



District of Columbia Patient Safety Reporting Program

Annual Report

Fiscal Year 2017

FOR THE REPORTING PERIOD OF:

OCTOBER 1, 2016, through SEPTEMBER 30, 2017



Table of Contents

Executive Summary	3
I. Background	3
II. Data Collection—Patterns and Trends in Adverse Event Reports	4
Introduction	6
I. The District’s Patient Safety Reporting System	6
Data Collection and Analysis	10
I. Reportable Events.....	10
II. Reports by Event Type.....	10
III. Reports by Level of Harm	16
IV. Report Quality	18
V. Corrective Action Plans in Reports	18
VI. Central-Line-Associated Bloodstream Infections (CLABSIs).....	19
VII. Patient Safety Webinars and Training.....	20
Guidance and Recommendations.....	21
I. Retained Foreign Objects	21
II. Falls.....	22
III. Pressure Ulcers.....	24
Conclusion.....	25
Technical Credits	25
Acronyms and Abbreviations	26
Figure and Table lists.....	26
References.....	27

Executive Summary

I. Background

In December 2006, the District of Columbia passed the Medical Malpractice Amendment Act of 2006. The Act requires that all licensed healthcare providers or medical facilities report adverse events, which include the 29 serious reportable events defined by the National Quality Forum (NQF) as events that are unambiguous (identifiable and measurable), serious (resulting in death or significant injury), and usually preventable.

In 2009, the Act was amended to require that adverse events be reported within 60 days of their occurrence. In January 2010, the web-based DC Health - Health Regulation and Licensing Administration Patient Safety Reporting System, hosted by ECRI Institute, was implemented as part of the ongoing effort to improve healthcare delivery.

Starting in 2010, District facilities were required to report central-line-associated bloodstream infections (CLABSIs) in intensive care units (ICUs) through the National Healthcare Safety Network (NHSN) system, allowing epidemiologists at DC Health to monitor and validate infection rates for District facilities and contribute District information to the Centers for Disease Control and Prevention's (CDC) national database.

Current users of the web-based adverse event reporting system include acute care hospitals and long-term acute care, rehabilitation, and ambulatory surgical facilities.

Adverse event reports are submitted to DC Health through its subcontractor, ECRI Institute. These reports are confidential.

The web-based reports are analyzed to identify patterns and trends, to determine recommended methods to reduce systematic adverse events, and serve as the basis for the information disseminated to ensure best practices. In addition, technical assistance is provided to healthcare providers and medical facilities. All other facilities and providers can submit adverse event reports using the original paper-based form.

The DC Health Center for Policy, Planning and Evaluation's Division of Epidemiology Disease Surveillance and Investigation (CPPE DE-DSI) provides CLABSI data from CDC's NHSN to ECRI Institute to include in the annual report.

This 10th annual report provides an update on the District of Columbia Patient Safety Reporting System. The report presents an overview of the program's offerings, analysis of adverse event reports, and descriptions of the most significant findings from events submitted between October 1, 2016, and September 30, 2017, as well as comparisons with data from previous years.

II. Data Collection—Patterns and Trends in Adverse Event Reports

Collecting and analyzing reports of adverse events is a vital component of the District's goal to improve the quality of healthcare delivery. During the reporting period of October 2016 through September 2017 (fiscal year [FY] 2017), the District's healthcare providers and medical facilities submitted a total of 200 events to DC Health (DC Health, 2017; ECRI Institute Patient Safety Organization [PSO]).

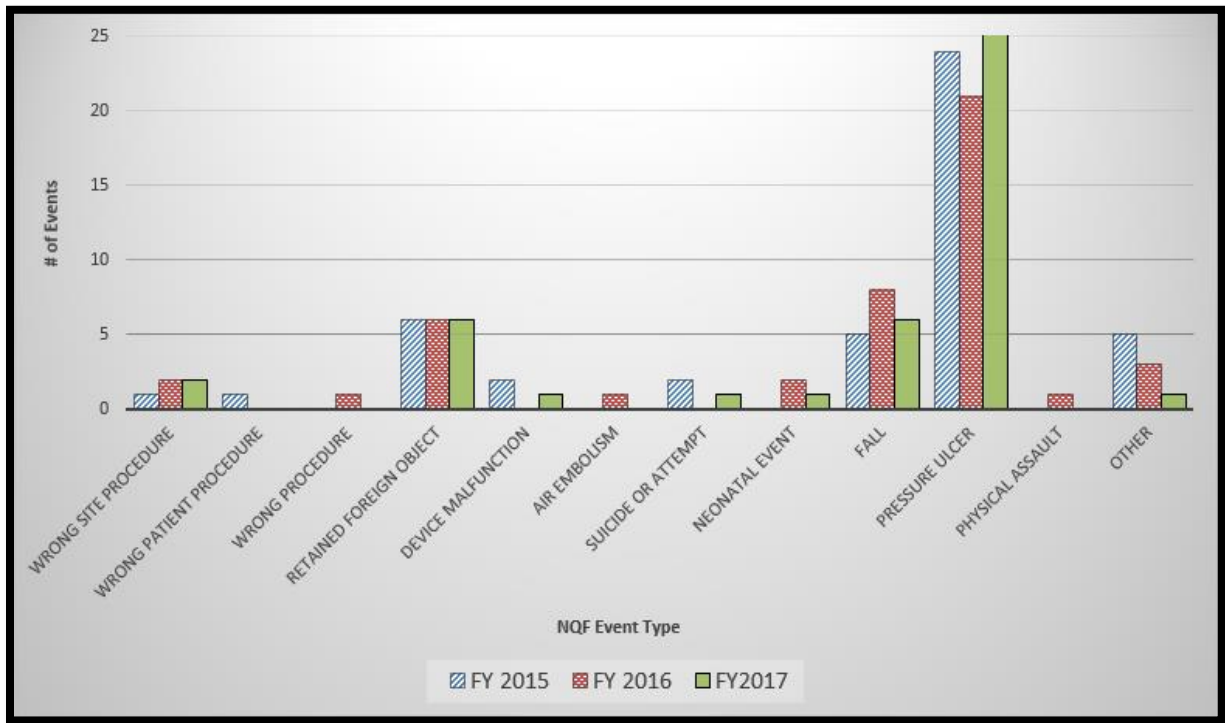
Forty-five adverse event reports were submitted to the District of Columbia Patient Safety Reporting System, and 155 CLABSI reports (DC Health, 2017) were submitted to CDC's NHSN. These events are reported to and validated by DC Health's CPPE DE-DSI.

DC Health continued to use NQF's updated 2011 list of 29 serious reportable events as a classification system for reportable events during FY 2017. The NQF events analysis is based on events submitted between October 2016 and September 2017, regardless of event occurrence date. The lag time in reporting is due to the time lag established within the reporting requirement. Acute care hospitals submitted 95% of the reports.

Similar to past years, the most commonly reported event types, representing 194 (97%) of reports submitted, were CLABSIs (78%), pressure ulcers (14%), falls (3%), and retained foreign objects (3%).

Figure 1 provides an overview of the number of serious reportable events, by NQF event type, that have been reported over the past three fiscal years (ECRI Institute PSO). The adverse event reports submitted by healthcare providers and medical facilities in the 10th year of the District's reporting program represent a continued effort by the District to contribute to the Patient Safety Reporting System.

FIGURE 1. NUMBER OF NQF EVENTS BY TYPE, FY 2015–FY 2017



Introduction

I. The District's Patient Safety Reporting System

Goals of the District's Patient Safety Reporting System are to:

- ▶ Promote patient safety
- ▶ Improve the culture of safety
- ▶ Learn from and prevent the reoccurrence of similar adverse events
- ▶ Provide feedback and information on best practices to District facilities

Aggregation of adverse event data gathered from facilities and providers throughout the District is a powerful tool to identify trends in reporting that challenge safe and effective healthcare and assists in achieving the primary goal of the reporting program to prevent the reoccurrence of similar adverse events. The web-based adverse event reporting system provides access to aggregate data at the District level and through [ECRI Institute PSO](#) at the national level. Analysis of the information received through the District's reporting program serves as the basis for meaningful insights, lessons learned, and the development of best practices that can improve patient safety.

For three NQF event categories—retained foreign objects, falls, and pressure ulcers—this report provides an overview of data from the past fiscal year and presents guidance and recommendations to help look further into the practices surrounding these adverse events.

Aside from the annual report, in FY 2017, the District's Patient Safety Reporting System offered facilities the following resources:

- ▶ Webinars (Table 1, p. 7) are offered at least quarterly on patient safety topics.
- ▶ Patient safety advisory articles (Table 2, p. 7) are offered quarterly in the publications *National Navigator* and *District Navigator*.
- ▶ *Patient Safety Membership Update* is a twice-monthly electronic newsletter that compiles updated patient safety news

If a thorough corrective action plan (CAP) is submitted along with an event, it is analyzed through ECRI Institute PSO's root-cause analysis (RCA) review process. The facility can then be provided with a report to further assist providers and staff in improving their processes. See "Corrective Action Plans in Reports" (p. 18) for details.

Custom feedback (Table 3, p. 8) on adverse events or topics provides resources and best practice information directly to facilities. Research responses (Table 3, p. 8) are summaries of research requests received at a national level on various topics. *Patient Safety Compass Points and E-lets* (Table 4, p. 8) are unscheduled special notices on major patient safety issues that have occurred at a national level.

TABLE 1. EDUCATIONAL WEBINARS (NUMBER OF LINES PARTICIPATING), FY 2017

Webinars

- October 2016— Sepsis and Septic Shock Adverse Events (28 lines)
- November 2016— Improving Health Literacy (1 line)
- January 2017— Medical Device Cybersecurity
- February 2017—Investigations of Surgical Patient Contamination
- March 2017— Using Lean Six Sigma to Improve Imaging Follow-up Reporting
- April 2017— Health IT Safe Practices: The Safe Use of Health IT for Patient Identification (1 line)
- May 2017— Effective Physician Peer Review to Improve Patient Safety (1 line)
- June 2017— ECRI Institute PSO Top 10 Patient Safety Concerns For Healthcare Organizations-2017 (3 lines)
- July 2017— Addressing Institutional Drug Diversion (4 lines)
- September 2017— ECRI Institute PSO Deep Dive: Safe Opioid Practices (1 line)

TABLE 2. NAVIGATOR PUBLICATIONS

Navigator or Patient Safety Advisory Articles

National:

- ▶ Chemotherapy Safety: Team Approaches for Error Prevention
- ▶ ECRI Institute PSO Third Annual Meeting Features Patient Safety All-Stars
- ▶ Misreads of Imaging Studies Among Top Radiology Events
- ▶ Moving Mountains Together: PSOs Offer Shared Learning

District:

- ▶ Hypersensitivity Reactions to Chemotherapy in the Outpatient Setting
- ▶ Patient Identification: Feedback from the Front Line
- ▶ When Seeing Clearly Doesn't Solve the Problem: Wrong-Site Imaging
- ▶ Workplace Violence: Embedded in Healthcare Culture

TABLE 3. CUSTOM FEEDBACK AND RESEARCH RESPONSES

<i>Feedback on Specific Events or Topics</i>	
Custom Feedback	Research Responses
<ul style="list-style-type: none"> • Fall Prevention • Inpatient Suicides • Newborn Falls • Pressure Ulcer Prevention • Pressure Ulcers Related to Devices • Retained Foreign Objects • Retained Sponges • Wrong Site Surgery Prevention 	<ul style="list-style-type: none"> • Applying Health Information Technology (HIT) to Management of Lab Specimens in Home Care • Blood Storage in Trauma Centers • Design of Patient Harms Display Scorecards • Documenting Patient Allergens: The Electronic Medical Record or the Patient Wristband? • Hand Washing Facilities and Fit Testing for N95 Masks in the Physician Office • Managing Test Results in Outpatient Care • Medical/Surgical Competencies for the Medical Psychiatric Unit Nurse • Patients in Acute Care with Illegal Drugs • Pediatric Sedation • Prevention of Chair Falls

TABLE 4. PATIENT SAFETY COMPASS POINTS AND E-LERTS

Breaks in Isolation Set the Stage for Infection
Circumcision: Focus on Sterile Technique, Proper Supplies, and Correct Clamp Size
Clinical Decision Support: Only Helpful If You Can See It
Desaturation during a Ride: Oxygen Supply and Patient Transport
Don't Forget the Tourniquet
ECRI Institute Provides Disinfectant Concentrations for EPAs List K
Electronic Health Records Systems - Current Measured Patient Weight May Not Be Mapped to Pharmacy System, Potentially Leading to Medication Errors
Failure to Follow MRI Scanning Guidelines for MR-Conditional Cochlear Implants May Lead to Tissue Damage during MRI Scans
Gatekeeper to Care: The Essential Role of the ED Triage Nurse
Get the Red Out: Preventing Pre-Analytical Specimen Hemolysis
Hand Hygiene: Implement Smart Strategies to Reduce Lapses
If It's Not Clean, It's Not Sterile: Reprocessing Contaminated Instruments
Immediate Jeopardy: Do You Know the Triggers?
Implementing the ENFit Initiative for Preventing Enteral Tubing Misconnections
Instant Hot Packs: Preventing Skin and Eye Exposure to Active Solution
Intuitive—da Vinci EndoWrist Vessel Sealers: Keys to Preventing Malfunctions and Patient Harm
Know Your ADCs: Poor Configuration Risks Medication Errors
The Line between Paralysis and Patient Death: Neuromuscular Blocking Agents
Long Live TPA: Communication and Coordination Support Thrombolytic Therapy
Making the Wrong Call: Diagnostic Errors

One Is Enough: Don't Double Up on Oral Anticoagulants

Operative Vaginal Deliveries: Seek Clear Indications for Vacuum Use

Out-of-Office: Tracking Test Results in the Outpatient Setting

Pick the Proper Techniques to Maintain PICC Dressings

Powerless: Layer Backup Strategies to Weather Power Outages

Releasing the Clamp: Omitted and Delayed Intravenous Infusions

Some Disinfection Caps May Leave Sponge Fragments or Residue on Needlefree Connector Septums after Normal Use

Stick to Safety with Medication Patches

Support Second Victims: Help Staff Cope After an Event

Suicide: Inadequate Assessment Leaves Patients at Risk

They Don't Make the Cut: Lost, Mislabeled, and Unsuitable Surgical Specimens

What You Don't See Can Hurt You: Diagnostic Errors in Radiology

When Sugar Isn't Sweet: Improve Insulin Safety in Hospitals

Data Collection and Analysis

I. Reportable Events

The District has mandated the reporting of adverse events by a broad range of healthcare providers and medical facilities. Adverse events that must be reported include the 29 NQF serious reportable events listed in 2011. During this past fiscal year, CLABSI events reported to CDC's NHSN were validated by DC of Health's CPPE DE-DSI.

Since 2010, hospitals and ambulatory surgical centers have been required to report adverse events and CAPs using the web-based reporting system. A standardized adverse event reporting form is available to all other medical facilities and healthcare providers for this purpose. Reports must be submitted within 60 days of the occurrence of an adverse event (67% of events reported met this requirement and 27% did not provide an event date). DC Health collects and analyzes the reports, providing an annual report that includes summary data and recommendations. The Medical Malpractice Amendment Act contains well-defined confidentiality provisions related to reporters and information provided to the system administrator. This annual report compiles and provides analysis on both the CLABSI data from NHSN and the NQF events submitted to the web-based reporting system.

II. Reports by Event Type

In the 10th reporting period (October 1, 2016, to September 30, 2017), District medical facilities and healthcare providers submitted 200 reports to DC Health. The most frequently reported types of NQF events were CLABSIs, 155 events (78%); pressure ulcers, 28 (14%); falls, 6 (3%); and retained foreign objects, 6 (3%); representing 194 (97%) of the reports submitted. Table 5 (p. 11) summarizes the reports submitted by event type (DC Health, 2017; ECRI Institute PSO; National Quality Forum, 2011). Figure 2 (p. 13) provides a graphic version.

TABLE 5. NUMBER AND PERCENTAGE OF NQF REPORTS BY EVENT TYPE, FY 2017

Category	Event Type	Reports	%
<i>Surgical or invasive procedure events</i>	1A - Surgery or other invasive procedure performed on the wrong site	2	1%
	1B - Surgery or other invasive procedure performed on the wrong patient	0	0%
	1C - Wrong surgical or other invasive procedure performed on a patient	0	0%
	1D - Unintended retention of a foreign object in a patient after surgery or other invasive procedure	6	3%
	1E - Intraoperative or immediately postoperative/postprocedure death in an ASA class 1 patient	0	0%
<i>Product or device events</i>	2A - Patient death or serious injury associated with the use of contaminated drugs, devices, or biologics provided by the healthcare setting	0	0%
	2B - Patient death or serious injury associated with the use or function of a device in patient care, in which the device is used or functions other than as intended	1	<1%
	2C - Patient death or serious injury associated with intravascular air embolism that occurs while being cared for in a healthcare setting	0	0%
<i>Patient protection events</i>	3A - Discharge or release of a patient/resident of any age, who is unable to make decisions, to other than an authorized person	0	0%
	3B - Patient death or serious injury associated with patient elopement	0	0%
	3C - Patient suicide, attempted suicide, or self-harm that results in serious injury, while being cared for in a healthcare setting	1	<1%

<i>Care management events</i>	4A - Patient death or serious injury associated with a medication error	0	0%
	4B - Patient death or serious injury associated with unsafe administration of blood products	0	0%
	4C - Maternal death or serious injury associated with labor or delivery in a low-risk pregnancy while being cared for in a healthcare setting	0	0%
	4D - Death or serious injury of a neonate associated with labor or delivery in a low-risk pregnancy	1	<1%
	4E - Patient death or serious injury associated with a fall while being cared for in a healthcare setting	6	3%
	4F - Any stage 3, stage 4, and unstageable pressure ulcers acquired after admission/presentation to a healthcare setting	28	14%
	4G - Artificial insemination with the wrong donor sperm or wrong egg	0	0%
	4H - Patient death or serious injury resulting from the irretrievable loss of an irreplaceable biological specimen	0	0%
	4I - Patient death or serious injury resulting from failure to follow up or communicate laboratory, pathology, or radiology test results	0	0%
<i>Environmental events</i>	5A - Patient or staff death or serious injury associated with an electric shock in the course of a patient care process in a healthcare setting	0	0%
	5B - Any incident in which systems designated for oxygen or other gas to be delivered to a patient contain no gas, the wrong gas, or are contaminated by toxic substances	0	0%
	5C - Patient or staff death or serious injury associated with a burn incurred from any source in the course of a patient care process in a healthcare setting	0	0%

<i>Environmental events (cont.)</i>	5D - Patient death or serious injury associated with the use of physical restraints or bedrails while being cared for in a healthcare setting	0	0%
<i>Radiologic events</i>	6A - Death or serious injury of a patient or staff associated with the introduction of a metallic object into the MRI area	0	0%
<i>Potential criminal events</i>	7A - Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed healthcare provider	0	0%
	7B - Abduction of a patient/resident of any age	0	0%
	7C - Sexual abuse/assault on a patient or staff member within or on the grounds of a healthcare setting	0	0%
	7D - Death or serious injury of a patient or staff member resulting from a physical assault that occurs within or on the grounds of a healthcare setting	0	0%
<i>CLABSIs</i>	8 - Central-line-associated bloodstream infection (DC Health, 2017)	155	78%
<i>"Other" event type reported</i>	X - "Other" non-NQF type of event reported	1	<1%
Total		200	100%

ASA: American Society of Anesthesiologists
MRI: magnetic resonance imaging

Figure 2 (p. 13) details the NQF event types for which one or more events were reported during the FY 2017 reporting period; eight total NQF event types were reported plus "Other" events (ECRI Institute PSO).

FIGURE 2. NUMBER OF NQF EVENTS BY EVENT TYPE, FY 2017

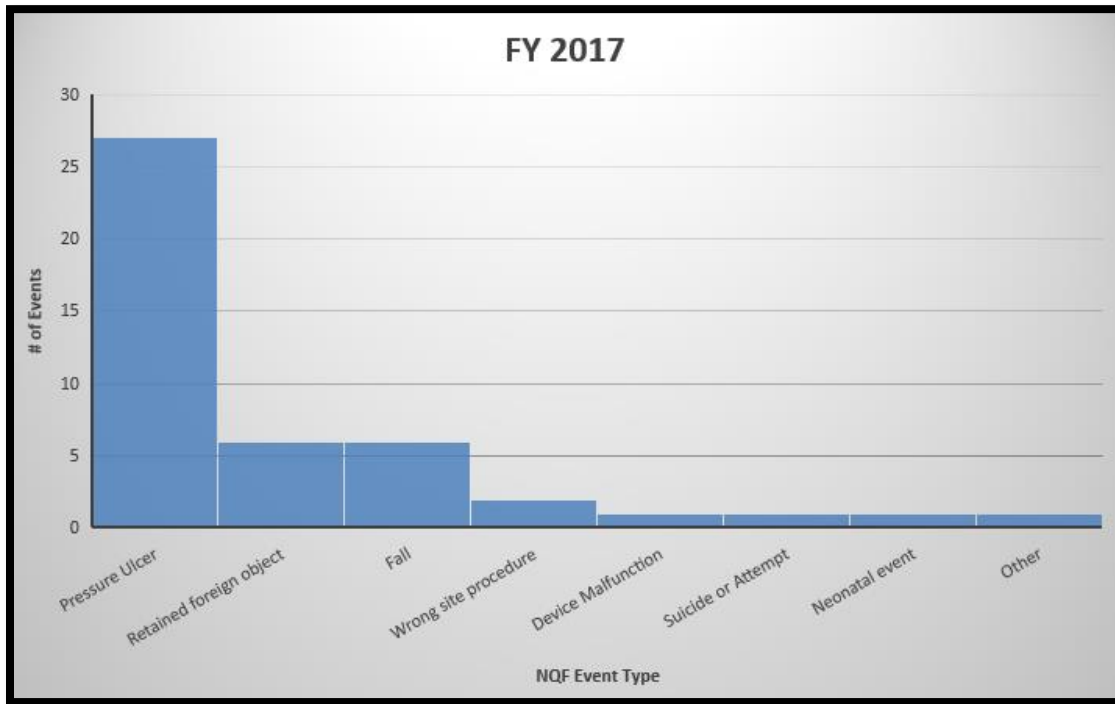
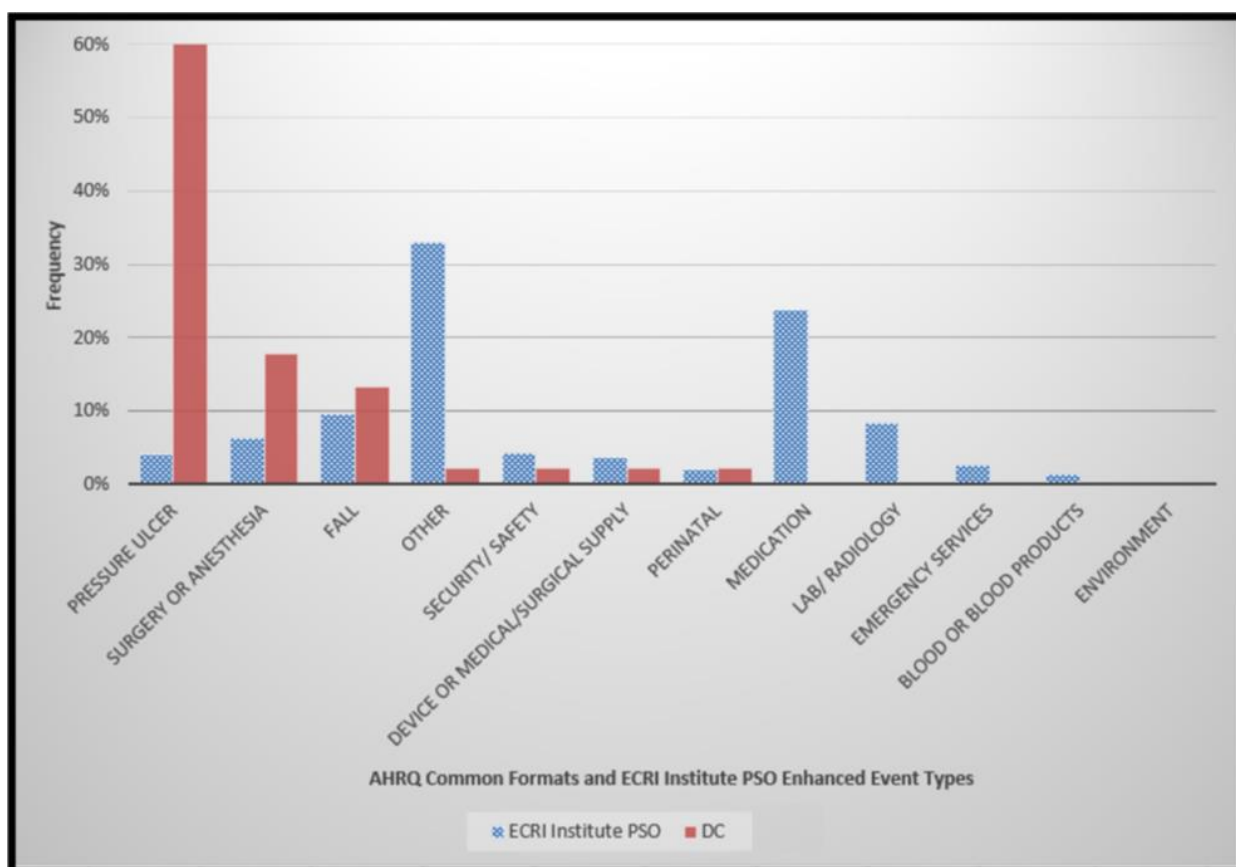


Figure 3 (p. 14) compares event categories reported by District facilities between October 1, 2016, and September 30, 2017, with those in the ECRI Institute PSO system overall aggregate.

It should be noted that this graph cannot be considered a benchmark because the ECRI Institute PSO system is a voluntary national event reporting database, whereas the District of Columbia Patient Safety Reporting System mandates reporting of adverse events.

For Figure 3 (p. 14), the event types are categorized according to the Agency for Healthcare Research and Quality's (AHRQ) Common Formats and ECRI Institute enhanced event types rather than as NQF event types (ECRI Institute PSO).

FIGURE 3. COMPARISON OF AHRQ EVENT TYPE FREQUENCY



When viewed using this definition, and excluding healthcare-associated infections (HAIs) and CLABSIs, the District’s most frequently reported event categories were pressure ulcers, surgery or anesthesia events, and falls.

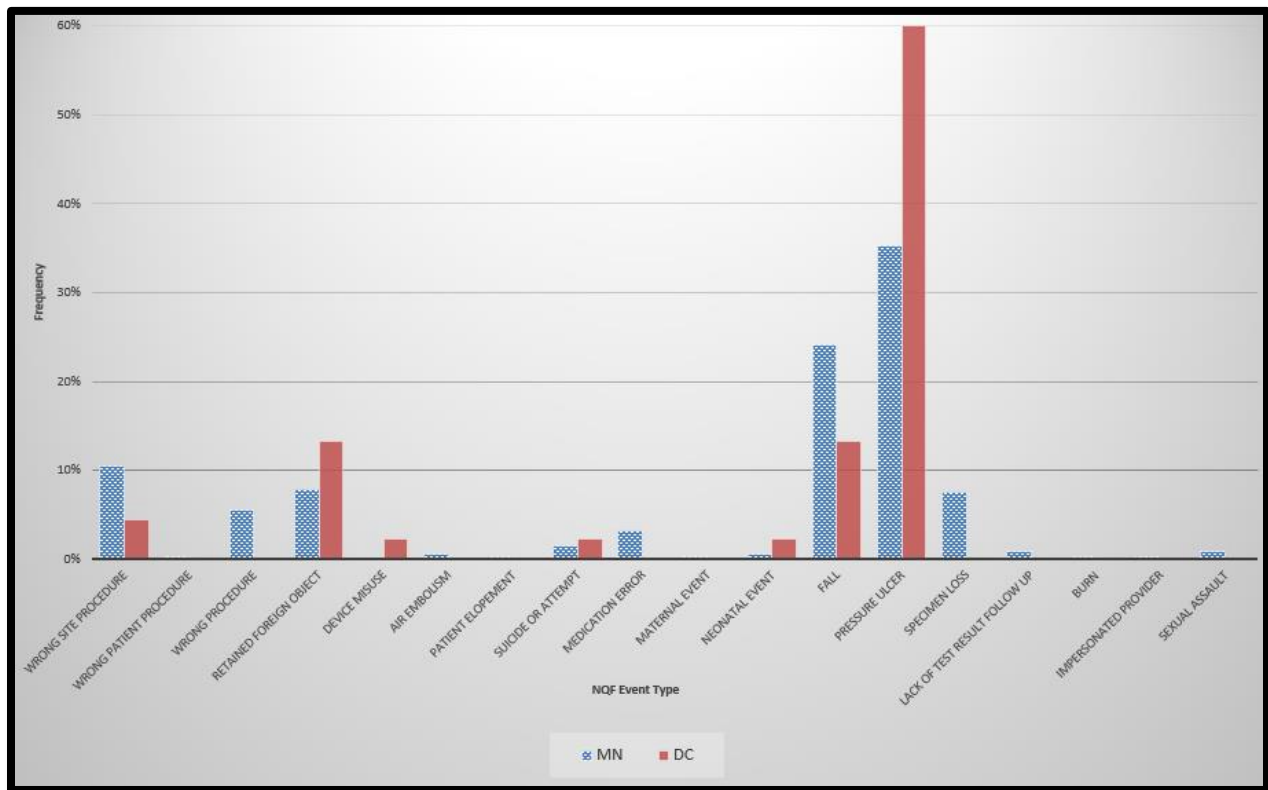
The most frequently reported events in the ECRI Institute PSO database were “Medication” events and “Other events.”

Again, excluding HAIs, pressure ulcers clearly stand out as the most frequently reported event type in the District (60%), whereas they accounted for 4.1% of the reports in the ECRI Institute PSO aggregate data. Also, similar to FY 2016, medication errors were apparent 23.8% of the time in the reports to ECRI Institute PSO but make up 0% of the District’s reports. However, conclusions cannot be drawn when comparing mandatory and voluntary reporting programs. The District’s best benchmark is comparing its data trends over time (see Figure 1, p. 5).

Comparison with other mandatory reporting systems may also be valuable (Figure 4, p. 15) (ECRI Institute PSO; Minnesota Department of Health, 2018; National Quality Forum, 2011). For example, the Minnesota Department of Health’s 2018 *Adverse Health Events in Minnesota* report noted 341 NQF events reported. Minnesota Department of Health adverse health events are also based on NQF’s list of serious reportable events updated in 2011. Although the Minnesota system includes many more facilities that are required to report, when broken down by event type percentages, Minnesota’s most frequently reported events were similar to those reported by DC Health in that they included pressure ulcers (35%),

falls (24%), and retained foreign objects (8%). However, Minnesota reports wrong site surgeries or invasive procedures (11%) as the third most commonly reported events. The Minnesota system also includes 11 additional event categories for which the District did not receive reports (e.g., medication error, specimen loss, impersonated provider, burn, and sexual assault). Figure 4 shows the NQF event-report type frequency from the District of Columbia for FY 2017 and from the Minnesota Department of Health's 2017 reporting year; the percentages are based on the total number of NQF and "Other" events (ECRI Institute PSO; Minnesota Department of Health, 2018).

FIGURE 4. COMPARISON OF NQF EVENT TYPE FREQUENCY (MINNESOTA AND DISTRICT OF COLUMBIA)



III. Reports by Level of Harm

The 2011 list of NQF serious reportable events changed the language from “serious disability” to “serious injury” in applicable event types (National Quality Forum, 2011). Not all reportable events imply the same degree of harm, and it is often useful to distinguish among degrees of harm. To this end, the harm scale developed by the National Coordinating Council for Medication Error Reporting and Prevention continues to be applied to the event reporting system, and the 45 NQF events could be categorized based on the information provided.

Table 6 (below) summarizes the level of harm among the 45 reports and Figure 5 (p. 17) illustrates the percentages of the levels of harm identified (ECRI Institute PSO).

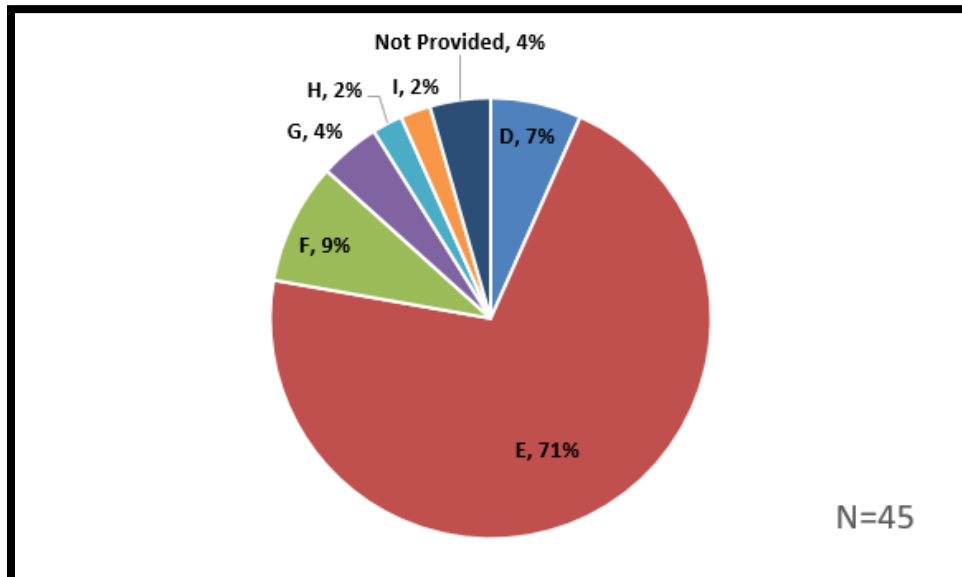
TABLE 6. NUMBER AND PERCENTAGE OF NQF REPORTS BY LEVEL OF HARM, FY 2017

Harm Score	Description	Reports	%
A	Circumstances that could cause adverse events (e.g., look-alike medications, confusing equipment)	0	0%
B1	An event occurred but did not reach the individual (“near miss” or “close call”) because of chance alone	0	0%
B2	An event occurred but did not reach the individual (“near miss” or “close call”) because of active recovery efforts by caregivers	0	0%
C	An event occurred that reached the individual but did not cause harm and did not require increased monitoring (an error of omission, such as a missed medication dose, does reach the individual)	0	0%
D	An event occurred that required monitoring to confirm that it resulted in no harm and/or required intervention to prevent harm	3	7%
E	An event occurred that contributed to or resulted in temporary harm and required treatment or intervention	32	71%
F	An event occurred that contributed to or resulted in temporary harm and required initial or prolonged hospitalization	4	9%
G	An event occurred that contributed to or resulted in permanent harm	2	4%
H	An event occurred that resulted in a near-death event (e.g., required ICU care or other intervention necessary to sustain life)	1	2%
I	An event occurred that contributed to or resulted in death	1	2%
	Harm score not provided	2	4%
Total		45	99%*

*Total percentage does not equal 100 due to rounding.

ICU: intensive care unit

FIGURE 5. PERCENTAGE OF NQF REPORTS BY HARM SCORE, FY 2017



Harm scores classified by the reporting facility and associated with the reports submitted ranged from D (“An event occurred that required monitoring to confirm that it resulted in no harm and/or required intervention to prevent harm”), 3 events (7%); to I (“An event occurred that contributed to or resulted in death”), 1 (2%).

The majority of the events (32, or 71%), were categorized as having a harm score of E (“An event occurred that contributed to or resulted in temporary harm and required treatment or intervention”), which is consistent with the minimal harm score severity level described in the NQF events.

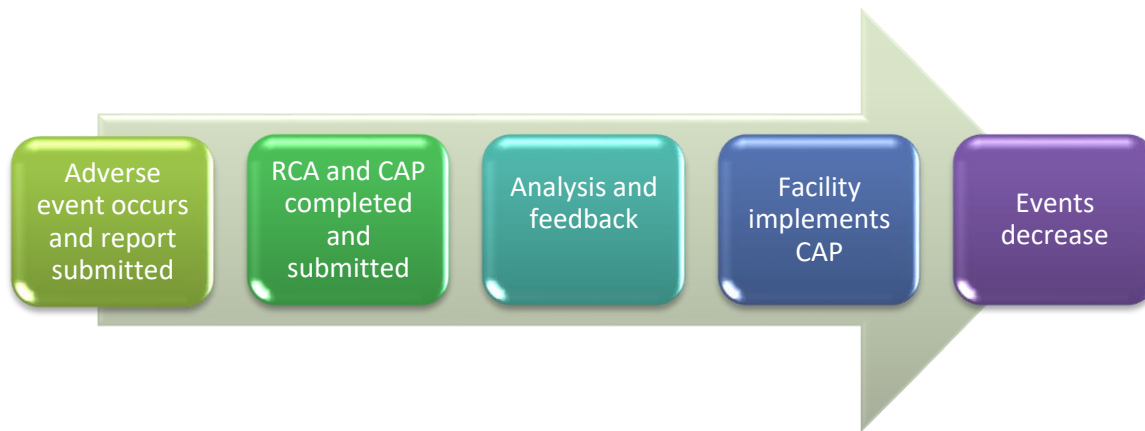
District facilities continue to voluntarily report events that did not cause patient harm. Harm scores reported during FY 2017 included harm score D; NQF serious reportable events typically have a harm score of E or higher.

IV. Report Quality

During FY 2017, 56% of the 45 NQF events reported to the District of Columbia Patient Safety Reporting System had thorough event descriptions and 44% had minimal event descriptions. The “Event Description” field is a free-text field on the web-based form; when reporters complete it, this field can capture the most important details of the event. This area of reporting has remained consistent and coincides with the implementation of the electronic reporting system.

V. Corrective Action Plans in Reports

The District requires the submission of a corrective action plan (CAP) as a follow up to a reported adverse event. This procedure allows the facility to receive a review of its CAP. The goals of the program include handling an adverse event in the following steps:



A CAP describes how the facility or provider plans to prevent or reduce the risk of similar events in the future and should be based on the findings from the event investigation. The investigation of an event must look beyond the direct patient-care provider to identify system failures. Of the 45 NQF reports submitted in FY 2017, 1 (2%) included mention of corrective action(s), which is consistent with the previous fiscal year. Although some reports identified contributing factors or root causes, no complete RCAs were submitted for review during FY 2017.

Some facilities have found an additional field within the reporting system labeled “Supplemental Information” to be an easy way to incorporate their CAPs. This also allows the event details and the action plans to be stored in the same location. Facilities have the ability to update an event report after the event has been submitted if the RCA and CAP have not been completed at the time of the event submission.

Contributing factors were cited in 16% of the reported events; of those, equipment (design or function) was cited 25% of the time, and data (availability or accuracy) 25% of the time. The following resources are available to District facilities (access required) on these topics:

- Patient Safety Tool: [RCA² - Improving Root Cause Analyses and Actions To Prevent Harm](#)
- Webinar: [Using Lean Six Sigma as a Structure for an Accountable RCA Process](#)

Facility staff can obtain access to the DC Patient Safety Reporting System web portal by contacting the liaison in their facility.

VI. Central-Line-Associated Bloodstream Infections (CLABSIs)

Facilities in the District of Columbia are required by law to report CLABSIs to CDC’s NHSN. NHSN is an online tracking system that provides a reporting mechanism for the District and eight short-term acute care and two long-term acute care facilities covered by the mandate. Epidemiologists at DC Health’s CPPE DE-DSI perform validation studies on CLABSIs reported to NHSN.

The following data were provided by DC Health’s CPPE DE-DSI in advance of publication by CDC, from the reports submitted to CDC’s NHSN. During FY 2017, units from all 10 acute care facilities reported a total of 155 CLABSIs and 162,117 central-line-days for a CLABSI rate of 0.956 infections per 1,000 central-line days. Data viewed in this way represent a different mix of hospitals and units for each year.

This raw, unadjusted rate provides the actual number of events over a specified time. This rate is useful in assessing the overall burden of HAIs in the healthcare system (DC Health, 2017).

To take these data one step further, a standardized infection ratio (SIR) was calculated for eight of the short-term acute care facilities that submitted data in the District. The SIR is an indirect standardization method that is used to summarize the HAI experience across any number of stratified groups (DC Health, 2017).

The SIR allows for comparison of data across risk groups, procedures, and hospital characteristics to gain a better understanding of the incidence, trends, and patterns of HAIs while adjusting for underlying patient or hospital factors that may affect occurrence of HAIs (DC Health, 2017).

The SIR is calculated by dividing the number of observed CLABSIs by the number of statistically predicted CLABSIs based on the national baseline data and provides a basis for comparison between how many CLABSIs occurred and how many were expected to occur based on the national experience. A SIR of 1.0 means the observed number of infections is similar, or equal, to the number of predicted infections. A SIR higher than 1.0 means that there were a greater number of infections than predicted, and a SIR of less than 1.0 means that there were fewer infections than predicted. For FY 2017, the overall SIR for the eight short-term acute care facilities was 0.845 (0.716, 0.992) (DC Health, 2017).

Additional Resources

Centers for Disease Control and Prevention (CDC). (2016). Healthcare associated infections progress. D.C. acute care hospitals. <http://www.cdc.gov/hai/pdfs/stateplans/factsheets/dc.pdf>

VII. Patient Safety Webinars and Training

Webinars are provided on patient safety topics and are also used to train users of the reporting system. For the 10 webinars offered in FY 2017, and the number of lines that called in for each presentation, see Table 1 (p. 6) (note that information about the number of participants on each line is unavailable). After the presentation, webinar recordings and handouts are posted to the web portal for future viewing.

Guidance and Recommendations

DC Health is charged with providing facilities and providers with recommended methods to reduce systematic adverse events and disseminating information and advice on best practices. The following is a summary of three important topic categories and a discussion of lessons learned and strategies to help prevent reoccurrence of these event types. The three NQF event types are as follows:

- I. Retained foreign objects
- II. Falls
- III. Pressure ulcers

As required by the Medical Malpractice Amendment Act, the information is deidentified and anonymized with regard to facility, provider, and patient. Root causes, contributing factors, and preventive strategies identified by healthcare facilities and providers are shared if available. Finally, recommended best practices are provided to further assist facilities and providers in improving healthcare delivery in the District.

I. Retained Foreign Objects

Surgical-related events reported included the following:

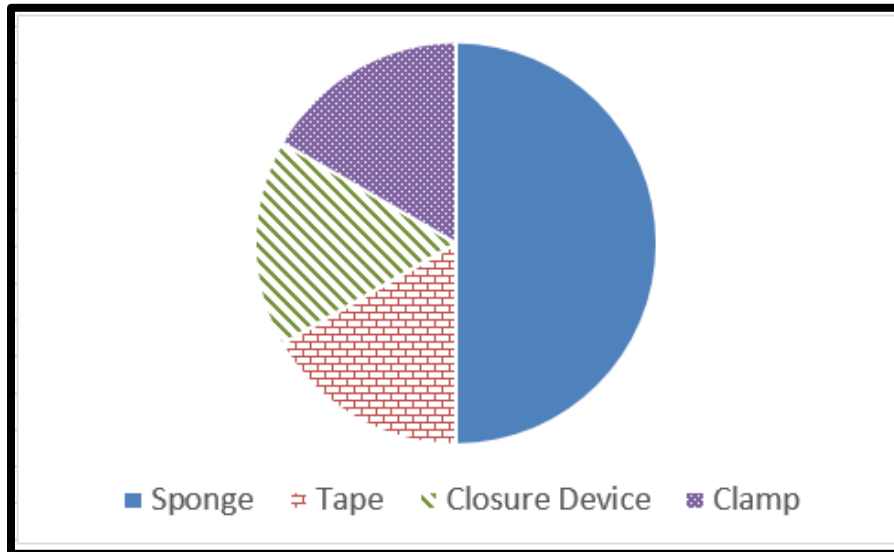
- ▶ Unintended retention of a foreign object in a patient after surgery or other procedure

A review of the six retained foreign object events submitted over the past fiscal year (Figure 6, p. 21) (ECRI Institute PSO), between October 2016 and September 2017, revealed the following findings (related recommendations follow):

DC Health Findings

- ▶ 50% of retained foreign objects were sponges; 17% clamps; 17% closure device; 17% tape
- ▶ A time-out was done according to 50% of the events; for the other 50%, it was unknown or left blank
(ECRI Institute PSO)

FIGURE 6. RETAINED FOREIGN OBJECTS, FY 2017



Recommendations

- ▶ “Minimize noise and distractions during the count process. Consider enforcing counts as mandatory 'quiet time.'”
- ▶ “Standardize the count process by clearly defining, in an evidence-based policy, how to count, when to count, and what must be counted and documented. Monitor for adherence.”
- ▶ “Consider adjunct technology to help prevent retained sponges.”
- ▶ “Define in policy the steps to be taken when counts cannot be reconciled.”
- ▶ “Foster multidisciplinary team accountability for all surgical or procedural items.”
- ▶ “Ensure that time or productivity pressures do not result in failure to carry out critical job responsibilities (e.g., performing baseline counts, appropriate actions taken with incorrect counts).”

(AORN, 2018; ECRI Institute Webinar, 2018)

Resources

- ▶ Research Response: [Adjunct Technologies for Retained Surgical Items](#)
- ▶ AORN Perioperative Guidelines
- ▶ Compass Point: [One, Two, Three, Four: I Counted All, But Found Some More](#)
- ▶ [Webinar: Retained Surgical Items: What the Data is Telling Us](#)

II. Falls

Falls events are defined as follows:

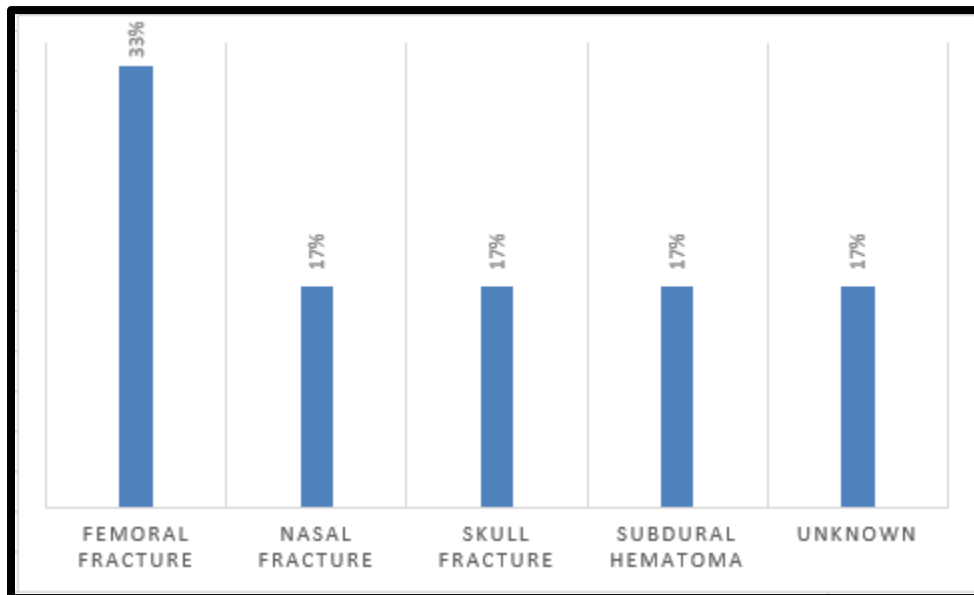
- ▶ Patient death or serious injury associated with a fall while being cared for in a healthcare setting

A review of six falls events submitted over the past fiscal year (ECRI Institute PSO), between October 2016 and September 2017, revealed the following findings (related recommendations follow):

DC Health Findings

- ▶ All of the falls reports that provided the patient's age involved adult patients; of those, 33% were adults older than age 65
- ▶ Sixty-seven percent of the falls resulted in fractures, one resulted in a hematoma/skin tear, and one report did not specify (Figure 7) (ECRI Institute PSO)

FIGURE 7. INJURY RESULTED FROM FALLS EVENTS, FY 2017



Recommendations

- ▶ “Implement intentional rounding on a regularly scheduled basis (e.g., hourly).”
- ▶ “Standardize falls risk assessments upon admission and institute reassessment of the patient's fall risk after, at minimum, a change in condition, fall, or transfer to a new unit.”
- ▶ “Ensure that care planning interventions address the specific risk factors identified on the standardized falls risk assessment for that particular patient.”
- ▶ “Include a huddle, a clinical review, and potentially a root cause analysis in post-fall procedures.” (AHRQ, 2013; ECRI Institute Compass Point, 2016)

Resources

- ▶ [AHRQ Falls Toolkit](#)
- ▶ Research Response: [Fall Injury Prevention Interventions](#)
- ▶ Compass Point: [Focus on Falls Assessment: Fill in the Gaps](#)
- ▶ Compass Point: Pediatric Falls: [Handle the Noggin with Care](#)
- ▶ Research Response: [Prevention of Chair Falls](#)

III. Pressure Ulcers

Pressure ulcer events are defined as follows:

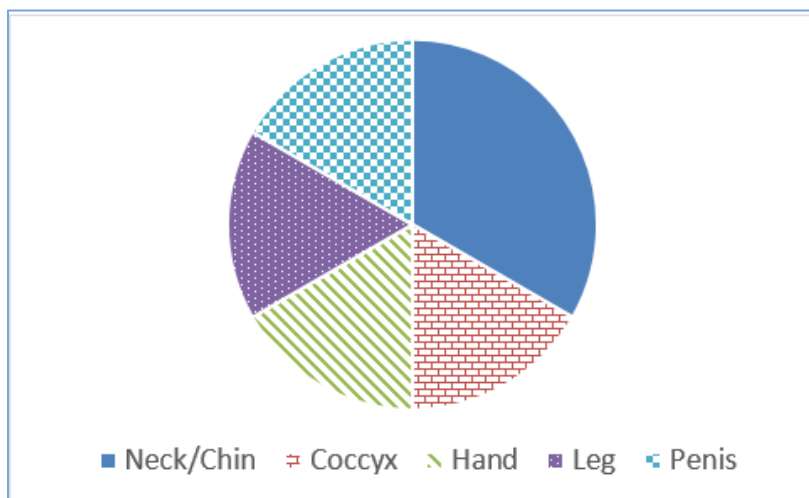
- ▶ Any stage 3, stage 4, or unstageable pressure ulcers acquired after admission/presentation to a healthcare setting

A review of 27 pressure ulcer events submitted over the past fiscal year (ECRI Institute PSO), between October 2016 and September 2017, revealed the following findings (related recommendations follow):

DC Health Findings

- ▶ Nineteen percent of patients were being treated in specialty care areas (such as ICUs), 17% were in general inpatient care areas, and for the rest, the care location was unreported
- ▶ Twenty-two percent of the events reported the pressure ulcer locations on the body but there were no commonalities: coccyx, hand, penis, neck/chin, and leg (Figure 8) (ECRI Institute PSO)

FIGURE 8. PRESSURE ULCER INJURY LOCATION, FY 2017



Recommendations

- ▶ Consider using one of the following two pressure ulcer assessment scales: Braden Scale or Norton Scale; they are both validated.
- ▶ Implement a unit-based pressure ulcer team that can oversee the plan of care for pressure ulcer assessments, prevention, documentation, and collaboration with the Wound Care Team.
- ▶ Consistently measure both incidence and prevalence rates of pressure ulcers. (AHRQ 2014)

Resources

- ▶ [AHRQ Pressure Ulcer Toolkit](#)
- ▶ *DC Navigator*. [Medical Devices and Pressure Ulcers](#)

Conclusion

Medical facilities and providers in the District of Columbia continue to take important steps to improve patient safety by submitting adverse event reports in accordance with the Medical Malpractice Amendment Act of 2006. The success of the reporting program continues to rely on the willingness of healthcare facilities and providers to disclose NQF events and submit meaningful reports. The focus of the District's Patient Safety Reporting System is to analyze events to better understand how and why adverse events occur and to prevent the reoccurrence of similar events. The vision for the reporting system is to provide a tool for quality improvement and education. Disseminating lessons learned and best practices facilitates system changes that consistently promote the delivery of safe patient care. In 2018, the District will have continued opportunities to benefit from custom feedback to support this objective as well as the ability to submit research requests, with the delivery of safe patient care as the ongoing goal of the program.

Technical Credits

This report was prepared for the DC Health by ECRI Institute in collaboration with DC Health. ECRI Institute, a nonprofit organization, dedicates itself to bringing the discipline of applied scientific research in healthcare to uncover the best approaches to improving patient care. As pioneers in this science for 50 years, ECRI Institute marries experience and independence with the objectivity of evidence-based research. More than 5,000 healthcare organizations worldwide rely on ECRI Institute's expertise in patient safety improvement, risk and quality management, and healthcare processes, devices, procedures, and drug technology.

Acronyms and Abbreviations

- AHRQ: Agency for Healthcare Research and Quality
- CAP: corrective action plan
- CDC: Centers for Disease Control and Prevention
- CLABSI: central-line-associated bloodstream infection
- CPPE DE-DSI: Center for Policy, Planning and Evaluation's Division of Epidemiology Disease Surveillance and Investigation
- DC Health: District of Columbia Health: Government of the District of Columbia
- HAI: healthcare-associated infection
- ICU: intensive care unit
- NHSN: National Healthcare Safety Network
- NQF: National Quality Forum
- PSO: patient safety organization
- RCA: root-cause analysis
- SIR: standardized infection ratio

Figures

FIGURE 1. Number of NQF Events by Type, FY 2015–FY 2017

FIGURE 2. Number of NQF Events by Event Type, FY 2017

FIGURE 3. Comparison of AHRQ Event Type Frequency

FIGURE 4. Comparison of NQF Event Type Frequency (Minnesota and District of Columbia)

FIGURE 5. Percentage of NQF Reports by Harm Score, FY 2017

FIGURE 6. Retained Foreign Objects, FY 2017

FIGURE 7. Injury Resulted From Falls Events, FY 2017

FIGURE 8. Pressure Ulcer Injury Location, FY 2017

Tables

TABLE 1. Educational Webinars (Number of Lines Participating), FY 2017

TABLE 2. Navigator Publications

TABLE 3. Custom Feedback and Research Responses

TABLE 4. Patient Safety Compass Points and E-lets

TABLE 5. Number and Percentage of NQF Reports by Event Type, FY 2017

TABLE 6. Number and Percentage of NQF Reports by Level of Harm, FY 2017

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