, to provide discharge-oriented treatment, and to successfully return them back to the community when they are ready to leave."*

—Greg Roberts, Oregon State Hospital Superintendent

## Recovery from Mental Illness is Possible

The perception that mental illness was “incurable” used to destine people with mental illness to a life in a psychiatric hospital. Those days are gone. Recovery is possible and most people with mental illness can get better.

The Substance Abuse and Mental Health Services Administration (SAMHSA), part of the U.S. Department of Health & Human Services, defines recovery from mental illness and/or substance abuse disorders as a process of change. In this process, individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Ten principles guide the process. The recovery process:

1. Emerges from hope;
2. Is person-driven;
3. Occurs via many pathways;
4. Is holistic;
5. Is supported by peers and allies;
6. Is supported through relationships and social networks;
7. Is culturally-based and influenced;
8. Is supported by addressing trauma;
9. Involves individual, family, and community strengths and responsibility; and
10. Is based on respect.



*SAMHSA's Recovery Wheel*

## Calls for Change in State Mental Health System



In 2004, the Governor’s Mental Health Task Force reported Oregon’s mental health care was uncoordinated and underfunded. In its report, the task force stated that recovery was the goal of all mental health services. The task force also called for the reinvention of the Oregon State Hospital (hospital) as a facility focused on excellence. As part of this reinvention, new hospital facilities were needed.



In 2005, plans to replace the existing Salem hospital began. The first phase planning report concluded the physical condition of most buildings was inadequate to provide effective treatment. Patient rooms were overcrowded and undersized. Conditions in patient living and treatment areas were unsafe and some buildings were so decrepit they were life threatening. In fact, more than 40 percent of the hospital was unusable due to toxic hazards, leaking roofs, and crumbling walls.

In 2006, a U.S. Department of Justice (DOJ) investigation and subsequent report reinforced the need for change at the hospital, but went beyond the

physical structure. Changes were needed to protect patients from harm, provide appropriate care, and to ensure the use of seclusions and restraints (S/R) met professional standards.

The second phase planning report recommended replacing the old hospital in Salem with two new hospitals. The two new hospitals would become the current hospital campuses in Salem and Junction City. Designs for both hospitals were expected to reflect the recovery model of care.

In 2009, construction of the new Salem hospital began. By the end of 2011, construction was complete and patients and staff moved into the new buildings. Between March 2014 and March 2015, the hospital saw significant movement and change. The facilities in Pendleton and Portland closed and patients and staff were transferred to the Salem facilities. The new Junction City campus opened, and dozens of patients and staff transferred to the new facilities.



### ***Oregon State Hospital***

Oregon State Hospital operates under the Oregon Health Authority (OHA) and currently runs two campuses— Salem and Junction City. In 2014, the hospital provided care for 1,386 individuals who could not be served in the community. A goal of the hospital is to reduce the safety risk of patients in order to transfer them to a less restrictive environment.

The hospital is designed to serve Oregon’s most ill— civilly and criminally (forensically) committed adults who suffer from serious and persistent mental illness. Courts commit civil patients to OHA. Civil patients who cannot be safely treated in a less-restrictive environment are committed to the hospital. At times, a guardian may also voluntarily commit civil patients.

Patients are separated into programs based on their legal status and treatment needs. Guilty Except for Insanity (GEI) patients are first admitted into the Pathways program and transition into the Bridges program as they prepare for release from the hospital. Civil patients are admitted into the Crossroads or Springs programs, depending on their treatment needs. Finally, aid and assist patients are admitted into the Archways program. See Figure 1 for a description of each program.

**Figure 1: Hospital programs**

Hospital Program	Patient legal status	Patients served in program
<i>Archways</i>	Aid and assist (forensic)	All patients unable to aid and assist in their own defense
<i>Pathways</i>	GEI (forensic)	GEI patients.
<i>Bridges</i>	GEI (forensic)	GEI patients who are transitioning back to the community.
<i>Crossroads</i>	Civil	Civilly committed patients.
<i>Springs</i>	Civil	Civilly committed patients with traumatic brain injury, psychiatric disorders associated with advanced age, or significant medical needs.

*GEI*- The largest segment of the patient population is those found guilty except for insanity by a criminal court. This means they were found guilty of committing a crime, but due to their mental illness, they did not understand the criminality of their behavior or were unable to follow the law at the time. GEI patients are under the jurisdiction of either the Psychiatric Security Review Board or State Hospital Review Panel, depending on the nature of the crime.

Though GEI patients make up the largest portion of the average monthly census, they typically represent the smallest portion of hospital admissions and have the longest length of stay. Their length of stay varies based on the nature of their crime and illness, but typically is just over two years.

*Civil*-The second largest patient population is those who are civilly committed. This means a judge or, in some cases a legal guardian after review by OHA, has found them to be a danger to themselves or others and in need of secure 24-hour care, which is unavailable in their community. The typical length of stay for a civil patient is about five and a half months.

*Aid and Assist*- Patients who have been charged with a crime and found by a judge unable to aid and assist in their defense are committed to the hospital to restore their competency to stand trial. However, they remain under court jurisdiction. Hospital clinicians evaluate these patients to determine if they are competent to stand trial. If and when they are found competent, they return to court to face their charges.

Though they make up the smallest portion of average monthly census, these patients accounted for over half of the admissions in 2014. Aid and assist patients typically have the shortest length of stay at about two and a half months.

Figure 2 shows the average monthly hospital census and number of admissions by patient legal status in 2014.



*Hospital staff meet with a Bridges patient to discuss benefits*

**Figure 2: 2014 Hospital census, admissions, and length of stay**

Patient legal status	Average monthly census	Total annual admissions	Median length of stay (days)
Forensic- Aid and Assist	150	461	72
Forensic- GEI	249	76	821
Civil	204	290	162
Other	2	6	54
<b>Total</b>	<b>605</b>	<b>833</b>	

Inpatient care at a psychiatric hospital can be expensive because it includes providing patients with 24-hour security, health care, and behavioral treatment. Costs associated with patients' daily living such as food and housing are also included.

The hospital reported an average daily cost per bed totaling \$829 for fiscal year 2014. This was fifth highest among 24 psychiatric hospitals in other regional states.

## Treatment Malls Provide Centralized Treatment

The first treatment mall opened at the hospital in 2006, marking a shift from decades of unit-based to centralized treatment. In unit-based treatment, patients live and receive treatment on their unit with the same cohort of patients and staff. Unit-based models are logistically easier because they lack physical movement of patients or staff, but can create considerable roadblocks to facilitating patient recovery.

In a unit-based model, patients run a greater risk of isolation and boredom. They have fewer opportunities for social engagement with their peers because their interactions are limited to patients on the same unit. Treatment options and providers are also limited to those that work on the unit, creating services that are fragmented or duplicated within programs. In this model, it can be more difficult to meet individual treatment needs.

The treatment mall model on the other hand, offers significant recovery-oriented benefits. Patients have more treatment options. They have more opportunities to interact with their peers and a variety of staff. As a result, staff can better meet individualized treatment needs of patients. At the same time, the hospital maximizes the use of staff and their skills.

Treatment malls have grown in popularity across the nation since the concept was introduced in the late 1990's. Like many other state hospitals, treatment malls are now Oregon's primary mode of treatment delivery.

The hospital operates much like a college campus. Patients reside on the living units, attend class-like treatment groups on the treatment malls separate from their living space, and eat in cafeteria-style dining rooms. Treatment groups are varied. Each hospital program has a corresponding treatment mall. Patients generally attend their program's treatment mall, but may attend other malls, depending on their treatment needs. Patients



*Patients in a legal skills class on the Harbors treatment mall*

from different units come together to attend groups on treatment malls. Patients attend groups related to their treatment goals. For example, Archways patients take legal skills classes to help them learn how to cooperate with their lawyer, participate in their defense, and understand court proceedings.

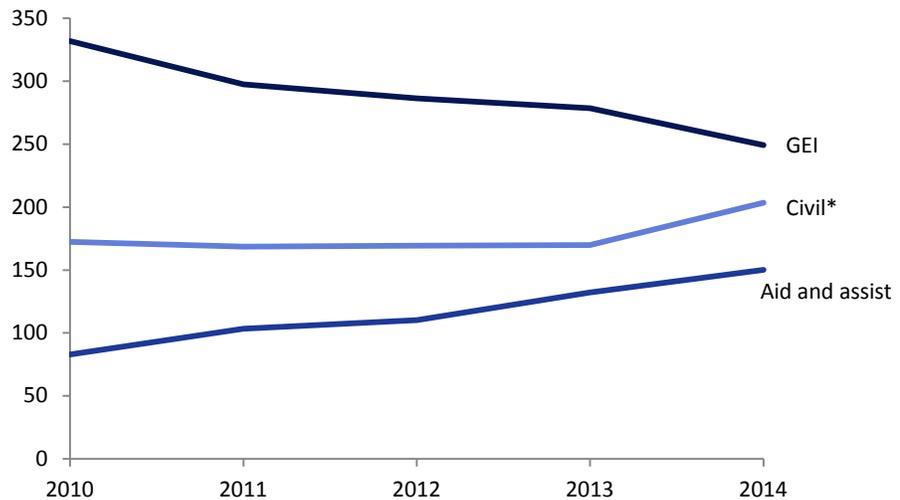
## Unexpected Growth in Admissions of Aid and Assist Patients Creates Challenges

Forensic patients represented 70% of the hospital's population in 2014, according to the hospital's average monthly census data. In addition, the forensic population's composition has changed, with fewer GEI and more aid and assist patients.

During the hospital's replacement planning, it was predicted 40% of yearly forensic admissions would be aid and assist patients and 60% would be GEI patients. However, in 2014, aid and assist patients comprised 86% of forensic admissions, more than double the predicted percentage.

Hospital management believes the rise in admissions of aid and assist patients is not sustainable. They accounted for more than half of all admissions in 2014. Management reported this unexpected growth has created challenges for the hospital, including the need to open new units to accommodate the growing numbers. See Figure 3 for the average monthly census by patient legal status from 2010-2014.

**Figure 3: Average number of patients (monthly) 2010-2014**



\*The closing of the Blue Mountain Recovery Center accounts for a portion of the increase in civil patients from 2013-2014.

Unexpected increases in aid assist patients can also pose unique safety challenges for the hospital. We heard in interviews that these patients are often unstable when admitted and their behavior can negatively impact the treatment environment of their unit. We also heard that aid and assist

patients are less likely than others to receive medication to treat their symptoms before arriving at the hospital. Management will likely need to take additional precautions to ensure that the hospital's changing population will not compromise patient and staff safety.

## **U.S. Department of Justice Reports Oregon Needs More Community Mental Health Services**

In 2014, the U.S. DOJ released an interim report suggesting Oregon lacked adequate community mental health services. The U.S. DOJ concluded the state could not fully transition to a community-based system for mental health care because it lacked high intensity services and critical supports for housing and employment. As a result, Oregon would continue to depend on institutional settings, like the hospital, to care for adults with serious and persistent mental illnesses.

The U.S. DOJ also concluded that it was unclear whether community services were appropriately distributed and allocated across Oregon.

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## Audit Results

### Additional Planning Could Improve Treatment

Identifying and meeting patients' treatment needs is critical to their recovery. The hospital uses an interdisciplinary treatment team (team) model to plan, deliver, and evaluate individualized patient treatment. Teams are responsible for planning patients' treatment and helping patients reach their treatment goals.



*A patient makes pottery in an art therapy classroom*

Treatment planning is documented in patient care plans (treatment plans). The plans are comprised of several key components developed by members of the team. Patient diagnoses, assessments, problems or challenges, and observations are documented in the plans. These help teams understand their patients and what they can do to help address their patient's needs. Patients are encouraged to participate in all aspects of planning their own treatment.

The team works with each patient to create individualized plans to guide treatment. Treatment plans are patient-centered roadmaps focused on individual rehabilitation and recovery. Short and long-term goals are developed to address each challenge patients face. Patient treatment should tie to these goals.

#### ***Effective treatment planning and delivery is critical to patient recovery***

Although treatment groups provided on the treatment malls are just one type of treatment at the hospital, the malls are the primary mode of treatment delivery. Accordingly, teams should work with patients to ensure the groups they attend address the goals identified in their treatment plan.

Treatment planning should inform the treatment patients receive. Patient progress in treatment should then inform future treatment planning. When coupled with best practices, we would expect the following continuous improvement approach tabled in Figure 4 to patient treatment.

**Figure 4: Using the Deming “Plan-Do-Check-Act” model to create an ideal continuous improvement approach to patient treatment**

Plan	Do	Check	Act
<i>Treatment is <b>planned</b> to identify and address reasons behind patient behaviors.</i>	<i>Treatment patients <b>receive</b> help them meet their goals.</i>	<i>Treatment is <b>evaluated</b> on its impact on patient progress.</i>	<i>Treatment is <b>revised</b> to better help patients meet their goals.</i>
<p>Team develops understanding of patient’s needs and strengths.</p> <p>Together with patient, team identifies long and short-term treatment goals to address patient’s needs.</p> <p>Team and patient together select appropriate interventions to help meet treatment goals.</p>	<p>Clinical disciplines design therapy groups that help patients meet their treatment goals.</p> <p>Hospital staff determine which groups to offer based on what will best help patients meet their treatment goals.</p> <p>Teams help patients schedule groups that align with their treatment goals.</p>	<p>Treatment group outcomes tie to patient treatment goals.</p> <p>Treatment groups are evaluated on their impact on patients’ progress in meeting treatment goals.</p> <p>Patient progress is measured on how well patients meet group outcomes.</p> <p>Patients’ treatment goals are updated based on progress made in their groups.</p>	<p>Updated treatment goals are used to determine future treatment groups offered in treatment malls and individual patient scheduling.</p> <p>Results from treatment group evaluation are used to improve class design.</p>

We did not assess the effectiveness of the hospital’s treatment planning and delivery processes because we did not receive timely access to patient information. However, we reviewed the process for treatment planning and delivery and identified several opportunities for improvement.

***Hospital could improve treatment planning***

Case formulations (formulations) are critical to developing effective treatment plans. They synthesize a large amount of information from patient assessments and organize it in a way that is helpful in understanding the patient and why they are currently hospitalized. Formulations should integrate key factors and guide individualized treatment. For example, clinicians can use formulations to identify patient skill deficits that need to be improved and strengths that can be leveraged. Once identified, clinicians create treatment strategies for how best to meet these treatment needs and facilitate release from the hospital or movement to a less restrictive environment. These strategies drive treatment planning and delivery. Thus, improving case formulations can improve treatment planning.

Limited access to treatment plans prevented us from evaluating formulations, but hospital management acknowledged formulations need



*Patients participate in group therapy on the Springs treatment mall*

improvement. Specifically, management explained formulations are not always consistent across teams.

Teams can use assessments and observations to identify behaviors. However, they also need to understand the factors contributing to these behaviors and why a patient is committed to the hospital. Understanding *why* a patient is displaying a particular behavior *at that time* is important for determining the best course of treatment. Biological, psychological, environmental, and social factors can help explain how a person has come to present a certain disorder or circumstances at a particular point in time. Approaches to case formulations can differ, including what independent variables are important in an individual's case.

Creating a case formulation can be a challenging process. Literature suggests the content of formulations can vary depending on the approach of the clinicians. The hospital does not have policies to guide clinicians on how to conduct case formulations, nor does it offer practical training on how to do so. As a result, case formulations are not consistently conducted.

### ***Integrating treatment goals with treatment group design, selection, and scheduling could improve classes***

Teams develop short and long-term treatment goals to address challenges that stand in the way of each patient's recovery. The team and patient work together to identify appropriate treatment interventions that help patients achieve their treatment goals. Progress toward achieving treatment goals is also used as a measure for assessing patient's overall progress.

**Design-** When the hospital began the transition from a unit-based system to the treatment mall model in 2006, available evidence suggests treatment mall groups were designed based on clinician skill and expertise. It is not clear that, since the transition, the hospital has systematically re-evaluated its treatment group offerings to ensure they align with specific treatment goals outlined in patients' treatment care plans.

However, the hospital reports that some groups have been modified based on patient needs. For example, hospital management told us that in 2010, they used a patient needs assessment to develop programming for the first treatment mall in the new facilities, in the Harbors building and further used professional opinion regarding the needs of patients in group design for the Trails building. In 2015, the Archways treatment mall reportedly began making changes to group design, based on overcrowding.

**Select-** Hospital staff did not use treatment goals to select treatment groups offered on the mall. Rather, the treatment groups are chosen quarterly based on several factors including clinicians' professional judgment, perceived patient needs in each program, and needs assessments. Patient preferences and satisfaction surveys are also considered.



*Patients engage in an art therapy class*

The hospital recently began using patients' skill deficits identified in assessments to assist clinicians when considering group offerings. However, patient assessments are initially conducted early in the treatment planning process and are only one component used to develop patient's treatment goals. Also, skill deficits identified in the assessments may not always align with patients' treatment goals.

### **Setting Goals**

*I'm going to set a goal today,  
A short term, long-term goal I say,  
For I am willing,  
And my values are filling,  
My mind with a need,  
For the cognitive defusion  
techniques I read,  
To accept and commit to,  
That which is risky and true,  
And less avoidance and control,  
For that takes a toll,  
On my short life span,  
Oh man! Oh man!  
There goes my mind again.*

- Oregon State Hospital patient, 2012

**Schedule-** Patients, with staff assistance, select the groups they attend each quarter, but do not always end up in groups that align with their treatment goals. During interviews, hospital managers and staff told us of instances where patients were in treatment groups unrelated to their treatment goals. These groups are less likely to help patients recover because they are not tied to patient's treatment needs.

Current policies do not ensure patients are attending treatment mall groups that address their treatment goals. They do not clarify who within the team is responsible for ensuring patients attend appropriate groups. Nor do they require treatment mall staff or teams to review group enrollments to ensure patients and classes are properly matched. Improving these polices would provide greater assurance that patients are attending groups that best help them achieve their treatment goals.

The Crossroads program has made efforts to better match its patients with appropriate groups. Teams within this program designate a member as the patient's "care coordinator." Care coordinators meet one-on-one with patients to learn more about their strengths and weaknesses. They also consult with other team members and treatment mall staff on what groups can best prepare patients for discharge.

Though this is a promising model, it is not clear whether care coordinators are expected to use treatment goals to help patients choose appropriate groups. Also, management has not planned how to evaluate the model's success or implement it in other programs.

### ***Treatment group evaluation could improve with better integration of treatment goals***

Group leaders evaluate patients on their progress. Given this, we would expect group evaluations that measure how well groups help patients meet their treatment goals.

But we learned that the hospital does not measure how well groups help patients achieve their treatment goals. Without effectiveness measures, it would be difficult to determine the value groups add in helping patients recover.

Recent improvements may allow for better group evaluation. The hospital is piloting a new process for documenting patient progress in treatment mall groups. This process requires group leaders to check fields in the electronic health record that conclude on progress patients make in

achieving their goals. These fields will allow managers to easily sort and aggregate patients' progress data by the groups they attend.

### ***Hospital leadership has a vision for improving treatment***

In the past several years, management has focused resources on improving hospital culture and addressing safety concerns through its "Culture of Safety" initiative. Tackling these two issues, culture and safety, has helped to prepare the hospital for the next stage in improvement efforts—effectively addressing needed changes in treatment planning and delivery.

The hospital is committed to improving patient treatment, and has articulated a vision, but management has not fully developed a plan for implementation. Such a plan would include steps for communicating the reasons for change, strategies, and timelines for change implementation, milestones to monitor progress, and measures designed to evaluate the plan's success.

Through their existing performance management system, the hospital has been documenting its core processes and monitoring outcomes. Hospital leadership has reported future plans for improving treatment will build upon this existing framework.

## **Added Efforts Could Further Improve Patient and Staff Safety**

Safety is critical for patient recovery. Reducing aggressive events that lead to seclusion and restraint (S/R) is vital to improving safety. The hospital has made progress in reducing S/R use and in implementing strategies for a safer environment. Strategies include redesigning the facilities to support recovery and improving treatment and organizational culture. Sustained efforts in these areas can help to further reduce S/R use and improve safety.

### ***Patient and staff safety is critical to promoting recovery***

When people do not feel safe, their "fight or flight" response kicks in and they try to control their environment. Patients need to feel safe before they can begin to make choices towards their recovery.

Patients are unlikely to recover in an environment where they do not feel safe. In the same way, if staff feel unsafe, they are unlikely to form the therapeutic relationships with patients necessary to facilitate recovery.

### ***Reducing the use of seclusion and restraints is essential for safety***

S/R is coercive, traumatizing, and provides many opportunities for patient and staff injuries. However, hospital staff may legally use seclusion or restraint when violent or self-harming behavior poses an immediate physical threat to the patient or others' safety. It is a safety measure of last

*"Use of seclusion or restraint shall be considered a treatment failure."*

-Oregon State Hospital Seclusion and Restraint policy

resort. Using either seclusion or restraint requires physician approval and on-going patient monitoring.

The federal Centers for Medicare and Medicaid Services consider a patient in seclusion when they are confined involuntarily to an area they cannot leave. Restraint is more restrictive. When restrained, a patient cannot freely move their arms, legs, or head. Restraints can be either manual using hands, or mechanical using equipment such as a specialized transfer board with restraint belts.

Restraints by their very nature are physical. Adding physical contact to these emotionally charged situations creates more opportunities for injuries to occur. Restraint events can be traumatic for everyone involved, including patients and staff who witness a restraint.

Preventing and reducing patient aggression diminishes the need for staff to place patients in seclusion or use restraints. Doing so can improve safety.

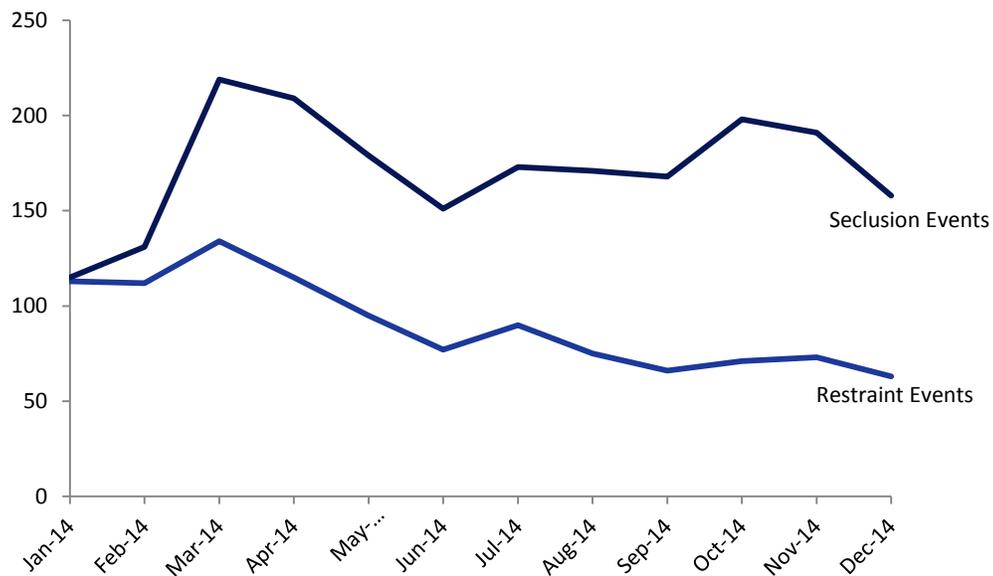
### ***Hospital has made progress towards improving safety***

Less than three percent of patients at the hospital are responsible for nearly half of all aggressive events and sixteen percent account for all aggression. However, aggressive events do occur and can compromise safety and impede recovery. By reducing patient aggression and violence, the hospital can improve safety and better facilitate recovery.

Physical aggression is defined as any physical behavior, including assault, which could result in injury, regardless of severity. The hospital measures areas of risk related to patient aggression through several indicators including: the number of seclusions, number of restraints, injuries resulting from assaults, patient self-harm and aggressive events towards peers, and the number of aggressive events aimed at staff.

Recent hospital data suggests progress towards reducing seclusion and restraint events, critical indicators of safety, is occurring. For example, in 2014, monthly restraints decreased significantly, from 113 in January to 63 in December. During the same period, the monthly seclusions increased slightly, but began to decrease at the end of the year. A temporary increase in seclusions is logical, as staff seek to use the less restrictive method of seclusion to control aggressive behavior. Figure 5 illustrates trends in S/R during 2014.

**Figure 5: Seclusion and restraint trends suggest progress in 2014**



SAIF, Oregon's state-chartered workers' compensation insurance company, has recently reported declines in the hospitals' injury claims resulting from patient aggression towards staff, another important indicator of safety. From September 2013 through August 2014, there were 113 SAIF claims, down 28% from the same period in the previous year. Though these claims do not include all incidents of patient to staff aggression, such as those that do not result in injuries, the decline in claims is encouraging.

Although the hospital has made progress, other indicators suggest more work is needed. For example, patient self-harming behavior and aggression towards peers increased in 2014.

Hospital data suggests patient aggression towards staff also increased in 2014. In a 2014 survey of hospital staff, about a quarter of staff reported they had been physically assaulted by a patient in the past year and more than half reported their assault resulted in injury. Only 54% felt safe in their job. When looking specifically at nursing staff (RNs, LPNs, MHTs, and HTTs), nearly 40% reported having been assaulted in the past year and just 43% reported they felt safe in their job.

***Physical design of new hospital facilities minimizes safety risks***

Literature suggests the intentional design of psychiatric hospitals minimizes safety risks. The new hospital in Salem incorporates design elements that are intended to minimize physical safety risks while promoting the psychological well-being of patients, such as:

- Centralized treatment areas, also known as treatment malls;
- Access to outdoor areas, such as courtyards and recreation areas;
- Simulated community experiences such as a coffee shop and salon;

- A peer mentoring center;
- Electronic security and surveillance technologies; and
- Modern communications and working environment for staff.



The interior of a patient bedroom

The hospital minimizes physical safety risks in a variety of ways. For example, there are electronic doors at major access points and staff carry personal duress alarms in case of emergencies. Nursing stations on patient units have clear lines of sight and there are over 1,170 cameras at the hospital—two mechanisms that provide good visual monitoring. Other features and materials minimize the potential for self-harm and injury: laminated safety glass, breakaway shower hooks, tamper resistant electrical outlets, and impact resistant lighting and walls.

Other aspects of design at the hospital promote psychological well-being. Hospital buildings feel welcoming and look similar to a college campus. The physical design of the hospital itself provides the secure perimeter, allowing patients to walk around many areas. In interviews, staff used words like “dungeon” to describe the old hospital and “soothing” to describe the new hospital. Visual and physical access to nature promotes healing. Patients have access to 22 outdoor courtyards connected to living areas and treatment malls.



Courtyards offer patients green space and recreational opportunities

### Six Core Strategies for Reducing Seclusion and Restraint Use

The National Association of State Mental Health Program Directors (NASMHPD) identified six core strategies, in addition to the physical design of hospitals, for preventing patient aggression and reducing S/R use. The hospital adopted these six strategies as the framework for safety improvement efforts. We reviewed actions taken towards implementation in each strategy shown in Figure 6 and noted where further improvements could be made.

Figure 6: NASMHPD’s Six Core Strategies for Reducing Seclusion and Restraint



## **Sustained leadership towards organizational change needed**



*NASMHPD strategy #1: Leadership towards organizational change is the **core strategy** upon which the other five are built. Leadership: defines a mission, philosophy, and values towards S/R reduction; creates an S/R reduction plan; and provides ongoing oversight and review of S/R.*

*“We know where we were, we know where we want to go and we have a clear road map for proceeding— understanding that our [the hospital’s] way toward recovery will have its unexpected twists and turns.”*

-Rupert Goetz, Oregon State Hospital Chief Medical Officer

Hospital leadership has made significant strides towards laying the groundwork for cultural change. For example, they created a new mission and vision centered on hope, safety, and recovery.

To address safety, leadership is focused on reducing the use of S/R. Leadership created a S/R reduction plan, provided training, and changed its organizational structure. Executive management is providing oversight and review of S/R events and is implementing interventions related to safety and cultural change.

Cultural and organization change appears to be taking hold. Of the staff who participated in a 2014 hospital survey:

- 91% understood restraints were only to be used as a last resort;
- 68% discussed ways to prevent injuries or increase safety; and
- 72% believed staff could reduce risks of violence on the unit.

Still, challenges remain. In the same survey, a quarter of nursing staff reported they did not believe in the hospital’s culture of safety. Over a third did not feel staff received support from hospital leadership when injured on the job. This is particularly important because nursing staff make up the largest portion of hospital staff and spend the most time with patients.

Some of the nursing and security staff we interviewed indicated uncertainty around their role in promoting patient recovery. This could stem from the dual responsibilities of nursing and security staff to ensure safety while promoting patient recovery. However, allowing patients to make choices means giving them the space to sometimes make the wrong choice— a necessary risk in the recovery process.

Hospital leadership must continue to address organizational culture, training needs, and attitudes if they are to be successful in changing culture.

## **Data informs decision-making and practice**



*NASMHPD strategy #2: Data is used to inform practice. For example, it is used to identify the baseline use of S/R, set goals for reduction, and monitor trends. Data is not used punitively.*

The hospital uses data at various levels to inform, monitor, and target S/R reduction efforts. When an S/R event occurs, staff record and track the event data through several levels.

*Unit—* Data is tracked at the unit level. For example, unit staff collect data on the frequency and duration of S/R events, as well as moderate to severe



A display board with unit-level data

injuries resulting from restraint use. Each of the 26 patient units at the Salem campus has a visual display board to track their data. Staff review unit data during daily staff huddles and use metrics to review their performance.

*Program*— Program level data is comprised of aggregate unit data for each of the five hospital programs. Program Executive Teams use this aggregate unit data to evaluate their program's performance. They also discuss program metrics with hospital leadership monthly and quarterly during hospital-wide performance reviews.

*Hospital*— The hospital has several committees that review aggression and S/R data. The Protection from Harm Committee collects, reviews, and processes data in order to identify trends and recommend changes to the Superintendent's Cabinet. The Protection from Harm Committee has two sub-committees that review and make recommendations based on aggression and S/R data.

The hospital provides metrics related to patient care to the Oregon State Hospital Advisory Board. The legislature established this board to review laws, rules, policies, and procedures related to the safety, security, and patient care. They review high-level safety data such as S/R and aggression trends by month and allegations of patient abuse. The board makes recommendations for improvement to the hospital's Superintendent, Director of Oregon Health Authority, and legislative committees.

The hospital appears to be in line with NASMHPD's recommended use of data to inform decision-making and practice.

### ***Continued efforts needed to develop workforce***



*NASMHPD strategy #3: Using workforce to create a treatment environment rooted in trauma-informed care and recovery. This strategy is implemented through intensive and ongoing staff training. For example, staff are trained in safe S/R application and evaluated on their technical competencies and attitudes.*

The hospital is working to improve its treatment environment through workforce development initiatives focused on improving its safety culture.

Currently, the hospital uses three training programs to help staff prevent and respond to patient aggression: ProAct, Safe Containment, and Collaborative Problem Solving (CPS).

ProAct teaches staff how to respond to behavioral emergencies. It teaches verbal de-escalation techniques to calm agitated patients, and evasive maneuvers staff can use to avoid injury if a patient becomes aggressive. Using a combination of classroom learning and hands-on exercises, Safe Containment teaches staff how to safely restrain patients. CPS aims to prevent patient aggression through communication and problem solving, while addressing patients' lagging skills in these areas. With the introduction of CPS, the hospital furthers its transition from a coercive

*“Too often, we have not provided our staff, especially direct care staff, with the necessary skills to do the job we expect them to do. That’s like asking someone to build a house without first providing them with a hammer and nails.”*

-Greg Roberts, Oregon State Hospital Superintendent

environment to one that is rooted in recovery. The hospital is using on-unit CPS coaches in real time to work with staff to implement the new approach.

The hospital has trained all existing staff in ProAct, but is still working to fully implement Safe Containment and CPS. Continued use of ProAct and implementation of Safe Containment and CPS with real time coaching will help to ensure staff are competent in their new skills and are consistently applying the methods.

New staff orientation is also critical to establishing the hospital’s new safety culture. The hospital provides training on mental illness and recovery, trauma informed care, perspectives of consumers and people in recovery, abuse prevention, patient rights, and cultural diversity.

The hospital did not have clear policies and procedures that outlined the components to include during on-the-job orientation for new staff. As a result, we found that this kind of training for new nursing staff was inconsistent across programs and buildings.

Specifically, the Archways program did not have complete documented procedures or practices to guide the training of new nursing staff. In addition, training for new staff who work in the most restrictive setting, the Harbors building, lacked information on where the behavioral emergency equipment and the S/R room were located.

Most units in the Harbors building house patients in the Archways program. Consistent training of staff in the Archways program, especially those who work in Harbors, is particularly important. Hospital management has reported patient aggression and S/R is highest in this program and in 2014, 80% of S/R occurred in the Harbors building.

Updating policies and procedures that guide on-the-job training would help ensure that new staff are properly oriented on the hospital’s organizational culture and treatment expectations.

Mentoring can help ensure that staff receive and retain required knowledge, skills, and abilities to promote S/R reduction. The hospital discontinued its mentor program partly because it lacked meaningful incentives for mentor participation. There is interest in mentoring and staff have found it helpful. The hospital could improve workforce development by re-establishing the mentor program and providing adequate incentives for mentor participation.

### ***S/R prevention tools and assessments are being implemented***



*NASMHPD strategy #4: S/R prevention tools and assessments are used and integrated into individual patient treatment.*

The hospital is integrating S/R reduction tools and assessments into individual patient treatment. For example, the hospital uses the Short Term Assessment of Risk and Treatability to help identify patient risks. Individualized patient needs are further identified through the treatment

care planning process. The hospital also has classes that teach patients social skills and how to manage their emotions.

The hospital also provides sensory therapy as a tool to help reduce patient agitation, aggression, and S/R use. Units have “sensory rooms” where patients can self-soothe when they may become upset or agitated. In the Springs program, sensory therapy helps patients learn how to calm themselves, be more alert to surroundings, and focus.



*Sensory rooms have special lighting, music, and comfortable seating.*

The hospital appears to be in line with NASMHPD’s recommended use of S/R prevention tools.

***Additional stakeholder involvement could lead to further improvements***

*NASMHPD strategy #5: Fully include consumers, advocates, and people in recovery in efforts to reduce S/R.*



It is important to include consumers, advocates, and people in recovery in efforts to reduce S/R. This strategy builds on principles of recovery-oriented systems of care by providing patients with choice, respect, dignity, partnership, and inclusion. The hospital strives to include consumers and stakeholders in S/R reduction efforts.

The hospital involves consumers and their advocates on committees that work to address and reduce patient aggression and S/R. For example, there is a family representative on the Protection from Harm Committee and a current patient on the S/R Review committee.

*“Their voices have been an important part of [our] culture change ... our peer recovery specialists will remain at the forefront as one of our most powerful resources.”*

-James Campbell, Seclusion and Restraint Committee, May/June 2013 OSH Recovery Times Newsletter



*The Empowerment Center is run by peer recovery specialists.*

The hospital created a Peer Recovery Services Department—the only of its kind known to be at a state hospital. The department employs peer recovery specialists who have experience with mental illness and recovery. The purpose for the department was to serve as a unique lifeline to patients—reaching out after admission, supporting them in their recovery, providing advocacy, and helping clinicians understand recovery from a patient perspective.

The hospital has not developed a mission or plan to achieve department goals, likely due to limited resources and vacancies in department management positions in recent years. The hospital recently hired a new department director and is in the early phases of developing and implementing a plan for the department.

Hospital leadership can help to ensure this department's success by providing the new director with the tools and support needed to form a department mission and development plan. Guided by an approved development plan, the director should consider evaluating the need for additional specialist positions.



*Patients pose for a photo outside of the Empowerment Center*

*“Current vacancies inhibit the good work of the Board and should be addressed and filled as soon as possible. . . . It is essential for the continued success of the Board’s legislative charge and desired mission that each statutorily mandated position be filled by qualified individuals.”*

-Oregon State Hospital Advisory Board report to the Oregon Legislature, 2013

Vacancies have also impacted the Oregon State Hospital Advisory Board. In 2013, the board reported to the legislature that vacancies hindered their work. In 2015, the Governor appointed and the Senate confirmed two members to fill consumer and advocate seats. However, two voting member vacancies remain, including a mental health consumer seat. Filling these vacancies would help the Board fulfill its mission and incorporate stakeholder perspective in efforts to reduce S/R.

### **Current debriefing policy under revision**



*NASMHPD strategy #6: Thorough analyses of S/R events are used to inform policies, procedures, and practices to avoid future use. Secondary goal is to mitigate the traumatic effects of S/R.*

Debriefing can help staff and patients learn from an event. This is important because analyzing a seclusion or restraint event can influence future staff and patient interactions. It should involve the patient, senior clinical and medical staff and occur within several days of the incident.

The hospital’s debriefing form and policy are under revision to improve practices and collect more targeted data. Debriefing is currently part of the hospital’s S/R policy, but the hospital wants to make it a standalone policy to encourage staff to debrief after all significant events, not just those that end in S/R.

Under the new policy, debriefing teams will describe the event in detail and discuss what worked, what did not, and what they would do differently.



*Salem campus HEART team and members of the Superintendent’s Cabinet*

Seclusions and restraints can be traumatic for patients, staff involved, and witnesses. The hospital has created the HEART team, a specially trained group of staff who can offer assistance to staff after a patient assault.

## Additional Efforts Could Further Reduce Overtime and Address Fatigue



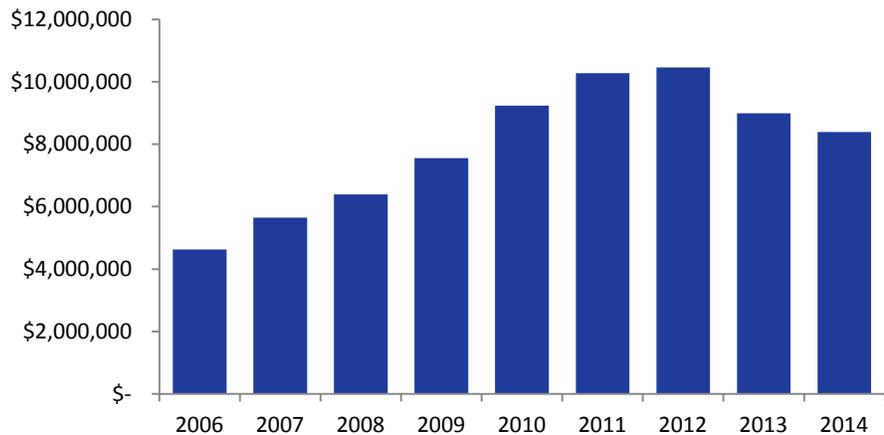
### ***Overtime is necessary, but can be expensive and create safety risks***

Overtime in a 24-hour medical facility is unavoidable. Its use is driven by patient needs such as one-to-one monitoring for those at risk of harming themselves or others and staffing needs such as high vacancy rates, poor distribution of staff, and unexpected staff absences.

Appropriate staffing levels are necessary at all times to ensure safety and good patient care. In the past, hospital management needed to assign mandatory overtime to staff. This practice can cause fatigue, low morale, and contribute to high personnel costs.

In 2014, the hospital spent \$8.4 million in overtime, representing 8% of personnel costs. Managing overtime use is important because some of it can be avoided, yet in some cases paying overtime may be less expensive than hiring additional staff.

**Figure 7: Overtime costs rose from 2006-2012, but declined in 2013 and 2014.**



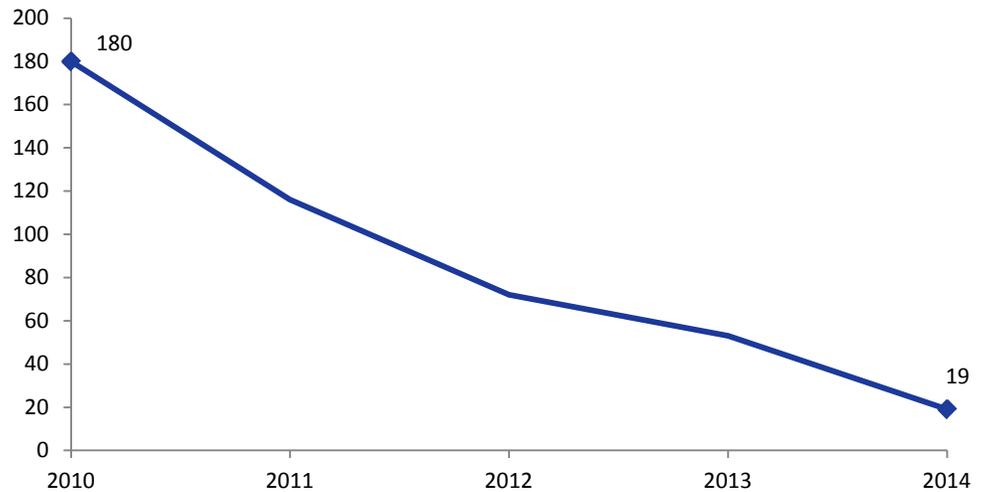
Excessive overtime creates safety risks because it can lead to fatigue, affecting nursing staffs' ability to deliver good patient care, make good clinical decisions, and communicate effectively. Fatigued nursing staff could make errors, take unnecessary risks, be forgetful, and be in a poor mood.

Fatigue could also affect nursing staffs' ability to prevent harmful patient behavior. Although not necessarily tied to overtime, fatigue may have been a factor in some recent hospital abuse allegations. For example, there were several substantiated abuse allegations in 2013 involving neglect where nursing staff fell asleep while monitoring patients at risk for suicidal or violent behavior.

### **Implemented strategies have reduced overtime use**

The hospital has worked to reduce use of mandated overtime. For example, Figure 8 shows mandated overtime shifts for registered nurses declined significantly from 2010 to 2014.

**Figure 8: Mandated shifts for registered nurses declined significantly from 2010-2014**



Strategies used to reduce overtime included:

- Hiring nursing staff to address the vacancy rate;
- Developing staffing ratios that identify the appropriate number of nursing staff to meet the unique needs of each unit and redistributing staff accordingly;
- Creating a float pool of nursing staff to cover unscheduled absences;
- Revising weekend shift times and hours; and
- Reducing patient aggression and S/R use to limit the need for one-on-one monitoring of at-risk patients.

### **Additional actions could reduce overtime and its effects**

A major driver of overtime at the hospital continues to be unscheduled absences. These absences may occur for many reasons, including when staff are unexpectedly ill.

We identified several staff whose overtime hours indicated that they could have been at risk for fatigue and its effects. The hospital does not offer staff training on fatigue causes and effects, recognizing fatigue, or on the obligation of staff to ensure they can provide safe patient care. Staff would benefit from education on the causes of fatigue and its effects.

There are no policies that limit the total number of overtime hours or consecutive days staff can work, though nursing staff are limited to working no more than 16 hours a day. The Institute of Medicine recommends registered nurses not work more than 12 hours in a 24-hour period and 60 hours in seven days. Studies found working more than 40

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*Excessive overtime use may pose safety risks.*

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hours in a week could adversely affect patient safety and the health of nurses. Implementing policies to limit overtime use could help ensure patient and staff safety.

### ***Cost containment strategies could further reduce staffing costs***

As mandated overtime decreases, the hospital plans to shift its focus to reducing overall overtime. As the hospital works to reduce overtime, there may be strategies that could reduce staffing costs.

Our 2012 audit of the Oregon Department of Correction's personnel costs used an analytical framework for looking at how the department managed its staffing costs and discussed several cost containment strategies. Strategies could include developing a 'post factor,' managing staff absences, and monitoring workload and vacant positions. In that setting, we found that overtime could be less expensive than the salary and benefits of a new hire. However, we cautioned that excessive overtime posed safety risks in custodial settings. While we recognize that psychiatric hospitals are very different from correctional facilities, and that staffing levels are dependent on patient treatment needs, the analytical framework used in the audit may be of use to the hospital.

## **Hospital Could Further Improve Patient Care by Completing Its Electronic Health Records System**

The Oregon State Hospital Replacement Project team was charged with updating the new hospital's patient record keeping system. The team oversaw implementation of the hospital's electronic health records system (AVATAR) beginning in 2009. AVATAR was intended to better integrate the hospital's existing technologies and convert hard copy records to an electronic format.

The hospital has faced several challenges during the systems' implementation and parts of the system are still not complete. The incomplete system adversely affects organizational efficiency and, potentially, the quality and cost of patient care.

### ***Automating existing processes could improve patient care***

Automation uses information technologies to reduce the need for human work (manual process) in the production of goods and services. Automation in a health care setting can help reduce errors and inefficiencies, while freeing staff to focus on patient care.

We learned of several manual processes at the hospital that pose challenges. Using technology to automate these processes would free staff time and could result in increased efficiencies and patient safety. These processes touch various aspects of patient care:

- documenting treatment planning;
- dispensing medication;



- requesting laboratory tests; and
- preparing nutrition assessments.

The hospital contracted for an automated medication dispensing system in 2012. The system is not in full use because the hospital’s vendors have not been able to integrate it with AVATAR. As a result, the hospital continues to use a manual process for dispensing patient medication, which could lead to errors like providing patients with the wrong dose or medication.

The automated dispensing system would have provided several safeguards to ensure the right patient receives the right medication at the right dose. For example, the dispensing system uses barcode scanning to make sure patients receive the right medications. It also limits access to patient medications and provides immediate notification when unauthorized access occurs. Implementing the automated system would also help reduce the time and resources required to manually dispense patient medications.

In another example, poor integration of AVATAR and the medical lab’s information system could have resulted in frequent lab order errors. It was reported that medical staff must manually reconcile order discrepancies on a daily basis to ensure accuracy. Staff must also print out patient lab reports to obtain a physician signature. Inaccurate lab orders could lead to additional treatment costs and risks to patient safety.

***Critical patient information still maintained as paper records***

The hospital is working to convert its patient record keeping system to an electronic format, but a large percentage of patient records are still maintained as hard copy. Hard copy record systems can lead to additional costs, lost productivity, and limited accessibility.

Hospital management reported to us that a little over half of patients’ medical forms are still only in hard copy paper format. Those include critical medical records such as patient prescriptions, allergy information, “do not resuscitate,” and “advanced directive” documents. Most behavioral records such as patient assessments are also held in paper form.

Hospital clinicians and other staff must walk to patients’ units each time they need to access paper records, diverting them away from providing patient care.

**Top medication errors from March 2014 - April 2015, out of an estimated 4.9 million medication administrations during the same time period**

Error type	Number of errors
Omitted med	230
Wrong dose	124
Wrong time or date	100
Wrong med	72
Transcription error	64
Discontinued med given	53
Procedural error	45
Wrong patient	21
Med given without order	18
Look alike/sound alike med	15

**Impediment to Audit Completion**

*Government Auditing Standards* require that we report circumstances that interfere with the completion of our audits. In particular, we are required to report data limitations and constraints when our access to records is restricted.

Our initial audit methodology included a review of selected patient case files to evaluate the effectiveness of patient safety procedures and review classes identified in treatment plans.

OHA managers did not permit us to initiate our case file reviews with the explanation from their attorney that we had no statutory authority to audit those patient files. In addition, the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) was cited as a reason for maintaining patient file confidentiality.

After five months of legal discussions, we were granted access to the patient files for the purpose of this audit only. Unfortunately, the data sharing agreement we needed to access patient files was delayed by another two months. These delays made it impossible for us to conduct the fieldwork and complete the audit in a timely way. As a result, we abandoned our approach for evaluating the hospital's patient safety and treatment procedures. We also could not verify the accuracy of data the hospital provided us because we could not review source documentation.

We are currently negotiating a more general agreement with OHA attorneys that would allow us more timely access to patient and other records.

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## Recommendations

To improve treatment provided to patients, we recommend Oregon State Hospital management develop a plan for improving consistency of case formulations and integrating patient treatment goals with the treatment mall groups offered. The plan should include:

- steps for communicating to staff the reasons behind treatment changes;
- strategies and timelines for implementation;
- milestones to monitor progress; and
- metrics to evaluate the plan's success.

We also recommend Oregon State Hospital management develop policies and procedures in two areas: developing and documenting case formulations; and designing, selecting, and scheduling treatment mall groups.

To improve patient and staff safety, we recommend Oregon State Hospital management:

- Continue to address organizational cultural issues and meet staff training needs to reduce seclusion and restraint (S/R) incidents.
- Continue to use data to inform decision-making and practice in S/R reduction efforts.
- Continue Collaborative Problem Solving and Safe Containment implementation with real time coaching to ensure staff are competent in their new skills and consistently applying the methods.
- Update policies and procedures that guide the on-the-job training of nursing staff to ensure consistency among the programs.
- Consider re-establishing the mentoring program for nursing staff and provide adequate incentives for mentor participation.
- Continue efforts to integrate S/R reduction tools and assessments into individual patient treatment.
- Ensure success of the Peer Recovery Services department by providing the new director with the tools and support needed to form a department mission and development plan.
- Continue to ensure stakeholders and consumers have a role in S/R reduction efforts.
- Continue to work with the Governor and legislature to fill vacant seats on the Oregon State Hospital Advisory Board.
- Continue efforts to finalize the hospital's debriefing policy.

To reduce overtime and any adverse effects on patient care resulting from it, we recommend Oregon State Hospital management:

- Develop strategies that could limit unscheduled absences where possible;
- Develop policies for managing staff overtime; and

- Provide training to staff on the causes and effects of fatigue and on how fatigue may impair their ability to provide safe patient care.

We also recommend Oregon State Hospital management consider using the analytical framework used in our 2012 audit of the Department of Correction's management of personnel costs to see if it is possible to identify additional cost savings while meeting patient treatment needs and maintaining a high level of patient and staff safety.

We recommend Oregon State Hospital management complete its electronic health record system's implementation while prioritizing resources on automating processes that significantly impact patient care and converting critical patient information to electronic format.

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## Objectives, Scope and Methodology

Our audit objective was to identify actions the Oregon State Hospital has taken to promote patient recovery and challenges that remain. We focused our efforts on actions taken at the Hospital's Salem campus and completed our fieldwork in July 2015.

Our audit methodology would have included a review of selected patient case files to evaluate patient safety procedures and review classes identified in treatment plans. However, we were unable to access records containing federally protected patient information in a timely manner. As a result, we abandoned this approach for evaluating patient safety and treatment procedures.

To address our audit objective, we reviewed applicable state laws, rules, and policies as they relate to the Oregon State Hospital. We reviewed the hospital's policies and procedures, performance measures, and strategic planning documents. We also reviewed literature on patient and staff safety, treatment planning and delivery, over time management, and electronic health records systems implementation.

We reviewed documents prepared by the Legislative Fiscal Office to understand historical context and budgets. We also reviewed relevant reports produced by the Governor's Mental Health Task Force, Governor's Special Master, U. S. Department of Justice, and private consultants.

We toured the new hospital in Salem and interviewed hospital security staff, nursing staff, clinicians, and managers to understand the actions taken by the hospital to improve patient safety and treatment and to address the challenges in managing overtime and patient records.

We also interviewed stakeholders from the National Alliance on Mental Illness of Oregon, Disability Rights Oregon, Marion County Adult Mental Health Services, Marion County Psychiatric Crisis Center, Marion County jail, Oregon State Police, Oregon Psychiatric Security Review Board, Service Employees International Union 503, and American Federation of State, County and Municipal Employees Council 75. We also visited the Oregon State Hospital Museum.

To understand progress made in improving patient and staff safety, we analyzed the hospital's data on patient aggression, seclusion, and restraint use. We were unable to test the reliability of this data because we did not have timely access to source documents containing federally protected patient information. We did determine the number of seclusions and restraint events appeared reasonable compared to summary reports prepared by the Hospital.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our

audit objective. We believe that the evidence obtained and reported provides a reasonable basis to achieve our audit objective.

Photos obtained from the following sources: Oregon State Hospital Communications Department, with assurances that we have permission to use patient photos; and ©Experimental | Dreamstime.com; ©Renaud Philippe | Dreamstime.com; and ©Sherry Young | | Dreamstime.com.

*Six Core Strategies* graphic in this report auditor created from individual icons; individual icons made by Freepik from [www.flaticon.com](http://www.flaticon.com).



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Re: Oregon Health Authority's Response to the audit report *Oregon State Hospital: Significant Actions Taken to Improve Safety and Promote Patient Recovery, but Further Improvements are Possible*

Dear Mr. Blackmer:

Thank you for the opportunity to respond to the audit, titled *Oregon State Hospital: Significant Actions Taken to Improve Safety and Promote Patient Recovery, but Further Improvements are Possible*. We appreciate the dedicated attention that the Oregon Audits Division staff gave to learning about the hospital and the people it serves.

The Oregon Health Authority generally agrees with the recommendations included in the report. Many of the recommendations encourage the hospital to continue its current efforts. We believe this confirms that we are on the right path toward high-quality care and treatment, as well as safety for both patients and staff. Since the time of the audit, the hospital has already begun to put some of the recommendations in place, as you will note in the response below.

## HOW FAR WE'VE COME

We were pleased that the report acknowledged the substantial improvements made by Oregon State Hospital over the past five years. We agree the hospital must continue its excellence efforts; however, it's important to recognize how far we've come.

In September 2010, an independent auditor, Liberty Healthcare Corporation, issued the "Quality and Compliance External Review Report of Oregon State Hospital." The report identified a number of serious problematic issues that required immediate attention. The key findings were:

- Fundamental confusion between compliance and quality improvement
- Need for stronger front-line engagement by hospital leadership
- Need for clear and decisive authority
- Proliferation of committees and diffusion of leadership authority
- Disorganization of top administrators and a pervasive culture of indecisiveness
- Patient units operating independently and quite differently
- Excessive use of intense observation (i.e. patients on one-to-one, two-to-one precautions)
- A perception that managers could not dismiss poor performers

By 2012, the hospital had implemented a continuous improvement initiative and resolved each of the deficiencies cited by the Liberty Healthcare report. Led by the Superintendent's Cabinet, the hospital had:

- Established well-defined roles for compliance and performance improvement
- Formalized and emphasized Quality Management within the organization
- Maintained regular leadership visits on all units and all shifts
- Created new mission and vision statements and communicated them widely
- Streamlined the organizational chart and committee structure
- Clarified lines of authority and decision-making
- Standardized processes for the operation of patient units
- Improved the process of placing patients on precautions, requiring more intensive, regular clinical review
- Emphasized accountability at all levels, including dismissing poor performers

In addition, the hospital has made other significant improvements. Since 2010, the hospital has:

- Established the Peer Recovery Services Department, which employs people who have experienced mental illness to advocate for patients within the hospital.
- Nearly eliminated mandatory overtime and significantly reduced overall use of overtime.
- Increased the percentage of patients who receive 20 hours of "active treatment" per week on treatment malls and in other areas (e.g., vocational) to 80 percent.
- Reduced its population of patients who have been found by the courts to be guilty except for insanity (GEI) through the creation of the Forensic and Legal Services Department and collaboration with the Psychiatric Security Review Board (PSRB). Since 2010, the hospital has discharged more than 400 GEI patients while the PSRB has maintained a recidivism rate of less than one percent.
- Reduced the average length of stay for civilly committed patients who have been declared "ready to place" by six days since July 2013 while the number of discharges has increased by 50 percent.
- Infused performance improvement principles, specifically Lean methodology, throughout the hospital to enable the people doing the work to lead improvement efforts. These initiatives have led to improved patient care and safety, as well as cost savings for the hospital.
- Implemented the Oregon State Hospital Performance System, emphasizing regular and rigorous business reviews, to maintain organizational health and continuous improvement.
- Introduced evidence-based treatment methodologies that support recovery and increase safety, such as Dialectical Behavioral Therapy and Collaborative Problem Solving.
- Received a positive report from the March 2015 survey by the Joint Commission, the hospital's national accrediting organization. During the survey, the hospital's performance improvement program was identified as a national example of excellence, and the hospital was encouraged to apply for the prestigious Malcolm Baldrige National Quality Award.

Hospital leadership continues to focus on a number of improvement initiatives, many of which are described in the audit report, as we strive to ensure that patients receive high-quality care and treatment in a safe and therapeutic environment.

## OREGON HEALTH AUTHORITY RESPONSE

### **Audit Report Summary Heading: Improving Treatment Plans and Groups Could Help Patient Recovery**

*Recommendation – Develop a plan for improving consistency of case formulations and integrating patient treatment goals with the treatment mall groups offered.*

Our response to this recommendation is in two parts. The first addresses **case formulation**.

We generally agree that the hospital needs to establish a more consistent approach to, and training for, case formulation. Most licensed clinicians (such as psychiatrists, nurse practitioners, psychologists, social workers, and rehabilitation therapists) learn case formulation, most commonly the biopsychosocial model, during their individual clinical training. However, this training varies widely across the numerous universities where clinicians receive their education.

We have already begun implementation of a consistent model of case formulation at OSH. We have piloted a training curriculum that uses standard work and a standard approach. We are currently expanding this curriculum to include Collaborative Problem Solving concepts.

However, effective case formulation is only one step in treatment planning. Case formulations are highly individualized and do not lend themselves to standardized measurements of treatment effectiveness, nor do they provide ready data for identification of treatment mall therapy group need.

Treatment begins with assessment, followed by interdisciplinary case formulation. The formulation guides the team in identifying patient treatment needs. Treatment care planning is a collaborative process in which the clinical team, together with the patient:

- Determines which treatment needs will be prioritized for focus at that particular time;
- Establishes long-term and short-term goals related to those prioritized needs; and
- Identifies treatment interventions (which may include group therapies) that will be used to address those needs.

While we agree there should be a formal plan, we believe it should encompass more than case formulation. OSH plans to follow the approach of measuring patient treatment needs in three areas:

- Skill Deficits (using the Collaborative Problem Solving Skills Inventory as we implement this treatment model across the hospital);
- Recovery Strengths (using Reaching Recovery scales); and
- Risks (using the Short Term Assessment of Risk and Treatability, or START, which is already in use).

The hospital has been operating under an informal plan until now; however, we will follow the auditors' recommendation to draft a formal plan for improvement that will include:

1. Expansion of case formulation tools and standard work to include Collaborative Problem Solving concepts
2. Clinician training and implementation rollout, including pilots on specific living units
3. Ongoing implementation of the Collaborative Problem Solving treatment model (the hospital is currently in the midst of a five-year timeline for training and implementation)
4. Employment of Reaching Recovery scales to measure patient strengths

The overall plan also will include a timeline, metrics for evaluating success, and strategies for expanded rollout and communication.

Next we will address **integrating patient treatment goals with the treatment mall groups offered.**

The hospital agrees with the auditors that decisions about which groups are offered on the malls should be based on the treatment needs of the patients; however, we assert that the treatment malls have been doing this since moving into the new Salem facility in 2011.

Treatment malls develop class offerings based on the results of needs assessments and the effectiveness of the previous session's groups. Classes are evaluated every 10 weeks. When preparing the schedule for the upcoming treatment mall session, staff review the assessments, treatment teams determinations of effectiveness, and requests from both patients and treatment teams. After identifying which groups are most needed, the treatment malls work with the discipline chiefs to assign programming to group leaders. Depending on where groups are offered, patients may attend groups on multiple malls to best meet their treatment goals.

Patients and their treatment teams judge the effectiveness of groups by measuring the progression or regression for that individual. For example, if a patient is attending a 10-week Anger Management group to work on frustration tolerance, the team will review the progress notes from the group leader to determine whether the patient is attending and how well skills are being developed. The team will also evaluate the patients' behavior on the unit to determine progression.

One example of how the treatment malls are directly responsive to patient need and patient treatment goals is reflected in the increase in the number of Legal Skills groups offered to patients who are committed to the Oregon State Hospital in order to be restored to competency to stand trial. These individuals have been accused of a crime, but the court has determined that they are unable to "aid and assist" their own defense counsel because of their mental illness. The hospital has experienced a significant surge in the number of patients who need these services. Thus, the treatment malls focused resources on expanding Legal Skills materials, sessions, and treatment opportunities. This was recognized by The Joint Commission as a leading practice in our 2015 survey.

***Recommendation – Develop policies and procedures for developing and documenting case formulations; and designing, selecting, and scheduling treatment mall groups.***

We generally agree with this recommendation. Because case formulation is a task that requires structured professional judgment in the case of each individual patient, policy requirements should be limited to:

- Use the standardized tool (currently under development) for case formulations; and
- Ensure clinicians are trained in its use.

Anything else would venture into the realm of professional judgment.

The hospital does intend to develop a protocol that demonstrates the flow between case formulation, designing curriculum, and scheduling treatment mall classes. This protocol will be used to inform a policy. Currently, OSH Treatment Services has work team initiatives focusing on Treatment Delivery and Program Planning. These groups are chartered to standardize best practices from each of the malls, including those involving patient scheduling, program planning, and group evaluations.

**Audit Report Summary Heading: Fewer Incidents of Seclusion and Restraint Improved Patient and Safety**

The Oregon Health Authority agrees with all recommendations in this section and plans to follow them. Most of the recommendations instruct the hospital to continue with its current efforts, which acknowledges the progress the hospital has made through the Culture of Safety Initiative, launched in 2012. The initiative focuses on ensuring that staff have the skills and training they need to do their jobs safely.

The hospital has made significant progress in the past three years. Highlights include Safe Containment training, which teaches staff, when they have no other alternative but to “go hands-on,” to do it in a way that prevents both staff and patients from getting injured. To date, between 20 and 75 percent of staff on target units have completed the training.

Another highlight is the launch of the Collaborative Problem Solving (CPS) therapy model, which is an evidence-based approach for staff-patient interactions. CPS provides staff the skills to work with patients better and to avoid situations in which Safe Containment would need to be used. Patients and staff develop their skills together as a foundation for individual treatment. So far, more than 500 staff have completed CPS training, and the hospital has employed 10 CPS coaches to work with staff on the four units with the highest rates of seclusion and restraint. Coaches are available daily on both day and swing shifts.

As a result of these efforts, we believe, the number of staff who report feeling safe in their jobs has increased by 11 percent since 2012. This past year, 79 percent of staff rated the hospital as “acceptable” or “excellent” for staff safety, and 85 percent of staff rated hospital as “acceptable” or “excellent” for patient safety. While we are very pleased to see these numbers go up, we will keep working to improve safety throughout the hospital.

Our next steps are to continue training that will help staff defuse crises and avoid restrictive events. Further, we will refine the many nuances of treatment care planning so staff have the best possible tool for all treatment interventions and overall safety.

As we continue these efforts, we will rely on metrics to monitor how we are improving. We will be interested to determine whether we are reducing the number of patient and staff injuries and reducing the number of seclusion and restraint events, thus improving patient and staff safety.

Progress has continued since the Secretary of State's auditors were at the hospital, and we are pleased to report updates below.

***Recommendations –***

- ***Continue to address organizational cultural issues and meet staff training needs to reduce seclusion and restraint (S/R) incidents;***

The hospital intends to continue the leadership rigor as directed by the OSH Performance System. With clearly defined goals and measures for success, this system provides the structure and guidance necessary to achieve a culture of recovery, person-centeredness, continuous improvement, and LEAN empowerment throughout at all levels of the organization.

The hospital is establishing a LEAN culture that fosters the identification of training and cultural needs and creates opportunities for raising quality consciousness and attitudes. Through LEAN, the people doing the work each and every day are routinely problem-solving for increased effectiveness and working with leadership to discover improvement needs and opportunities together.

Hospital leadership will prioritize and expand the performance improvement body of work until these continuous improvement efforts become part of the fabric of the organization.

- ***Continue to use data to inform decision-making and practice in S/R reduction efforts;***

The efforts of the Seclusion and Restraint Committee will continue in earnest, in partnership with the clinical leadership and Data and Analysis teams. The Seclusion and Restraint Committee is accountable for reporting results to OSH Cabinet via the OSH Performance System quarterly performance review process as part of the overall OSH Performance System framework. This will ensure appropriate visibility and intensity of efforts toward reducing seclusion and restraint.

In addition, the hospital engaged in comparative work with the Western Psychiatric State Hospital Association (WPSHA) and the National Association of State Mental Health Program Directors' research arm, the National Research Institute. These collaborations allow the hospital to engage in regional and national discussions of best-practices in seclusion and restraint and identify the appropriate benchmarks for its organizational efforts.

- *Continue Collaborative Problem Solving and Safe Containment implementation with real time coaching to ensure staff are competent in their new skills and consistently applying the methods;*

Safe Containment training continues to be available to staff on all shifts, and implementation of the Collaborative Problem Solving (CPS) model continues to be a top hospital priority. Since January, 117 staff have taken the basic training and additional 72 have taken the advanced training. Next steps include CPS coaches seeking official CPS certification.

- *Update policies and procedures that guide the on-the-job training of nursing staff to ensure consistency among the programs;*

Nursing Services is currently establishing a comprehensive orientation program that includes mentoring and on-the-job training for all nursing staff (see next bullet). As this program continues to develop, Nursing Services will create the accompanying protocols and evaluation tools to ensure that all new nursing staff receive the appropriate level of both classroom and on-the-job training.

- *Consider reestablishing the mentoring program for nursing staff and provide adequate incentives for mentor participation;*

In January 2015, the hospital launched the Leadership, Encouragement and Development (LEAD) program for all unit nurse managers and unit supervising registered nurses. This is a year-long program focusing on leadership and management skills that will create more consistent unit leadership across the hospital.

Beginning in April 2015, every new mental health therapist (MHT) and habilitative therapy technician (HTT) goes through a highly structured four-week orientation. During this orientation, they work closely with instructors who guide them through the Trauma-Informed Care model that prepares them to build positive therapeutic relationships with patients based on empathy. First, new employees gain an understanding of concepts in a classroom setting. Then they are partnered with an MHT mentor on the unit who helps the new employee put newly learned skills into practice. They then return to the classroom and debrief the on-unit experiences. We believe this method of training will lay a firm foundation for reducing incidents of aggression and decreasing the need for seclusion and restraint.

We intentionally began the change in orientation with the MHTs and HTTs, as they constitute the highest percentage of the hospital's nursing staff and generally come less prepared to work at a psychiatric hospital than registered nurses (RNs). We are now developing an orientation for RNs and licensed practical nurses (LPNs) that will be similar to the MHT/HTT training, with classroom time, nurse mentors, and time to debrief with peers.

Once new orientation for RNs and LPNs is in place, the hospital plans to go beyond the recommendation and establish enhanced training for *all* clinical staff.

- *Continue efforts to integrate S/R reduction tools and assessments into individual patient treatment;*

We agree and will continue our current efforts to integrate tools into individual treatment to reduce the use of seclusion and restraint.

- *Ensure success of the Peer Recovery Services department by providing the new director with the tools and support needed to form a department mission and development plan;*

Since the new director started in January 2015, Peer Recovery Services has hired several more positions, including an outreach coordinator and a coordinator for the Patient Advisory Councils on both the Junction City and Salem campuses. With the addition of two more peer recovery specialists, the department will be able to expand its capacity to be involved in treatment team meetings, treatment mall delivery and community reintegration.

- *Continue to ensure stakeholders and consumers have a role in S/R reduction efforts;*

Consumers and other stakeholders have served on the hospital's Seclusion and Restraint Committee for several years, and they will continue to do so.

- *Continue to work with the Governor and legislature to fill vacant seats on the Oregon State Hospital Advisory Board;*

The hospital will continue to work closely with the Governor's Office to fill the remaining two seats and then maintain ongoing board membership.

- *Continue efforts to finalize the hospital's debriefing policy;*

The hospital is in the process of finalizing the debriefing policy to be aligned with the Collaborative Problem Solving treatment model.

### **Audit Report Summary Heading: Overtime Has Been Reduced – Fatigue Concerns Remain**

For several years, not only has mandatory overtime been nearly eliminated, but our overall reliance on overtime also has been significantly reduced. Overall monthly overtime expenditures have been reduced by approximately one-third since 2011.

***Recommendation – Develop strategies that could limit unscheduled absences where possible.***

We agree that unscheduled absences, or “call outs” as they are called at the hospital, continue to be the leading driver of overtime. However, this issue is closely tied to the labor management agreement, and any limits as recommended must be negotiated accordingly. In the meantime, the hospital will continue to address this issue through available personnel policies and procedures.

***Recommendation – Develop policies for managing staff overtime.***

We agree that a limit should be placed on the number of overtime hours an employee is permitted to work. Recent efforts to revise the union contracts on this issue were unsuccessful.

***Recommendation – Provide training to staff on the causes and effects of fatigue and on how fatigue may impair their ability to provide safe patient care.***

The hospital agrees that training on the effects of fatigue could provide some benefit. However, in an analysis completed in early 2015, the hospital found no correlation between staff who work a high number of overtime hours and staff who were alleged to have abused or neglected (e.g., slept on the job) patients.

***Recommendation – Consider using the analytical framework used in our 2012 audit of the Department of Correction’s management of personnel costs to see if it is possible to identify cost savings while meeting patient treatment needs and maintaining a high level of patient and staff safety.***

We agree and since meeting with the auditors, hospital leadership has reviewed the Department of Corrections (DOC) audit analytical framework to determine whether it can be applied in a psychiatric hospital setting.

In order to determine how many staff are needed to run a 24/7, 365-day operation like Oregon State Hospital, organization leaders use a “posting factor” to calculate staff absences, such as weekends, sick leave, vacations, holidays, etc. The hospital’s current “posting factor” is 2.0, which means the OSH needs to hire two nursing staff to ensure coverage for all assignments dedicated to patient units. This number reflects staff-to-patient ratios that were established in 2014 based on a six-month study of staffing patterns on all shifts and on each patient unit.

However, we are currently reviewing actual hours of staff absences to determine whether 2.0 is the correct posting factor to use for Oregon State Hospital according to the analytical framework of the DOC audit.

### **Audit Report Summary Heading: Automation Can Improve Patient Care**

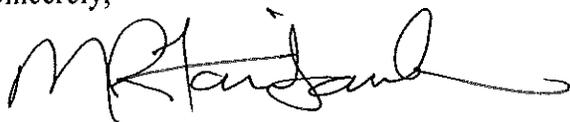
*Recommendation – Complete electronic health records system’s implementation while prioritizing resources on automating of processes that significantly impact patient care and converting critical patient information to electronic format.*

The hospital agrees with this recommendation. The hospital has faced several challenges during the implementation of the electronic health record (EHR) system, and, as noted in the report, parts of the system are still in process of being completed. The Oregon State Hospital Replacement Project team and the hospital, together with the Office of Information Services (the information technology arm of OHA and DHS), have been working diligently with the vendor to overcome the challenges and to complete the implementation. The incomplete system adversely affects organizational efficiency and, potentially, the quality and cost of patient care.

To expedite the conversion of patient medical records from paper to electronic form, the hospital has retained project management and consulting services to recommend improvements to the conversion process, to assist in implementing those recommendations, and to help accelerate and improve overall clinical adoption of the electronic health record system.

Again, thank you for the opportunity to address the recommendations in the audit report. We look forward to sharing our progress with you in the coming months. Please feel free to contact Oregon State Hospital Superintendent Greg Roberts or Chief Audit Officer David M. Lyda if you have any questions regarding this response.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Fairbanks', with a stylized flourish at the end.

Mark Fairbanks,  
Chief Financial Officer

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## About the Secretary of State Audits Division

The Oregon Constitution provides that the Secretary of State shall be, by virtue of her office, Auditor of Public Accounts. The Audits Division exists to carry out this duty. The division reports to the elected Secretary of State and is independent of other agencies within the Executive, Legislative, and Judicial branches of Oregon government. The division audits all state officers, agencies, boards, and commissions and oversees audits and financial reporting for local governments.

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The courtesies and cooperation extended by officials and employees of the Oregon State Hospital and Oregon Health Authority during the course of this audit were commendable and sincerely appreciated.