



June 2016



# **Table of Contents**

Executive Summary	٠١
About the Patient Safety Reporting Program	v
Participation and Reporting	1
Overview of Reports	2
Submitted Reports by Healthcare Segment	3
Patient Characteristics	4
Harm	5
Event Type	7
Contributing Factors	11
Recognition Targets	12
Written Notification	16
Conclusion	17
Appendix I. Reporting Patterns, 2009-2016	18
Appendix II. NCC MERP Harm Categories and Algorithm	19
Appendix III. List of Event Types that are Inherently Serious Regardless of Harm Category	21
Appendix IV. Detailed Data Tables by Segment	22
Appendix V. Event Types by Segment	28
Appendix VI. Event Sub-Types by Segment	29
Annendix VII. Contributing Factors	32

# **Executive Summary**

Transparency is a cornerstone for learning and patient safety improvement. The data in this annual summary is the result of Oregon's healthcare community working together to improve transparency and contribute essential information to the Patient Safety Reporting Program (PSRP)—a central location for data that informs patient safety and improvement efforts in Oregon. Healthcare facilities that participate in PSRP share information about adverse events, why they occur, and strategies for making care safer so that facilities across the state can learn from the experience of others.

This annual summary provides a statewide, aggregate picture of the information reported to PSRP, which is comprised of contributions from four different healthcare segments: ambulatory surgery centers, hospitals, nursing facilities, and community pharmacies. Although the contributing healthcare segments differ, when it comes to patient safety, many of the problems and improvement strategies identified in adverse event reports translate across healthcare segments.

In 2015, PSRP collected the largest number of reports submitted in one year since the reporting program began. The total number of events submitted to PSRP by all four healthcare segments was 704. Increased or decreased reporting does not necessarily mean that Oregon healthcare facilities are experiencing more or fewer adverse events than in the past. Shifts in reporting are more likely an indication of healthcare facilities improving their ability to identify, analyze, and report adverse events.

The most frequently reported adverse events were *fall, medication or other substance, surgical or other invasive procedure,* and *care delay.* Collectively, these four event types make up 63% of all PSRP event reports. As expected from the program's emphasis on serious adverse events, almost half of the 2015 reports (48%) resulted in serious harm or death. The types of adverse events and the severity of harm reported by each healthcare segment vary based on the services offered, the patient population served, and the processes and systems in place to support quality improvement and patient safety.

In addition to the number of reports submitted, PSRP also monitors the quality of the content included in each report; quality content provides a comprehensive picture of one facility's experience so the information can be used to help others learn and improve. Facilities that report to PSRP are improving the quality of their reports. From 2012 to 2015, the proportion of reports that were acceptable quality increased from 44% to 65%. Facilities can continue to improve the quality of their reports by:

- Better identifying the core reasons why events are occurring ("root causes")
- Developing system-level action plans to make care safer for future patients

Oregon's healthcare facilities are forming a community that values learning from one another and is supported by PSRP. Throughout 2016, the Patient Safety Commission will use data from this annual summary to inform actionable patient safety resources for statewide learning.

## Oregon Patient Safety Commission Mission

Improve patient safety by reducing the risk of serious adverse events occurring in Oregon's healthcare system and by encouraging a culture of patient safety.

# About the Patient Safety Reporting Program

The Patient Safety Reporting Program (PSRP) is designed to facilitate understanding of why and how patients are harmed during medical care and to share successful strategies for making care safer. Oregon healthcare facilities voluntarily report information on unintended harm (or potential harm) to patients as a result of medical care to create a statewide database for shared learning. Reporting does not imply that a facility experiences more adverse events than others. Rather, reporting shows a dedication to the learning and transparency that is necessary to improve patient safety.

All reports submitted to PSRP are confidential and non-discoverable according to Oregon State Law. PSRP analyzes the data provided and shares a collective view of information and strategies to help facilities statewide prevent similar harm from occurring in the future.

Report. Learn. Improve Patient Safety.

## Learning from PSRP

This annual summary provides a statewide, aggregate picture of the information reported to PSRP in 2015 by four different healthcare segments: ambulatory surgery centers (ASCs), hospitals, nursing facilities, and community pharmacies. The Oregon Patient Safety Commission's (OPSC) larger goal is to use this data to help healthcare facilities identify and implement the best practices needed to prevent patient harm. Although the reporting healthcare segments differ, when it comes to patient safety, many of the problems and improvement strategies identified in adverse event reports translate across healthcare segments.

In addition to this summary, OPSC periodically publishes special reports to explore some of the most frequent patient safety challenges identified by PSRP and to make recommendations to prevent harm. PSRP also uses data to set priorities for developing new tools and resources and to determine future patient safety activities.

## Additional Patient Safety Resources

In addition to PSRP, OPSC offers a variety of programs to help healthcare organizations identify and learn from adverse events. Healthcare organizations can use the information in this report, in conjunction with other OPSC offerings, to support and improve their patient safety programs. OPSC's patient safety offerings include:

- Educational opportunities. Online or in-person trainings about key patient safety practices
- Monthly newsletters. Up-to-date patient safety news, research, and resources
- Action alerts. Information about potentially serious patient safety concerns that may require immediate consideration and action
- Improvement initiatives. Learning networks working on targeted initiatives to improve patient care
- Statewide workgroups. Peers working together to improve patient safety
- Toolkits and resources. A collection of best-practice resources for healthcare organizations seeking to improve healthcare delivery
- **Consultation.** Uniquely qualified staff offering confidential patient safety expertise to help healthcare organizations learn from adverse events and make care safer
- Support for communication and resolution programs. OPSC's Early Discussion and Resolution program encourages open conversation between healthcare providers and patients after serious injury or death

For more information about PSRP and OPSC's other offerings, visit oregonpatientsafety.org.

# Participation and Reporting

The Patient Safety Reporting Program (PSRP) has been operating since 2006 when hospitals became the first segment to submit adverse event reports to the Oregon Patient Safety Commission (OPSC). The four healthcare segments that participate in PSRP today started reporting at different times (Table 1). In 2012, the PSRP online system was launched for ASCs, hospitals, and nursing facilities. Of these three segments, 82% of eligible facilities currently participate.

Adverse event: An event that results in unintended harm or creates the potential for harm that is related to any aspect of a patient's care (by an act of commission or omission) rather than to the underlying disease or condition of the patient. Adverse events may or may not be preventable.

**Segment:** A distinct type of facility that is eligible to participate in the reporting program according to ORS 442.837(2). Segments include ambulatory surgery centers, hospitals, nursing facilities, and pharmacies.

Table 1. Facility Participation in Reporting Program by Segment, 2015

			Nursing		
	ASC	Hospital	Facility	Pharmacy	All Segments
Quarter and year participation began	Q2 2007	Q2 2006	Q2 2007	Q2 2007	NA
Quarter and year online reporting began	Q4 2012	Q3 2012	Q4 2012	Q1 2014	NA
Number of participating facilities	60	59	115	125	359
Total eligible facilities	88	59	137	708	992
Percentage of participating facilities	68%	100%	84%	18%	36%

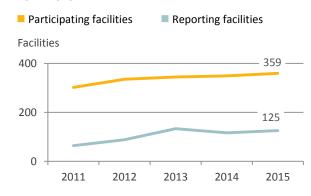
Not all facilities that participate in the reporting program submit reports each year (Figure 1 and Appendix I). Fifty-seven facilities have consistently submitted reports every year since they began reporting. Of these, 13 have submitted reports every year since the program started for their segment. In 2015, 15 facilities reported for the first time. More than half of participating facilities (57%) have submitted at least one report since the beginning of the program. OPSC is working closely with all healthcare segments to improve the quantity of reporting each year.

**Participating facility:** An eligible facility as defined by ORS 442.837(2) that has signed a PSRP participation agreement.

**Reporting facility**: A facility that has submitted at least one report in the current reporting year.

In 2015, 125 (35%) participating facilities submitted at least one report (Table 2). Compared to 2014, the number of ASCs that submitted reports increased, while the number of hospitals, nursing facilities, and pharmacies that submitted reports stayed the same. OPSC continues to invest in strategies to streamline the process of reporting as much as possible.

Figure 1. Participating and Reporting Facilities, 2011-2015



With more reporting, OPSC can continue to provide access to best practices and shared learning to improve patient safety. For more information about the number of reporting facilities, see Recognition Targets on page 12.

Table 2. Number of Reporting Facilities by Segment, 2015

			Nursing		
	ASC	Hospital	Facility	Pharmacy	All Segments
Number of reporting facilities	32	41	45	7	125
Number of participating facilities	60	59	115	125	359
Percentage of participating facilities that reported	53%	69%	39%	6%	35%

# **Overview of Reports**

In 2015, the Patient Safety Reporting Program (PSRP) collected information on 704 adverse events across all segments—the largest number of reports submitted in one year since the reporting program began (Figure 2). The figures on page 3 show report submissions by each reporting segment. Consistent growth in the number of reports submitted over time can, in part, be attributed to facilities that have successfully integrated PSRP into their internal quality improvement processes. Increased or decreased reporting does not necessarily mean that Oregon healthcare facilities are experiencing more or fewer adverse events than in the past. Shifts in reporting are more likely an indication of healthcare facilities improving their ability to identify, analyze, and report adverse events.

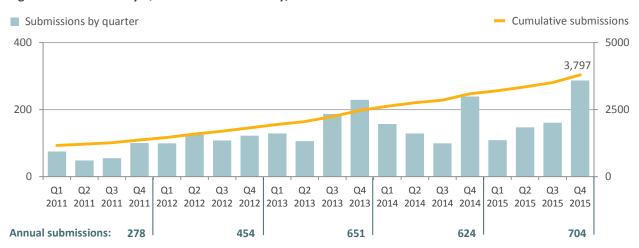


Figure 2. Submission by Quarter and Cumulatively, 2011-2015

In addition to the number of reports submitted, the Oregon Patient Safety Commission (OPSC) also monitors report quality and timeliness. From 2012 to 2015, the percent of reports that were acceptable quality increased from 44% to 65%. Acceptable quality reports provide a comprehensive picture of one facility's experience so the information can be used to help others learn and improve. In 2015, more than half of reports (55%) were considered timely. OPSC encourages facilities to respond immediately after an adverse event and to submit timely reports to collect full and reliable information, reduce delays, and develop strong solutions. More details about how facilities are meeting program goals are available in the Recognition Targets section on page 12.

# Submitted Reports by Healthcare Segment

#### **Ambulatory Surgery Centers**

The number of reports submitted by ambulatory surgery centers (ASCs) has been relatively stable over the past three years (Figure 3). For the second year in a row, a larger proportion of ASC reports were of acceptable quality, improving 36% between 2014 and 2015. ASCs submitted more reports in 2015 than they did in either of the previous two years. Over 1,200 reports have been submitted since the ASC reporting program began in 2007.

#### Hospitals

Hospitals have consistently increased the number of reports submitted each year since the reporting program began in 2006 (Figure 4). They submitted 270 reports in 2014 and 336 in 2015, an increase of 24%. In the same time period, the quality measure for hospital reports improved by 11%. Over 1,600 reports have been submitted in total since the hospital reporting program began in 2006.

#### **Nursing Facilities**

For the second year in a row, nursing facilities submitted almost 200 reports (Figure 5). Nursing facilities submitted 195 reports in 2014 and 190 in 2015, reflecting the continued hard work and collaboration by nursing facilities to incorporate adverse event reporting into quality assurance and performance improvement programs. Over 600 reports have been submitted since the nursing facility reporting program began in 2007.

#### **Pharmacies**

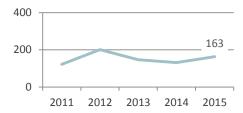
Community pharmacies ("pharmacies") submitted 28 reports in 2014 and 15 in 2015 (Figure 6). Pharmacies have not yet incorporated external adverse event reporting into their existing quality improvement practices. Over 200 reports have been submitted since the pharmacy reporting program began.

Note: Unless otherwise indicated, data on the following pages of this report excludes 26 reports that did not meet the definition of adverse event (definition on page 1).

#### Submitted Reports by Year, 2011-2015

Figure 3. Ambulatory Surgery Center Reports

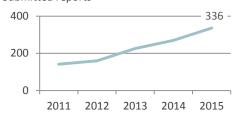
Submitted reports



Fifteen of the 163 reports did not meet the definition of "adverse event."

#### **Figure 4. Hospital Reports**

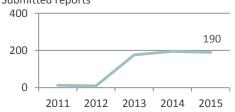
Submitted reports



Three of the 336 reports did not meet the definition of "adverse event."

**Figure 5. Nursing Facility Reports** 

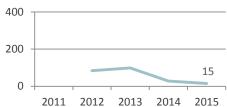
Submitted reports



Eight of the 190 reports did not meet the definition of "adverse event."

Figure 6. Pharmacy Reports

Submitted reports

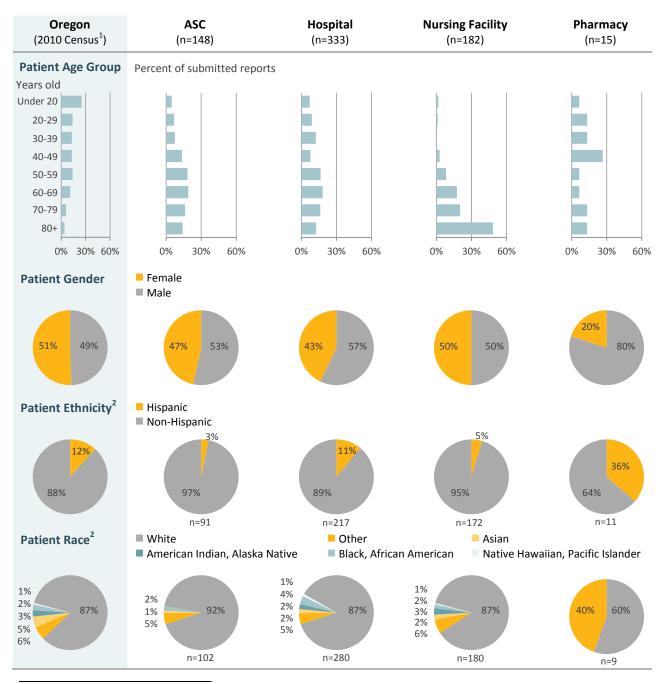


To ensure consistency of data across reporting segments over time, pharmacy reports submitted before 2012 have been excluded.

## **Patient Characteristics**

Collecting patient demographics enables the Oregon Patient Safety Commission to monitor adverse event reporting data for unexpected differences between population groups. Figure 7 summarizes patient age, gender, race, and ethnicity data reported in 2015. In some cases, race and ethnicity may be unknown and are indicated as such in the adverse event report; those reports have been excluded from the summary figures. The patients impacted by adverse events reported in 2015 ranged in age from newborn to 102. While patients in every age group experienced adverse events, those aged 60 and older accounted for more than half (58%).

Figure 7. Patient Demographics by Segment, 2015



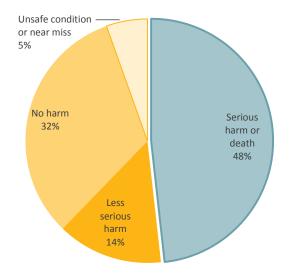
<sup>&</sup>lt;sup>1</sup> U.S. Census Bureau, 2010 Census of Population and Housing, Population and Housing Unit Counts, CPH-2-39, Oregon U.S. Government Printing Office, Washington, DC, 2012.

Healthcare facilities can report more than one race but only one ethnicity.

## Harm

Patient Safety Reporting Program participants are required to report any serious adverse events and are encouraged to report less serious harm events, no harm events, and near misses (also known as close calls). When reporting adverse events, facilities assess harm related to the event using formally validated national harm categories established by the National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) (Appendix II). Use of the NCC MERP harm categories allows the Oregon Patient Safety Commission to interpret the effect of adverse events in a standardized way.

Figure 8. Harm of Events Reported by All Segments, 2015 (n=678)



5%

50% 100%

0%

Figure 9. Harm Categories by Segment, 2015 **ASC** Hospital **Nursing Facility Pharmacy** (n=148)(n=333)(n=182)(n=15)**Harm Category** Serious harm or death 7% 53% 59% 27% Less serious harm 10% 12% 0% No harm 32% 23% 47% 53%

50% 100%

Note: Surgical and other invasive procedures are more likely to cause serious harm; therefore, OPSC expects more serious harm events from segments that provide higher risk services to patients (i.e., ASCs and hospitals).

5%

0%

Serious adverse event: An objective and definable negative consequence of patient care, or the risk thereof, that is unanticipated, usually preventable and results in, or presents a significant risk of, patient death or serious physical injury [Oregon Revised Statutes 442.819(6)].

This includes harm categories F, G, H and I for all segments. For hospitals, there are events that are considered to be inherently serious regardless of harm category. See Appendix III for a full list.

As expected from the program's emphasis on serious adverse events, almost half of the reports submitted to PSRP in 2015 (48%) resulted in serious harm or death (harm categories F, G, H or I) (Figure 8). Variations in the severity of harm by reporting segment may be due to the patient populations served and the types of services provided (Figure 9).

Participants also contribute reports about less serious harm events, no harm events, and unsafe conditions or near misses because these types of events play a critical role in identifying what must be done to prevent future occurrence and improve patient safety. Organizations that report these types of events allow for the identification of system-level issues that could lead to adverse events in the future and provide an opportunity to address those issues before patients are seriously harmed. For additional breakouts by event type and segment, see Appendix IV, Table 18-Table 21.

4%

50% 100%

0%

40%

50% 100%

0%

Unsafe condition or

near miss

Facilities reported 38 harm category I (patient death) events in 2015, which is proportionally similar to last year (Table 3). For a breakdown of these figures by segment, see Appendix IV, Table 16.

Table 3. Reports Indicating Death (Harm Category I) by Year, 2011-2015

	2011	2012	2013	2014	2015
Number of harm category I reports	22	34	39	39	38
Percentage of adverse events	8%	10%	6%	7%	6%

Six of the harm category I reports were patient suicides. While all patients are vulnerable, the majority of the remaining 32 harm category I events involved patients who were identified as having fragile health status or significant comorbidities. Regardless of the complexity of a patient's health status, reporting these types of events demonstrates a belief that all events should be analyzed to identify opportunities for prevention. In fact, these event analyses usually yielded system-level action plans—a clear indication that Oregon healthcare facilities are committed to preventing significant harm even in situations where the outcome was unavoidable. Reporting facilities used these significant events to strengthen their systems and prevent future harm.

#### **Voluntary versus Mandatory Reporting**

Participation in the Patient Safety Reporting Program is voluntary according to state law [Oregon Revised Statutes 442.837(2)]; however, according to administrative rule, healthcare organizations that agree to participate in the program must report all serious adverse events (Oregon Administrative Rules 325).

The Oregon Patient Safety Commission is frequently asked how Oregon's voluntary program compares to mandatory reporting programs around the country. Both voluntary and mandatory reporting programs depend on the cooperation, diligence, resources, and good-faith of the reporters. Short of reviewing every medical record, from every admission, from every eligible facility, every year, there is no way to get the number of actual adverse events that have occurred.

Oregon's voluntary Patient Safety Reporting Program has received comparable results to other reporting programs, which are mandatory and involve more facilities than Oregon's program.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> From the National Academy for State Health Policy's *2014 Guide to State Adverse Event Reporting Systems*, available at <a href="https://www.nashp.org">www.nashp.org</a>.

# **Event Type**

Reportable event types vary by segment. Not all event types can be reported by all segments. For example, pharmacies can only submit *medication or other substance* events and nursing facilities cannot submit *surgical or other invasive procedure* events because surgery is not performed in nursing facilities. The event types reported are impacted by each segment's patient population, services offered, and reporting requirements. Between the four reporting segments, there are 34 event types (Appendix V provides a full list by segment). In 2015, the top four event types for all segments combined were *fall, medication or other substance, surgical or other invasive procedure*, and *care delay*. Collectively, these four event types make up 63% of all events reported to PSRP (Table 4). Additional detail is available in Appendix IV, Table 17 and Appendix VI, Table 30-Table 35.

Table 4. Top Four Event Types by Segment, 2015

			Nursing		
	ASC	Hospital	Facility	Pharmacy	All Segments
	(n=148)	(n=333)	(n=182)	(n=15)	(n=678)
Top Four Event Types	Number (%)				
Fall	12 (8%)	56 (17%)	102 (56%)		170 (25%)
Medication or other substance	15 (10%)	43 (13%)	30 (16%)	15 (100%)	103 (15%)
Surgical or other invasive procedure	74 (50%)	19 (6%)			93 (14%)
Care delay	7 (5%)	53 (16%)	4 (2%)		64 (9%)

Additional detail is available on the top three reported event types, *falls* (page 8), *medication or other substance* events (page 9), and *surgical or other invasive procedure* events (page 10). The fourth most common event type was *care delay*. Communication issues were the most common contributing factors related to *care delays* across segments. The majority of communication issues were between providers and staff or involved hand-offs. Across segments, policy or procedure issues were also common in *care delays* and frequently resulted from provider unfamiliarity with a policy or procedure or an unclear policy or procedure.

#### **ASCs**

ASCs primarily perform surgical procedures; as expected, *surgical or other invasive procedure* events are the most reported event type for this segment (Table 5); however, there has been a steady drop in the percent of surgical events reported each year since 2013 as ASCs have begun to report a wider array of event types.

#### **Hospitals**

The range of event types reported by hospitals in 2015 is due to the diverse services provided in the hospital setting (Table 6).

#### **Nursing Facilities**

Falls continue to be the leading event type reported by nursing facilities (Table 7). Since 2013, the percent of nursing facility reports related to *medication or* other substance events has increased.

Table 5. Top Four ASC Event Types, 2015

Top Four Event Types	Number	Percent	
Surgical or other invasive procedure	74	50%	
Medication or other substance	15	10%	
Healthcare-associated infection	13	9%	
Fall	12	8%	

Table 6. Top Five Hospital Event Types, 2015

Top Four Event Types	Number	Percent
Fall	56	17%
Care delay	53	16%
Medication or other substance	43	13%
Retained object	25	8%
Device or supply	25	8%

Table 7. Top Four Nursing Facility Event Types, 2015

Top Four Event Types	Number	Percent
Fall	102	56%
Medication or other substance	30	16%
Elopement	10	5%
Other	9	5%

Note: Because pharmacies only report medication or other substance events, they are excluded from this breakdown.

### Falls

In 2015, a total of 170 falls were reported by the three segments from which falls data is collected (ASCs, hospitals, and nursing facilities). Fifty-six percent of the reported falls resulted in a physical injury (e.g., fracture or skin tear). Eighty-four percent of the falls were unassisted and 68% were unobserved. For breakouts of this data by segment, see Appendix IV, Table 22-Table 25.

Every patient who enters a healthcare facility is at risk for a fall. Hospitals and nursing facilities are asked to report on fall risk assessment and patient risk factors. 136 reports (86%) indicated that the patient had a documented fall risk assessment. Of the 136 patients that were assessed for fall risk, 4% were found not to be at any level of risk but experienced a fall anyway. Of the 158 patients who fell in a hospital or nursing facility, 96% had at least one known risk factor for falls at the time of their fall. The most frequently identified fall risk factors were *mobility or gait impairment* and *cognitive impairment* (Table 8). For breakouts of this data by segment, see Appendix IV, Table 26-Table 28.

Table 8. Risk Factors Present at the Time of the Fall by Segment, 2015

	Hospital	Nursing Facility	Both Segments*
	(n=51)	(n=101)	(n=152)
Risk Factors for Fall	Number (%)	Number (%)	Number (%)
Mobility or gait impairment	32 (63%)	93 (92%)	125 (82%)
Cognitive impairment	29 (57%)	75 (74%)	104 (68%)
History of previous fall	23 (45%)	73 (72%)	96 (63%)
Sensory impairment (vision, hearing, balance, etc.)	20 (39%)	53 (52%)	73 (48%)
Other risk factor for falls	1 (2%)	3 (3%)	4 (3%)
Prosthesis or specialty/prescription shoe	0 (0%)	1 (1%)	1 (1%)

<sup>\*</sup> These numbers may total more than 100% as reports may indicate contributing factors in multiple categories.

Most falls occurred while the patient was performing a routine activity, like getting out of bed or using the toilet. Twenty-one percent of patients who fell were transferring to or from a bed, a chair, a wheelchair, or similar, without assistance (Table 9). Seventeen percent were performing toileting-related activities. Appendix IV, Table 28 lists 2015 pre-fall activities by segment.

Table 9. Top Three Patient Activities Performed or Attempted at the Time of the Fall by Segment, 2015

			Nursing	
	ASC	Hospital	Facility	All Segments
	(n=12)	(n=56)	(n=102)	(n=170)
Top Three Pre-Fall Activities	Number (%)	Number (%)	Number (%)	Number (%)
Transferring to or from bed, chair, wheelchair, etc. without assistance	2 (17%)	12 (21%)	22 (22%)	36 (21%)
Toileting-related activities	1 (8%)	20 (36%)	8 (8%)	29 (17%)
Walking without assistance and without an assistive device or medical equipment	0 (0%)	1 (2%)	21 (21%)	22 (13%)

## Medication or Other Substance Events

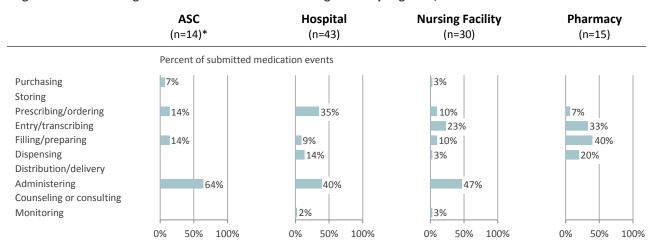
Medications are essential in the delivery of healthcare to patients, and are an integral part of patient care. Little variation exists in the types of medication events reported across the four segments. The top three medication event types for all segments combined were *incorrect medication or substance*, *incorrect dose*, and *medication or substance omitted* (Table 10). More detailed information about medication events reported in 2015 is available in Appendix VI, Table 34.

Table 10. Top Three Medication Event Types by Segment, 2015

			Nursing		
	ASC	Hospital	Facility	Pharmacy	All Segments
	(n=15)	(n=43)	(n=30)	(n=15)	(n=103)
Top Three Medication Event Types	Number (%)				
Incorrect medication or substance	4 (27%)	11 (26%)	5 (17%)	2 (13%)	22 (21%)
Incorrect dose	0 (0%)	8 (19%)	5 (17%)	2 (13%)	15 (15%)
Medication or substance omitted	2 (13%)	1 (2%)	9 (30%)	0 (0%)	12 (12%)

Medication management is a complex system involving numerous process steps and multiple individuals. Although these steps provide opportunities to ensure accuracy, as the number of medication orders increases and the complexity of the medication management system grows, so too does the risk of an adverse event. Medication events reported to PSRP are categorized using ten process stages. In 2015, reported *medication or other substance* events across all segments originated in seven out of ten stages (Figure 10). The types of events that occurred in each segment are indicative of the types of medication-related services provided. All four segments reported events that originated in the *prescribing/ordering* stage and the *filling/preparing* stage. The three segments that routinely administer medications submitted a large number of reports that originated in the *administering* stage.

Figure 10. Process Stage at Which Medication Events Originated by Segment, 2015



<sup>\*</sup> One report marked "unknown."

## Surgical or Other Invasive Procedure Events

Only ASCs and hospitals report *surgical or other invasive procedure* events, which were the third most frequently reported adverse event type in 2015. *Surgical or other invasive procedure* events represent half (50%) of all ASC reports. ASCs most frequently reported *unplanned admission to hospital* and *unplanned emergency department visit* events (Figure 11). Among hospitals, *surgical or other invasive procedure* events comprise 6% of all reported event types. Hospitals most frequently reported *incorrect site or side* and *laceration, perforation, puncture, or nick* events (Figure 12). More detailed data about *surgical or other invasive procedure* events (including a list of *other surgical or invasive procedure* events) can be found in Appendix VI, Table 35.

Figure 11. Top Four ASC Surgical Event Types, 2015

Unplanned admission to hospital within 48 hours of discharge – ASC only

Unplanned emergency department visit within 48 hours of discharge – ASC only

Incorrect site or side

Postoperative bleeding requiring return to operating room

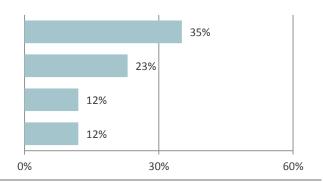
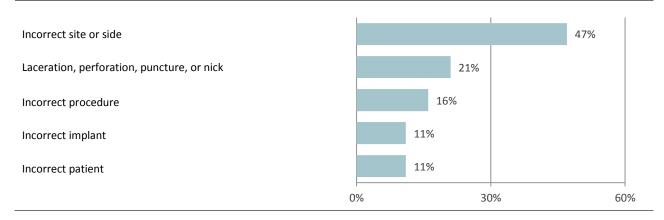


Figure 12. Top Five Hospital Surgical Event Types, 2015



# **Contributing Factors**

Contributing factors are generally external to the patient and frequently relate to the physical environment or to the care delivery system. The Patient Safety Reporting Program organizes contributing factors into eight categories. The most frequently selected contributing factor categories in 2015 were *patient* factors (52%) and *communication* factors (52%) followed by *policy or procedure* factors (45%). (For a breakout by segment, see Figure 13). The 678 reports submitted in 2015 identified 71 contributing factors across the eight categories. For details about the factors identified in each category by healthcare segment, see Appendix VII, Table 36-Table 43.

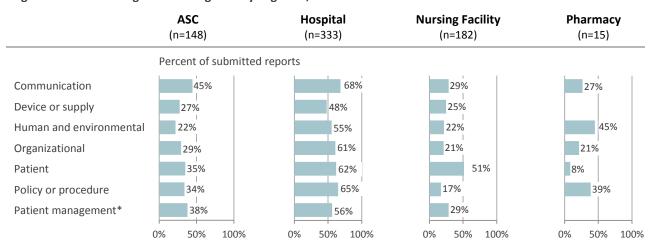


Figure 13. Contributing Factor Categories by Segment, 2015

Percents total more than 100 as reports may indicate contributing factors in multiple categories.

In previous years, *communication* and *patient* factors have been the most commonly identified contributing factor categories. The most frequently identified *communication* factors were communication *between providers and staff* (43%) and communication that occurred during *handoffs, handovers, or shift reports* (30%) (Appendix VII, Table 36).

In 2015, the most frequently identified patient factors were physical limitations (52%) and fragile health status (50%; Appendix VII, Table 42). Patient factors (such as physical or sensory impairments) are often identified early on in an adverse event analysis. Analyses that move past patient factors are more likely to identify system-level contributing factors (such as communication, organizational factors, and patient management). Action plans addressing patient factors are often least likely to prevent future harm because they focus on a single patient rather than the larger system. Identifying system-level contributing factors enables facilities to effectively understand the root cause of the adverse event and make lasting changes to prevent future harm.

Focusing on system level factors such as *communication* factors and *policy or procedure* factors gives facilities the opportunity to identify the root causes of the adverse event and develop strong action plans to prevent these events from recurring. When teams drill down to identify why handoffs or handovers didn't go as planned, or spend time understanding why a patient didn't understand instructions, they begin to place the focus on systems versus individual blame.

<sup>\*</sup> Patient management is not available on pharmacy reports.

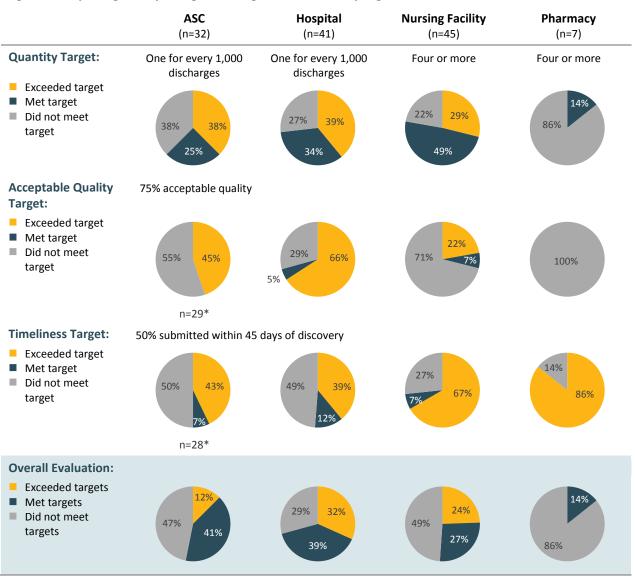
# **Recognition Targets**

The Patient Safety Reporting Program's (PSRP) recognition targets are intended to guide participating healthcare facilities and help them incrementally build adverse event review and reporting into their culture of safety. Targets ensure the Oregon Patient Safety Commission (OPSC) receives enough adverse event reports to build a strong database of adverse event prevention strategies, so that Oregon healthcare facilities can learn from each other. Recognition targets focus on three criteria: quantity, quality, and timeliness.

## Reporting Facility Performance

The following graphics (Figure 14) display how well each segment met recognition targets. (For a breakdown by the number of submitted reports rather than by number of reporting facilities, see Table 11 on page 13.) To meet 2015 overall targets, facilities had to meet or exceed the quantity target and submit at least one acceptable quality report. To exceed 2015 overall evaluation targets, facilities had to additionally meet or exceed their quality and timeliness targets.

Figure 14. Reporting Facility Recognition Target Performance by Segment, 2015



<sup>\*</sup> Excludes facilities that only submitted exempt reports. Exemptions: submitted events did not meet the definition of adverse event (definition on page 1) (acceptable quality and timeliness exemption), event discovered on chart review or while analyzing another event (timeliness exemption), or granted at the discretion of the patient safety consultant (timeliness exemption).

## Adverse Event Report Performance

In addition to evaluating each healthcare segment for their overall reporting performance, OPSC evaluates each submitted report using the three recognition target criteria: quantity, quality, and timeliness.

#### Quantity

OSPC measures quantity as the number of reports submitted by a reporting program participant. The quantity target for 2015 varied based on annual discharges for each participating ASC and hospital, but was a static four reports (one per quarter) for nursing facilities and pharmacies. Oregon facilities submitted 704 adverse event reports in 2015 (Table 11)—the largest number of reports submitted in one year since the reporting program began. The median number of reports per facility was four, with a range of one to 35.

Table 11. Quantity of Submissions by Segment, 2015

			Nursing		
	ASC	Hospital	Facility	Pharmacy	All Segments
Total reports submitted*	163	336	190	15	704
Number of submitting facilities	32	41	45	7	125
Median reports per facility	4	5	4	2	4
Range of reports per facility	1-21	1-35	1-10	1-4	1-35

<sup>\*</sup> Includes event reports that did not meet the definition of adverse event (definition on page 1)

## **Acceptable Quality**

When a report is acceptable quality, it provides a comprehensive picture of one facility's experience, so that the information can be used to help others learn and improve. PSRP patient safety consultants review every submitted report for acceptable quality to determine if the report provides enough information. OPSC provides specific feedback to reporters on how they might strengthen their event analyses or action plans to better prevent harm in the future. In 2015, 65% of submissions from reporting facilities were found to be of acceptable quality (Table 12). For a complete breakdown of the quality evaluations by segment, see Figure 15 on page 14.

Table 12. Acceptable Quality of Reports by Segment, 2015

	Nursing										
	ASC	Hospital	Facility	Pharmacy	All Segments						
	(n=148)	(n=333)	(n=182)	(n=15)	(n=678)						
Number of reports that were acceptable	99	275	66	2	442						
Percentage of reports that were acceptable	67%	83%	36%	13%	65%						

To help organizations understand what OPSC is looking for when determining acceptable quality, each quality category is broken down into two or three specific measures (<u>Guide to Quality Reporting</u>). Of the 236 submitted reports that fell short of acceptable quality, 75 (32%) missed the "acceptable" designation by a single measure. The two measures that were most frequently missing from reports were:

- 1. A system-level action plan that decreases the likelihood of such events in the future
- 2. At least one relevant root cause identified

The quality of reporting is essential to the success of PSRP; but more importantly, the competencies demonstrated by acceptable quality reporting are vital to healthcare organizations that desire to create a viable and lasting culture of patient safety. Without acceptable quality, transparency efforts are severely limited and opportunities to identify root causes of harm, as well as learn and improve practice to prevent future harm, are impaired.

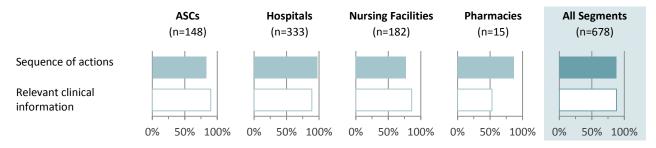
The following sections provide more information about the quality of reports submitted in 2015 by segment. PSRP uses four criteria to determine if reports are of acceptable quality: complete, thorough, credible, and having effective action plan(s).

Figure 15. Quality Evaluation Breakdown by Segment, 2015

■ Required for acceptable quality □ Not required for acceptable quality

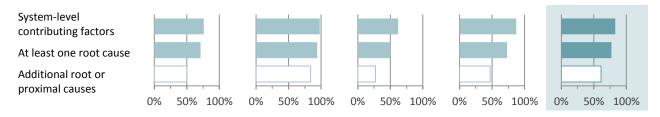
#### Completeness

Report provides essential information and clearly indicates what happened.



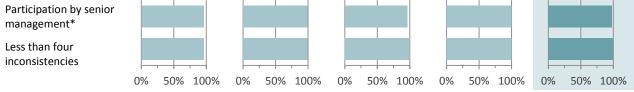
#### **Thoroughness**

Report represents an analysis that considered system-level contributing factors and identified root cause(s).



#### Credibility

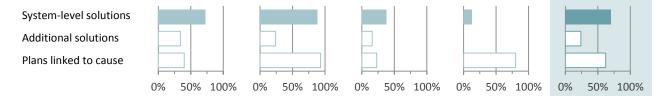
Report contains evidence that the event analysis included leadership participation and was internally consistent.



<sup>\*</sup> Only required of serious harm reports (harm categories F, G, H and I).

#### **Action Plans**

Report includes system-level plans that address identified causes and are likely to decrease the risk of future occurrence.



#### **Timeliness**

After an adverse event, an immediate response is needed to collect full and reliable information on the circumstances surrounding the event, reduce delays, and aid the development of action plans that prevent future events. For the second year in a row, more than half of reports (55%) were submitted within the 45 day requirement (Table 13). Facilities can continue to improve timeliness by reducing the amount of time between review completion and report submission.

**Timeliness:** The amount of time that passes between the date an event was discovered and the date a report is submitted to the Oregon Patient Safety Commission.

The State of Oregon requires that healthcare organizations submit a completed adverse event report within 45 calendar days of discovering a reportable serious adverse event (Oregon Administrative Rules 325).

Table 13. Timeliness of Reports by Segment, 2015

			Nursing		
	ASC	Hospital	Facility	Pharmacy	All Segments
	(n=142)	(n=304)	(n=179)	(n=15)	(n=640)
Number of reports that were timely	73	140	129	13	355
Percentage of reports that were timely	51%	46%	72%	87%	55%

Events that do not meet the definition of adverse event (definition on page 1), or that are discovered on chart review or while analyzing another event, are excluded from timeliness calculations. Reports may also be excluded at the discretion of the patient safety consultant.

OSPC collects four pieces of time-related data for adverse events: date event occurred, date event was discovered, date review team completed their event analysis, and date report was submitted. These data points provide information about patient safety processes and highlight three key reporting timeline phases:

- 1. Event to discovery
- 2. Discovery to review completion
- 3. Review completion to report submission

The median time between event *discovery* and *report submission* was 42 days. To better understand where delays occur, OPSC looks at each of the phases in the reporting process (Table 14). The phase that required the most time was *review completion* to *report submission*. Organizations that are not meeting the timeliness requirement can improve by submitting reports as soon as the event review is complete.

Table 14. Median Days in Key Reporting Timeline Phases, 2015

			Nursing		
	ASC	Hospital	Facility	Pharmacy	All Segments
Median days between (range)	(n=132)	(n=305)	(n=167)	(n=15)	(n=619)
Event to discovery	0 (0-69)	1 (0-421)	0 (0-47)	4 (0-127)	0 (0-421)
Discovery to review completion	9 (0-128)	20 (0-375)	2 (0-296)	11 (0-17)	11 (0-375)
Review completion to report submission	24 (0-491)	23 (0-304)	15 (0-322)	0 (0-134)	20 (0-491)

Events that do not meet the definition of adverse event (definition on page 1), that are discovered on chart review or while analyzing another event, or do not contain all necessary pieces of timeliness data, are excluded from this table. Reports may also be excluded at the discretion of the patient safety consultant.

## Written Notification

The Oregon Patient Safety Commission (OPSC) strongly believes that all patients have a right to know about the serious adverse events that affect their lives. <sup>4</sup> Adverse event disclosure is an appropriate practice for all physicians and healthcare organizations that provide care. Disclosing an adverse event can communicate to patients that the physician and larger healthcare organization are accountable for the care they provide and are strongly invested in quality care and maintaining the patient's trust. Providing patients and families with enough information after an adverse event is essential for both patients and providers to heal and move forward. Patients and families need to understand what happened, what may have caused the event, and how the healthcare facility or provider is working to prevent that same event from happening to another patient, regardless of the severity of harm.

In conjunction with Oregon Administrative Rule (OAR 325-010-0045), OPSC recommends that physicians and healthcare organizations faced with an adverse event provide oral disclosure followed by written notification. The administrative rule requires that Patient Safety Reporting Program participants provide written notification of reportable serious adverse events (definition on page 5) to the patient or patient's personal representative. Additionally, OPSC encourages facilities to strongly consider providing written notification for harm category E events—events that may have contributed to or resulted in temporary harm to the patient but did not require a significant intervention. In 2015, written notification was provided in 37% of the serious events for which it was required (Table 15).<sup>5</sup> (Reasons written notification was not provided when it was required are available in Appendix IV, Table 29.) Facilities also provided written notification in 26% of the cases where it was *not* required.

Table 15. Provision of Written Notification for Serious Adverse Events by Segment, 2015

			Nursing		
	ASC	Hospital*	Facility	Pharmacy	All Segments
	(n=91)	(n=198)	(n=50)	(n=1)	(n=340)
Number of serious event reports where written notification was performed	34	75	17	0	126
Percentage of serious event reports where written notification was performed	37%	38%	34%	0%	37%

<sup>\*</sup> For hospitals, the definition of serious adverse event in Oregon Administrative Rules includes six events types that are considered inherently serious regardless of level of harm (see Appendix III for a complete list).

Read the Oregon Patient Safety Commission Position Statement: Written Notification available online at oregonpatientsafety.org.

While the Oregon Patient Safety Commission does not collect data on whether oral disclosure was provided in the absence of written notification, we believe that oral disclosure is occurring before written notification.

# Conclusion

To provide the safest care possible, Oregon healthcare organizations must fully embrace the importance of building a strong culture of patient safety. Along with leadership support to make safety a priority, a safety culture must include identifying adverse events, conducting in-depth event analysis for those events, and implementing strategies to prevent recurrence. Oregon healthcare organizations that contributed patient safety data to the Patient Safety Reporting Program in 2015 were actively working to strengthen their culture of safety.

As evidenced by growing participation in the Patient Safety Reporting Program, the Oregon healthcare community acknowledges that there is value in working together to share important patient safety lessons. The Oregon Patient Safety Commission will use the healthcare community's Patient Safety Reporting Program contributions to inform patient safety resource development and offerings to help make healthcare safer across Oregon.

# Appendix I. Reporting Patterns, 2009-2016

■ Participating facilities ■ Reporting facilities

Figure 16. Number of Reporting and Participating Ambulatory Surgery Centers, 2009-2015

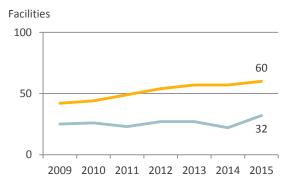


Figure 18. Number of Reporting and Participating Hospitals, 2009-2015

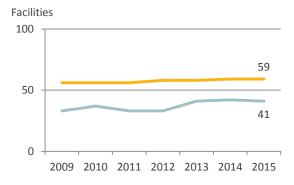


Figure 17. Number of Reporting and Participating Nursing Facilities, 2009-2015

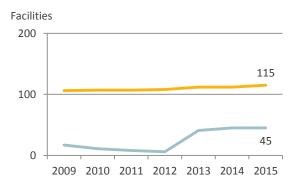
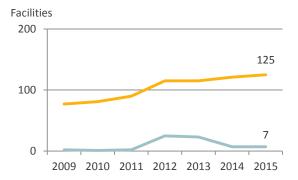


Figure 19. Number of Reporting and Participating Pharmacies, 2009-2015



# Appendix II. NCC MERP Harm Categories and Algorithm

## Harm Categories

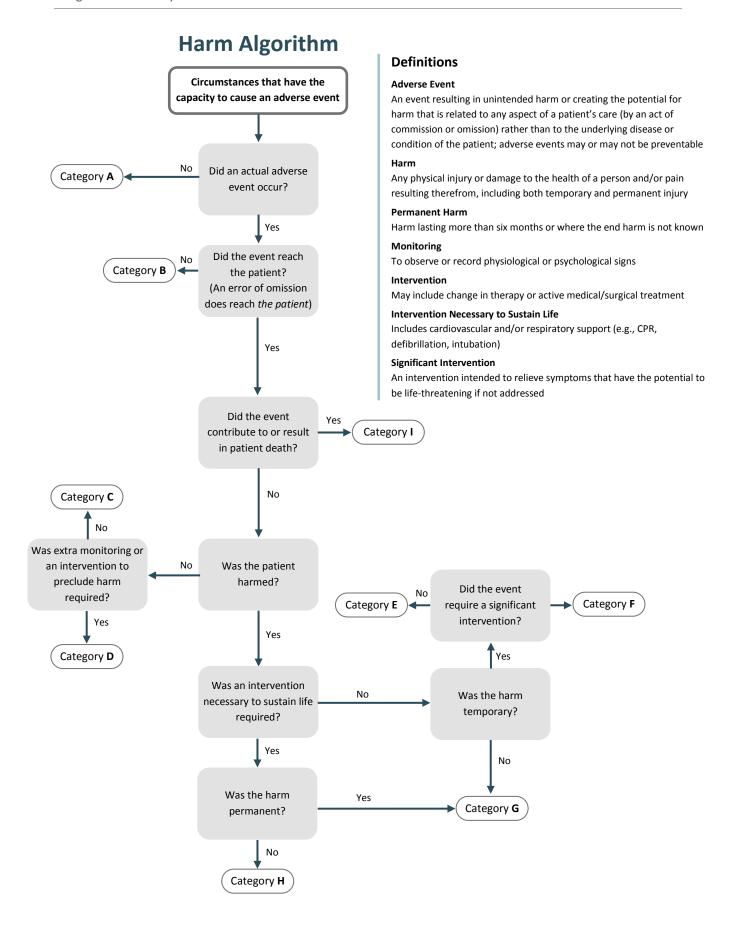
Adverse event ("event") is defined as an event resulting in unintended harm or creating the potential for harm that is related to any aspect of a patient's care (by an act of commission or omission) rather than to the underlying disease or condition of the patient; adverse events may or may not be preventable.

Category A Category B	Circumstances that have the capacity to cause an adverse event  An event occurred that did not reach the patient (an "error of omission" does reach the patient)	Unsafe condition or near miss
Category C	An event occurred that reached the patient but did not cause patient harm  Harm is defined as "any physical injury or damage to the health of a person requiring additional medical care, including both temporary and permanent injury"	Adverse event, no harm
Category D	An event occurred that reached the patient and required monitoring to confirm that it resulted in no harm to the patient and/or required intervention to preclude harm Monitoring is defined as "to observe or record physiological or psychological signs" Intervention is defined as including "change in therapy or active medical/surgical treatment"	
Category E	An event occurred that may have contributed to or resulted in temporary harm to the patient but did not require a significant intervention  Significant intervention is defined as "an intervention intended to relieve symptoms that have the potential to be life-threatening if not addressed"	Adverse event, less serious harm
Category F	An event occurred that may have contributed to or resulted in temporary harm to the patient and required a significant intervention  Significant intervention is defined as "an intervention intended to relieve symptoms that have the potential to be life-threatening if not addressed"	Adverse event, serious harm or death
Category G	An event occurred that may have contributed to or resulted in permanent patient harm Permanent harm is defined as "harm lasting more than 6 months, or where end harm is not known ('watchful waiting')"	
Category H	An event occurred that required intervention necessary to sustain life  Intervention necessary to sustain life is defined as including "cardiovascular and/or respiratory support (e.g., CPR, defibrillation, intubation)"	
Category I	An event occurred that may have contributed to or resulted in patient's death	

Adapted from "NCC MERP Index for Categorizing Medication Errors." 2001 National Coordinating Council for Medication Error Reporting and Prevention.

## What Must be Reported

Participants in Oregon's Patient Safety Reporting Program are required to report any adverse events that result in serious harm or death, which includes harm categories F through I (blue shading). In addition, ambulatory surgery centers and hospitals are also required to report certain events regardless of patient harm. Participants are encouraged to report unsafe conditions or near misses, no harm events, and less serious harm events (yellow shading).



# Appendix III. List of Event Types that are Inherently Serious Regardless of Harm Category

Some events are considered inherently serious, regardless of their harm category. For hospitals, those events are:

- Contaminated, wrong or no gas given to patient
- Discharge or release of a patient of any age, who is unable to make decisions, to an unauthorized person
- Surgical: Incorrect patient
- Surgical: Incorrect procedure
- Surgical: Incorrect site or side
- Unintended retained foreign object

# Appendix IV. Detailed Data Tables by Segment

# Harm Category I Reports

Table 16. Reports Indicating Death (Harm Category I) by Year, 2009-2015

	2009	2010	2011	2012	2013	2014	2015
Number of harm category I reports	34	35	22	34	39	39	38
Percentage of total reports	10%	9%	8%	7%	6%	7%	6%
Ambulatory Surgery Center							
Number of harm category I reports	1	1	0	2	0	0	1
Percentage of total reports	1%	1%	0%	1%	0%	0%	1%
Hospital							
Number of harm category I reports	29	33	22	31	38	36	32
Percentage of total reports	23%	26%	15%	19%	17%	14%	10%
Nursing Facility							
Number of harm category I reports	4	1	0	1	1	3	5
Percentage of total reports	11%	5%	0%	11%	1%	2%	3%
Pharmacy							
Number of harm category I reports	0	0	0	0	0	0	0
Percentage of total reports	0%	0%	0%	0%	0%	0%	0%

# **Event Type**

For further information about event sub-types, see Appendix VI.

Table 17. Event Type by Segment, 2015

			•		Nursing Facilities (n=182)		macies =15)	All Segments (n=678)		
Event Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Fall	12	8%	56	17%	102	56%			170	25%
Medication or other substance	15	10%	43	13%	30	16%	15	100%	103	15%
Surgical or other invasive procedure	74	50%	19	6%					93	14%
Care delay	7	5%	53	16%	4	2%			64	9%
Device or supply	10	7%	25	8%	7	4%			42	6%
Other event	6	4%	17	5%	9	5%			32	5%
Healthcare-associated infection (HAI)	13	9%	15	5%	3	2%			31	5%
Retained object	3	2%	25	8%					28	4%
Pressure ulcer			18	5%	6	3%			24	4%
Suicide or attempted suicide			16	5%	0	0%			16	2%
Maternal			14	4%					14	2%
Elopement			1	0.3%	10	5%			11	2%
Anesthesia	3	2%	6	2%					9	1%
Failure to follow up or communicate test results			8	2%					8	1%
Contaminated drugs, devices or biologics	1	1%	6	2%					7	1%

		i <b>Cs</b> 148)		oitals 333)	Nursing Facilities (n=182)		Pharmacies (n=15)		All Seg (n=6	ments 578)	
Event Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Deep vein thrombosis	6	4%							6	1%	
Resident transfer related					4	2%			4	1%	
Aspiration	1	1%	0	0%	3	2%			4	1%	
Perinatal			4	1%					4	1%	
Choking					3	2%			3	0.4%	
Burn	0	0%	0	0%	3	2%			3	0.4%	
Radiologic			3	1%					3	0.4%	
Irretrievable loss of	0	0%	2	1%					2	0.3%	
irreplaceable specimen	0	0%	2	10/					2	0.20/	
Air embolism	_	-,-	_	1%					_	0.3%	
Blood or blood product	0	0%	1	0.3%					1	0.1%	
Fecal impaction					1	1%			1	0.1%	
Total Events	151		334		185		15		685		

#### Other events:

- 5 Injury unrelated to an existing event type
- 5 Care management
- 4 Unexpected death
- 3 Inadequate discharge planning
- 3 Behavioral health patient assault on staff
- 2 Patient access to restricted items
- 2 Injury related to unsafe environment
- 1 Surgical event that does not meet the definition of an existing event type
- 1 Resident-to-resident physical or verbal altercation
- 1 Potential for skin integrity breakdown
- 1 Operating room fire
- 1 Misidentification of patient
- 1 Inadequate patient assessment
- 1 Hospital patient with pulmonary embolism and deep vein thrombosis
- 1 ASC patient with pressure ulcer

## Event Type by Harm by Segment

Table 18. Event Type by Harm, Ambulatory Surgery Centers, 2015

**Harm Category** Less Serious or No Harm Serious Harm or Death **Event Type** C D Ε G н В Anesthesia 3 Aspiration 1 Care delay 1 1 1 Contaminated drugs, devices or biologics Deep vein thrombosis with or without pulmonary embolism 5 Device or medical/surgical supply 2 2 3 3 Fall 1 1 10 3 Healthcare-associated infection (HAI) Medication or other substance 2 4 1 Other event 3 1 Surgical or other invasive procedure 11 4 42 4 Unintended retained foreign object 2

1

31

16

15

65

9

Table 19. Event Type by Harm, Hospitals, 2015

**Total Reports in Harm Category** 

	Harm Category									
	Les	ss Serio	ous or	No Ha	rm	Serious	Harm	or De	ath	
Event Type	Α	В	С	D	E	F	G	Н	ı	
Air embolism				1					1	
Anesthesia			2			2		2		
Blood or blood product		1								
Care delay	1	2	7	11	1	6	5	7	13	
Contaminated drugs, devices or biologics			1	5						
Device or medical/surgical supply			5	6	6	5		2	1	
Elopement			1							
Failure to follow up or communicate test results	1	1	1	1		3	1			
Fall		1	4	1	13	31	5		1	
Healthcare-associated infection (HAI)	1				1	9		1	3	
Irretrievable loss of irreplaceable specimen			1	1						
Maternal				1	1	5	3	4		
Medication or other substance		3	5	6	3	16	1	6	3	
Other event	3	1	4	3		2	1		3	
Perinatal						1	1	1	1	
Pressure ulcer					4	1	13			
Radiologic			2		1					
Suicide or attempted suicide	1			1	2	2		4	6	
Surgical or other invasive procedure		1	1		6	5	5	1		
Unintended retained foreign object			4	3	3	14		1		
Total Reports in Harm Category	7	10	38	40	41	101	35	29	32	

Table 20. Event Type by Harm, Nursing Facilities, 2015

	Less Serious or No Harm					Serious Harm or Death			
Event Type	Α	В	С	D	E	F	G	Н	- 1
Aspiration						2			1
Burn				1		1			1
Care delay			1	1	1				1
Choking				1		1		1	
Device or medical supply			1		1	5			
Elopement		1	3	2		4			
Fall	5		14	33	24	21	2	1	2
Fecal impaction						1			
Healthcare-associated infection (HAI)					2				1
Medication or other substance		1	4	21	2	2			

**Harm Category** 

1

2

2

40

1

5

Table 21. Event Type by Harm, Pharmacies, 2015

		Harm Category									
	Les	Less Serious or No Harm					Serious Harm or Death				
Event Type	Α	В	С	D	E	F	G	Н	ı		
Medication or other substance	1	5	7	1		1					
Total Reports in Harm Category	1	5	7	1	0	1	0	0	0		

5

## Falls

Other event

Pressure ulcer

Resident transfer related

**Total Report in Harm Category** 

Table 22. Physical Injury Resulting from Fall by Segment, 2015

			Nursing	
	ASC	Hospital	Facility	All Segments
	(n=12)	(n=56)	(n=102)	(n=170)
Physical injury	Number (%)	Number (%)	Number (%)	Number (%)
Physical injury	2 (17%)	47 (84%)	47 (46%)	96 (56%)
None	10 (83%)	7 (13%)	53 (52%)	70 (41%)
Unknown	0 (0%)	2 (4%)	2 (2%)	4 (2%)

Table 23. Type of Physical Injury Resulting from Fall by Segment, 2015

	ASC (n=2)	Hospital (n=47)	Nursing Facility (n=47)	All Segments (n=96)
Physical injury	Number (%)	Number (%)	Number (%)	Number (%)
Fracture		31 (66%)	21 (45%)	52 (54%)
Skin tear, avulsion, hematoma or significant bruising	1 (50%)	2 (4%)	14 (30%)	17 (18%)
Other injury		3 (6%)	9 (19%)	12 (13%)
Laceration requiring sutures	1 (50%)	3 (6%)	3 (6%)	7 (7%)
Intracranial injury		6 (13%)		6 (6%)
Dislocation		2 (4%)		2 (2%)

Table 24. Assisted and Unassisted Falls by Segment, 2015

	<b>ASC</b> (n=12)	Hospital (n=56)	Nursing Facility (n=102)	All Segments (n=170)
Was the fall assisted or unassisted?	Number (%)	Number (%)	Number (%)	Number (%)
Unassisted	10 (83%)	48 (86%)	85 (83%)	143 (84%)
Assisted	2 (17%)	7 (13%)	13 (13%)	22 (13%)
Unknown	0 (0%)	1 (2%)	4 (4%)	5 (3%)

Table 25. Observed and Unobserved Falls by Segment, 2015

	ASC	Hospital	Nursing Facility	All Segments
	(n=12)	(n=56)	(n=102)	(n=170)
Was the fall observed or unobserved?	Number (%)	Number (%)	Number (%)	Number (%)
Unobserved	4 (33%)	37 (66%)	74 (73%)	115 (68%)
Observed by staff (regardless of who else observed the fall)	7 (58%)	15 (27%)	24 (24%)	46 (27%)
Observed by visitor, family or another patient, but not staff	1 (8%)	4 (7%)	4 (4%)	9 (5%)

Table 26. Presence of a Documented Fall Risk Assessment by Segment, 2015

	Hospital (n=56)	Nursing Facility (n=102)	Both Segments (n=158)
Was a fall risk assessment documented?	Number (%)	Number (%)	Number (%)
Documented	45 (80%)	91 (89%)	136 (86%)
Not documented	10 (18%)	6 (6%)	16 (10%)
Unknown	1 (2%)	5 (5%)	6 (4%)

Table 27. Level of Patient Fall Risk by Segment, 2015

	Hospital	Nursing Facility	Both Segments
Was the patient assessed to be at any level of risk for	(n=56)	(n=102)	(n=158)
a fall?	Number (%)	Number (%)	Number (%)
Patient at any level of risk for fall	47 (84%)	88 (86%)	135 (85%)
Patient not at any level of risk for fall	8 (14%)	2 (2%)	10 (6%)
Patient's status unknown or unassessed	1 (2%)	12 (12%)	13 (8%)

Table 28. Patient Activities Performed or Attempted at the Time of the Fall by Segment, 2015

	ASC	Hospital	Nursing Facility	All Segments
Prior to the fall, what was the patient doing or trying	(n=12)	(n=56)	(n=102)	(n=170)
to do?	Number (%)	Number (%)	Number (%)	Number (%)
Transferring to or from bed, chair, wheelchair, etc. without assistance	2 (17%)	12 (21%)	22 (22%)	36 (21%)
Toileting-related activities	1 (8%)	20 (36%)	8 (8%)	29 (17%)
Walking without assistance and without an assistive device or medical equipment	0 (0%)	1 (2%)	21 (21%)	22 (13%)

			Nursing	
	ASC Hospital Facility		Facility	<b>All Segments</b>
Prior to the fall, what was the patient doing or trying	(n=12)	(n=56)	(n=102)	(n=170)
to do?	Number (%)	Number (%)	Number (%)	Number (%)
Unknown	0 (0%)	6 (11%)	9 (9%)	15 (8%)
Changing position (e.g., in bed, chair, etc.)	0 (0%)	0 (0%)	13 (13%)	13 (8%)
Walking with assistance and/or with an assistive device or medical equipment	2 (17%)	8 (14%)	2 (2%)	12 (7%)
Standing or sitting	1 (8%)	3 (5%)	5 (5%)	9 (5%)
Transferring to or from bed, chair, wheelchair, etc. with assistance	0 (0%)	1 (2%)	8 (8%)	9 (5%)
Dressing or undressing	6 (50%)	2 (4%)	0 (0%)	8 (5%)
Reaching for an item	0 (0%)	1 (2%)	5 (5%)	6 (4%)
Other	0 (0%)	1 (2%)	3 (3%)	4 (2%)
Showering or bathing	0 (0%)	1 (2%)	2 (2%)	3 (2%)
Sleeping	0 (0%)	0 (0%)	3 (3%)	3 (2%)
Navigating bedrails/siderails/assist rails	0 (0%)	0 (0%)	1 (1%)	1 (1%)

## Written Notification

Table 29. Reasons Written Notification was not Provided when Required by Segment, 2015

			Nursing		
Please specify why no written notification	ASC	Hospital	Facility	Pharmacy	All Segments
was given	(n=57)	(n=123)	(n=33)	(n=1)	(n=214)
Oral disclosure provided	32 (56%)	93 (76%)	11 (33%)	1 (100%)	137 (64%)
Not required by facility organizational policy	25 (44%)	15 (12%)	15 (45%)	0 (0%)	55 (26%)
No organizational policy	7 (12%)	8 (7%)	12 (36%)	0 (0%)	27 (13%)
Other reason	1 (2%)	11 (9%)	2 (6%)	0 (0%)	14 (7%)
Not required by the OPSC definition	1 (2%)	4 (3%)	0 (0%)	0 (0%)	5 (2%)

Facilities could select more than one response. Of note, "oral discloure provided" only reflects whether oral disclosure was provided as an alternative to written notification; it does not indicate the absence of oral disclosure. The Oregon Pateint Safety Commission believes that oral disclosure is occurring before written notification.

# Appendix V. Event Types by Segment

• Indicates event type is reportable

Event type	ASC	Hospital	Nursing Facility	Pharmacy
Air embolism	•	•		
Anesthesia	•	•		
Aspiration	•	•	•	
Blood or blood product (including hemolytic reactions)	•	•		
Burn (unrelated to the use or misuse of a device or medical/surgical supply)	•	•	•	
Care delay (including delay in treatment, diagnosis)	•	•	•	
Choking			•	
Contractures			•	
Dehydration			•	
Contaminated drugs, devices or biologics	•	•		
Contaminated, wrong or no gas given to a patient	•	•		
Deep vein thrombosis with or without pulmonary embolism	•			
Device or medical/surgical supply (including use error)	•	•	•	
Diabetic coma			•	
Discharge or release of a patient of any age, who is unable to make decisions, to an unauthorized person		•	•	
Electric shock	•	•		
Elopement		•	•	
Failure to follow up or communicate lab, pathology, or radiology test results		•		
Fall	•	•	•	
Fecal impaction			•	
Healthcare-associated infection (HAI)	•	•	•	
Intravascular embolisms related to IV therapy			•	
Irretrievable loss of irreplaceable biological specimen	•	•		
Maternal		•		
Medication or other substance	•	•	•	•
Perinatal		•		
Pressure ulcer		•	•	
Radiologic		•		
Resident transfer related			•	
Restraint or bedrail related	•	•	•	
Strangulation			•	
Suicide or attempted suicide		•	•	
Surgical or other invasive procedure	•	•		
Unintended retained foreign object (includes retained surgical items)	•	•		
Other event (please describe)	•	•	•	

# Appendix VI. Event Sub-Types by Segment

When completing a report, healthcare facilities identify a specific type of adverse event. For six event types, facilities are asked to further specify a sub-type within the chosen event type (e.g., specifying that the kind of *medication or other substance* event was an *incorrect dose*); facilities can select more than one event sub-type. A list of event types that do not specify sub-types is included at the end of this appendix.

## **Anesthesia Events**

Table 30. Anesthesia Event Sub-Types by Segment, 2015

Anesthesia Event	<b>ASC</b> (n=3)		<b>Hos</b> ¡ (n=		Both Segments (n=9)		
Sub-Type	Number	Percent	Number	Percent	Number	Percent	
Oversedation	1	33%	3	50%	4	44%	
Incorrect site anesthesia	0	0%	3	50%	3	33%	
Difficulty managing airway	2	67%	0	0%	2	22%	
Awareness (during anesthesia)	0	0%	1	17%	1	11%	

## **Blood or Blood Product Events**

Table 31. Blood or Blood Product Event Sub-Types by Segment, 2015

	ASC		Hos	oital	Both Segments		
<b>Blood or Blood Product</b>	(n=0)		(n=1)		(n=1)		
Event Sub-Type	Number	Percent	Number	Percent	Number	Percent	
Incorrect patient			1	100%	1	100%	

## **Device or Supply Events**

Table 32. Device or Supply Event Sub-Types by Segment, 2015

Device or Supply Event	<b>ASC</b> (n=10)		Hospital (n=25)		Nursing Facility (n=7)		All Segments (n=42)	
Sub-Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Use error	8	80%	16	64%	5	71%	29	69%
Device or supply failure	2	20%	8	32%	3	43%	13	31%
Device or supply not available	2	20%	1	4%	0	0%	3	7%
Device or supply expired	1	10%	0	0%	0	0%	1	2%
Other device or supply event	0	0%	1	4%	0	0%	1	2%

Other device or supply events:

• 1 – Device maintenance preformed incorrectly

# Healthcare-Associated Infection (HAI) Events

Table 33. HAI Event Sub-Types by Segment, 2015

	AS	SC	Hos	pital	Nursing	Facility	All Segr	nents *
	(n=	13)	(n=	15)	(n=	=3)	(n=	31)
HAI Event Sub-Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Surgical site infection (SSI)	11	85%	1	7%			12	43%
Central line-associated BSI (CLABSI)	0	0%	8	53%	0	0%	8	26%
Catheter-associated UTI (CAUTI)			1	7%	1	33%	2	11%
Gastrointestinal system infection	0	0%	3	20%	0	0%	3	10%
Sepsis	1	8%	2	13%	0	0%	3	10%
Urinary tract infection (UTI)			0	0%	1	33%	1	6%
Ventilator-associated Pneumonia (VAP)	0	0%	2	13%	0	0%	2	6%
Pneumonia	0	0%	0	0%	1	33%	1	3%
Other HAI event	1	8%	0	0%	0	0%	1	3%

<sup>\* &</sup>quot;All Segments" denominators are limited to segments for which this answer option is available.

Other healthcare-associated infection events:

## Medication or Other Substance Events

Table 34. Medication or Other Substance Event Sub-Types by Segment, 2015

Medication or Other	AS	SC	Hos	pital	Nursing	Facility	Phari	macy	All Segr	ments *
Substance Event Sub-	(n=	15)	(n=	43)	(n=	30)	(n=	15)	(n=1	103)
Туре	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Incorrect medication or substance	4	27%	11	26%	5	17%	2	13%	22	21%
Incorrect patient							3	20%	3	20%
Incorrect dose	0	0%	8	19%	5	17%	2	13%	15	15%
Incorrect directions							2	13%	2	13%
Medication omitted	2	13%	1	2%	9	30%	0	0%	12	12%
Incorrect route	1	7%	7	16%	2	7%	0	0%	10	10%
Contraindicated	2	13%	5	12%	0	0%	1	7%	8	8%
Incorrect time	2	13%	0	0%	5	17%			7	8%
Incorrect strength	0	0%	3	7%	1	3%	3	20%	7	7%
Generic substitution							1	7%	1	7%
Adverse reaction	5	33%	1	2%	0	0%	0	0%	6	6%
Oversedation	1	7%	3	7%	0	0%			4	5%
Discontinued	0	0%	2	5%	2	7%			4	5%
Incorrect rate	0	0%	2	5%	1	3%			3	3%
Expired	0	0%	1	2%	0	0%	1	7%	2	2%
Incorrect/ incomplete labeling	0	0%	1	2%	0	0%	0	0%	1	1%
Allergic reaction	0	0%	0	0%	1	3%	0	0%	1	1%

<sup>\* &</sup>quot;All Segments" denominators are limited to segments for which this answer option is available.

<sup>• 1 –</sup> ASC patient with UTI

## **Surgical Events**

Table 35. Surgical Event Sub-Types by Segment, 2015

	<b>ASC</b> (n=74)		Hospital (n=19)		Both Segments (n=93)	
Surgical or Other Invasive Procedure Event Sub-Type	Number	Percent	Number	Percent	Number	Percent
Unplanned admission to hospital within 48 hours of discharge	26	35%			26	35%
Unplanned emergency department visit within 48 hours of discharge	17	23%			17	23%
Incorrect site or side	9	12%	9	47%	18	19%
Laceration, perforation, puncture, or nick	6	8%	4	21%	10	11%
Incorrect implant	7	9%	2	11%	9	10%
Postoperative bleeding requiring return to operating room	9	12%	0	0%	9	10%
Other surgical or other invasive procedure event	5	7%	0	0%	5	5%
Incorrect procedure	1	1%	3	16%	4	4%
Incorrect patient	2	3%	2	11%	4	4%

<sup>\* &</sup>quot;Both Segments" denominators are limited to segments for which this answer option is available.

Other surgical or other invasive procedure events:

- 4 Issue with surgery consent process
- 1 Unplanned transfer to hospital outpatient surgery

#### The following event types reported in 2015 do not have sub-types:

- Air embolism
- Aspiration
- Burn
- Care delay
- Choking
- Contaminated drugs, devices or biologics
- Deep vein thrombosis (DVT)
- Elopement
- Failure to follow up or communicate test results
- Fall

- Fecal impaction
- Irretrievable loss of irreplaceable biological specimen
- Maternal
- Other event
- Perinatal
- Pressure ulcer
- Radiologic
- Resident transfer related
- Suicide or attempted suicide
- Unintended retained foreign object

# Appendix VII. Contributing Factors

The Patient Safety Reporting Program asks reporters to specify whether each of the eight contributing factor categories applies to their adverse event. The denominators in each table are the number of reports in each segment that marked at least one factor in that category.

## Communication

## **Healthcare Team Communication Factors**

Table 36. Healthcare Team Communication Factors by Segment, 2015

	ASC	Hospital	Nursing Facility	All Segments*
	(n=66)	(n=228)	(n=52)	(n=346)
Healthcare Team Communication Factors	Number (%)	Number (%)	Number (%)	Number (%)
Across units		43 (19%)	1 (2%)	44 (16%)
Among interdisciplinary teams	11 (17%)	53 (23%)	12 (23%)	76 (22%)
Between providers and staff	32 (48%)	108 (47%)	9 (17%)	149 (43%)
Between supervisor and staff	3 (5%)	18 (8%)	17 (33%)	38 (11%)
Handoffs, handovers or shift reports	9 (14%)	83 (36%)	11 (21%)	103 (30%)
Hard to read fax or handwriting	0 (0%)	3 (1%)	1 (2%)	4 (1%)
Within units	6 (9%)	41 (18%)	9 (17%)	56 (16%)
With other organizations or outside providers	10 (15%)	24 (11%)	11 (21%)	45 (13%)
Other healthcare team communication factors	0 (0%)	1 (0.4%)	0 (0%)	1 (0.3%)

<sup>\* &</sup>quot;All Segments" denominators are limited to segments for which this answer option is available. Pharmacies were excluded from this table because their n was too small.

## **Patient/Family Communication Factors**

Table 37. Patient/Family Communication Factors by Segment, 2015

			Nursing	
	ASC	Hospital	Facility	All Segments
	(n=66)	(n=228)	(n=52)	(n=346)
Patient/Family Communication Factors	Number (%)	Number (%)	Number (%)	Number (%)
Culture	0 (0%)	13 (6%)	4 (8%)	17 (5%)
Language	0 (0%)	4 (2%)	5 (10%)	9 (3%)
Miscommunication	11 (17%)	38 (17%)	14 (27%)	63 (18%)
Understanding discharge instructions or plan	17 (26%)	2 (1%)	0 (0%)	19 (5%)
Patient did not use call light	0 (0%)	0 (0%)	1 (2%)	1 (0.3%)
Patient unable to communicate	0 (0%)	0 (0%)	2 (4%)	2 (0.6%)
Other patient/family communication factors	2 (3%)	5 (2%)	0 (0%)	7 (2%)

Pharmacies were excluded from this table because their n was too small.

# Device, Equipment or Supply

Table 38. Device, Equipment or Supply Factors by Segment, 2015

	ASC	Hospital	Nursing Facility	All Segments
	(n=31)	(n=97)	(n=43)	(n=171)
Device, Equipment or Supply Factors	Number (%)	Number (%)	Number (%)	Number (%)
Availability	10 (32%)	40 (41%)	12 (28%)	62 (36%)
Design	15 (48%)	30 (31%)	14 (33%)	59 (35%)
Function	4 (13%)	32 (33%)	15 (35%)	51 (30%)
Maintenance	2 (6%)	8 (8%)	7 (16%)	17 (10%)
Shortages	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Use or selection by healthcare provider or staff	1 (3%)	11 (11%)	2 (5%)	14 (8%)
Use by patient (or resident)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other device or supply factors	1 (3%)	0 (0%)	0 (0%)	1 (1%)

Pharmacies were excluded from this table because they did not indicate Device, equipment or supply factors on any submissions.

## Human or Environmental

Table 39. Human or Environmental Factors by Segment, 2015

			Nursing		
	ASC	Hospital	Facility	Pharmacy	All Segments
	(n=23)	(n=130)	(n=36)	(n=9)	(n=198)
Human or Environmental Factors	Number (%)				
Clutter	1 (4%)	3 (2%)	2 (6%)	1 (11%)	7 (4%)
Interruptions or distractions	16 (70%)	77 (59%)	19 (53%)	6 (67%)	118 (60%)
Lighting	0 (0%)	7 (5%)	1 (3%)	0 (0%)	8 (4%)
Noise	0 (0%)	8 (6%)	3 (8%)	0 (0%)	11 (6%)
Provider or staff fatigue	1 (4%)	10 (8%)	3 (8%)	2 (22%)	16 (8%)
Provider or staff health issues	1 (4%)	3 (2%)	3 (8%)	0 (0%)	7 (4%)
Provider or staff stress	3 (13%)	27 (21%)	6 (17%)	3 (33%)	39 (20%)
Work area design or specifications	5 (22%)	35 (27%)	7 (19%)	1 (11%)	48 (24%)
Other human or environmental factors	1 (4%)	5 (4%)	4 (11%)	1 (11%)	11 (6%)

# Organizational

Table 40. Organizational Factors by Segment, 2015

			Nursing	All
	ASC	Hospital	Facility	Segments*
	(n=34)	(n=163)	(n=35)	(n=232)
Organizational Factors	Number (%)	Number (%)	Number (%)	Number (%)
Adequacy of budget	0 (0%)	1 (1%)	1 (3%)	2 (9%)
Clinical supervision	2 (6%)	26 (16%)		28 (14%)
Culture of safety	4 (12%)	40 (25%)	7 (20%)	51 (22%)
Internal reporting	1 (3%)	8 (5%)	1 (3%)	10 (4%)
Job orientation or training	17 (50%)	60 (37%)	17 (49%)	94 (41%)
Management or leadership skills	0 (0%)	8 (5%)	5 (14%)	13 (6%)
Managerial supervision	1 (3%)	13 (8%)		14 (7%)
Staff competencies	7 (21%)	72 (44%)	15 (43%)	94 (41%)
Staff turnover			3 (9%)	3 (9%)
Staffing level	2 (6%)	28 (17%)	5 (14%)	35 (15%)
Supervision			8 (23%)	8 (23%)
Systems to identify risk	8 (24%)	31 (19%)	9 (26%)	48 (21%)
Temporary staffing	0 (0%)	4 (2%)	3 (9%)	7 (3%)
Work assignment or allocation	1 (3%)	28 (17%)	6 (17%)	35 (15%)
Other organizational factors	5 (15%)	0 (0%)	1 (3%)	6 (3%)

<sup>\* &</sup>quot;All Segments" denominators are limited to segments for which this answer option is available. Pharmacies were excluded from this table because their n was too small.

# Policy or Procedure

Table 41. Policy or Procedure Factors by Segment, 2015

			Nursing		All
	ASC	Hospital	Facility	Pharmacy	Segments
	(n=42)	(n=195)	(n=27)	(n=7)	(n=271)
Policy or Procedure Factors	Number (%)				
Clarity of policy or procedure	18 (43%)	89 (46%)	8 (30%)	1 (14%)	116 (43%)
Policy or procedure absent	17 (40%)	53 (27%)	5 (19%)	1 (14%)	76 (28%)
Staff or providers unfamiliar with policy or procedure	6 (14%)	60 (31%)	13 (48%)	0 (0%)	79 (29%)
Too cumbersome	2 (5%)	3 (2%)	1 (4%)	0 (0%)	6 (2%)
Work around more efficient	4 (10%)	26 (13%)	3 (11%)	1 (14%)	34 (13%)
Other policy or procedure factors	4 (10%)	21 (11%)	1 (4%)	5 (71%)	31 (11%)

## **Patient Factors**

Table 42. Patient Factors by Segment, 2015

			Nursing	
	ASC	Hospital	Facility	All Segments
	(n=44)	(n=172)	(n=137)	(n=353)
Patient Factors	Number (%)	Number (%)	Number (%)	Number (%)
Behavioral status	9 (20%)	41 (24%)	65 (47%)	116 (33%)
Family dynamics or relationships	7 (16%)	14 (8%)	9 (7%)	30 (8%)
Fragile health status	19 (43%)	103 (60%)	50 (36%)	175 (50%)
Mental status	8 (18%)	50 (29%)	87 (64%)	145 (41%)
Physical limitations	14 (32%)	58 (34%)	112 (82%)	184 (52%)
Sensory impairment	9 (20%)	30 (17%)	54 (39%)	93 (26%)
Other patient factors	0 (0%)	2 (1%)	0 (0%)	2 (1%)

<sup>\*</sup> Pharmacies were excluded from this table because their n was too small.

# **Patient Management Factors**

Table 43. Patient Management Factors by Segment, 2015

			Nursing	All
	ASC	Hospital	Facility	Segments*
	(n=50)	(n=134)	(n=52)	(n=236)
Patient Management Factors	Number (%)	Number (%)	Number (%)	Number (%)
Accuracy of care plan			8 (15%)	8 (15%)
Follow-up care	9 (18%)	10 (7%)	11 (21%)	30 (13%)
Implementation of care plan			14 (27%)	14 (27%)
Initial diagnosis	2 (4%)	10 (7%)	10 (19%)	22 (9%)
Patient or risk assessment	24 (43%)	46 (34%)	22 (42%)	92 (39%)
Response to changing condition	6 (12%)	60 (45%)	13 (25%)	79 (33%)
Treatment or care plan	23 (46%)	57 (43%)		80 (43%)
Other patient management factors	2 (4%)	0 (0%)	0 (0%)	2 (1%)

<sup>\* &</sup>quot;All Segments" denominators are limited to segments for which this answer option is available. The category Patient Management is not available to pharmacies.