

District of Columbia Patient Safety Reporting Program

Annual Report Fiscal Year 2021

FOR THE REPORTING PERIOD OF:

OCTOBER 1, 2020, through SEPTEMBER 30, 2021





Table of Contents

Execu	Itive Summary	3
	Poeleround	2
1. 11	Data Collection – Datterns and Trands in Advarsa Event Departs	
11.	Data Collection—Patterns and Trends III Adverse Event Reports	
Introd	luction	6
I.	The District's Patient Safety Reporting System	6
Data (Collection and Analysis	10
I.	Reportable Events	
П.	Reports by Event Type	
III.	Reports by Level of Harm	
IV.	Report Quality	
V.	Corrective Action Plans in Reports	
VI.	Central-Line-Associated Bloodstream Infections	
VII.	Patient Safety Webinars and Training	19
Guida	nce and Recommendations	20
I.	Retained Foreign Objects	
II.	Pressure Ulcers	
Concl	usion	24
Acrony	ms and Abbreviations	
Figures		
Tables.		25

References2	26
-------------	----

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 in the District of Columbia 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 District of Columbia Department of Health (DC Health), Health Regulation and Licensing Administration Patient Safety Reporting System was implemented as part of the ongoing effort to improve healthcare delivery. The system is hosted by ECRI and the Institute for Safe Medication Practices Patient Safety Organization (ECRI and the ISMP PSO). Current users of the web-based adverse event reporting system include acute care and long-term acute care hospitals, rehabilitation facilities, and ambulatory surgical centers. Adverse event reports are submitted to DC Health through its subcontractor, ECRI. These reports are confidential.

The web-based reports are analyzed to identify patterns and trends and to recommend methods to reduce systematic adverse events, and they 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 under the Act can submit adverse event reports using the original paper-based form.

District facilities are 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 (CDC) national database.

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 to include in the annual report.

This 14th annual report provides an update on the DC 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, 2020, and September 30, 2021, 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 fiscal year 2021 (FY 2021), the District's healthcare providers and medical facilities submitted a total of 319 events to DC Health (DC Health, 2021; ECRI and the ISMP PSO).

These reports consisted of 188 adverse event reports submitted to the District of Columbia Patient Safety Reporting System and 131 CLABSI reports (DC Health, 2021) 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 list of 29 serious reportable events (updated in 2011) as a classification system for reportable events during FY 2021. The NQF events analysis is based on events submitted from October 2020 through September 2021, regardless of event occurrence date. The lag time in reporting is due to the time lag established within the reporting requirement.

Similar to past years, the most commonly reported event types (297 or 93.1% of reports submitted) were CLABSIs (131; 41.1%), pressure ulcers (148; 46.4%), and other events (18; 5.6%).

Figure 1 (p. 5) provides an overview of the number of serious reportable events, by event type, which have been reported over the past three fiscal years (ECRI and the ISMP PSO). The adverse event reports submitted by healthcare providers and medical facilities in the 14th year of the District's reporting program represent a continued effort by the District to contribute to the Patient Safety Reporting System.

DC HEALTH PATIENT SAFETY ANNUAL REPORT | 2021

FIGURE 1. NUMBER OF EVENTS BY TYPE, FY 2019–2021

	CLABSI	Pressure ulcer	Other event	Retained foreign object	Fall	Suicide or attempt	Wrong-site procedure	Neonatal event	Sexual assault	Medication error	Air embolism	Physical assault	Wrong-patient procedure	Wrong procedure
FY 2021 (n=319)	131	148	18	5	11	2	2	1	1	0	0	0	0	0
FY 2020 (n=335)	170	98	48	5	3	0	3	3	0	2	1	1	1	0
FY 2019 (n=198)	141	30	9	7	6	1	0	0	0	1	0	0	1	2

INTRODUCTION

I. The District's Patient Safety Reporting System

Goals of the District's Patient Safety Reporting System:

- 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 for identifying trends in reported events that challenge safe and effective healthcare. Aggregation helps achieve the primary goal of the reporting program, which is 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 <u>ECRI and the ISMP PSO</u>, at the national level. Analysis of the information received through the District's reporting program serves as the basis for meaningful insight, lessons learned, and the development of best practices that can improve patient safety.

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

In addition to the annual report, in FY 2021 the District's Patient Safety Reporting System offered facilities the following resources:

- Educational Webinars (Table 1, p. 7) are offered at least quarterly on patient safety topics.
- Top Ten articles (Table 2, p. 7) are published for patient safety concerns and health technology hazards each year.
- 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 Briefs (Table 4, p. 9) are unscheduled special notices on major patient safety issues that have occurred at a national level.
- Patient Safety Update is a weekly 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 and the ISMP PSO's root-cause analysis (RCA) review process. ECRI can then provide the facility with a report to further assist providers and staff in improving their processes. See section V (p. 17) for details.

TABLE 1. EDUCATIONAL WEBINARS (NUMBER OF LINES PARTICIPATING), FY 2021

Date	Title	Lines
November 2020	ECRI and the ISMP PSO Deep Dive: Strategies for Surgical Patient Safety	16
December 2020	Improving Patient Outcomes Using Fiberoptic Endoscopic Evaluation of Swallowing (FEES)	0
February 2021	Medication Safety: A Call to Action	0
March 2021	Improving Management of the Detoxing Patient by Automating CIWA Score-based Medication Dosing and Re-assessment	0
March 2021	Safe Practices to Reduce CPOE Alert Fatigue through Monitoring, Analysis and Optimization	1
April 2021	Accident and Forensic Investigation Services Best Investigation Practices and Collaboration with PSO	19
April 2021	Injectable Medication Matters: Preventing Wrong Route Administration Errors	0
April 2021	Interdisciplinary Approach to Improve Identification of Dysphagia in an Academic Medical Center	0
May 2021	ECRI and the ISMP PSO Top 10 Patient Safety Concerns for 2021	2
June 2021	Medication Safety Alert! Action Agenda 1st Quarter 2021	0
June 2021	Quality Journey Related to Associate Engagement and Improved Outcomes	0
July 2021	Barcode Medication Administration Closing the Safety Gaps	3
August 2021	ISMP Highlights for Action: Recent Medication Safety Concerns – 2nd Quarter 2021	2
September 2021	Management of Sepsis in the Emergency Department	1

TABLE 2. TOP TEN ARTICLES, FY 2021					
Safety	Top 10 Patient Safety Concerns for 2021				
Technology	Top 10 Health Technology Hazards for 2021				

TABLE 3. CUSTOM FEEDBACK AND RESEARCH RESPONSES, FY 2021				
Custom Feedback	Mandatory Event Reporting			
	Patient Safety			
	Pressure Ulcer Reduction			
	Retained Foreign Object Prevention			
	Screening for Weapons			
	Suicide Prevention Practices			
Research	Fall Risk Assessment Methods			
Responses	Placental Management: Best Practices			
	Peripheral Vascular Interventions			
	Managing Physician Preference Items			
	Monitoring Telemetry Patients			
	ECMO Consent Forms When Treatment Is Futile			
	Credentialing and Privileging for New Technology and Procedures			
	Monitoring Patients Undergoing Procedural (Conscious) Sedation			
	Risk Reduction Strategies: Working with Patients Who Have Limited English Proficiency			
	Gathering and Preparing Medications in the Operating Room			
	Methods of Surgical Instrument Identification			

TABLE 4. PATIENT SAFETY BRIEFS, FY 2021

The Fourth Trimester: Postpartum Safety in the Emergency Department

Manual Rate-Control Devices: Limited Ability to Prevent Medication Errors

Managing Changes in Patient Condition: One Bed at a Time

Adverse Events in Rehabilitation Facilities: Raising Awareness and Increasing Preventive Efforts

Communication of Behavioral Health Documentation: Integrate and Coordinate Care

When COVID-19 Patients Fall: Donning PPE Delays Rescue

Communication and Isolation: Failure Leads to Exposure

Medication Events in the Surgical Setting

PIVC Complications: Underreported and Undermining Patient Safety

Telehealth: What's on Your Radar?

Infusion Pump Interoperability: Necessary for Safety

Cut It Out: Disruptive Behavior in the Surgical Setting

Intraoperative Blood Salvage: Points of Failure

Airway Devices and Skin Integrity: A Difficult Balance

Heparin: Dosing Incidents Still Worrisome

DATA COLLECTION AND ANALYSIS

I. Reportable Events

The District has mandated the reporting of adverse events for a broad range of healthcare providers and medical facilities. Adverse events that must be reported include the <u>2011 29 NQF serious reportable</u> <u>events</u>. During this past fiscal year, CLABSI events reported to CDC's NHSN were validated by DC 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 paper adverse event reporting form is available to all other medical facilities and healthcare providers under the Act for this purpose. Reports of an adverse event must be submitted within 60 days of the occurrence of the event (67% of events reported in FY 2021 met this requirement, 18% did not meet this requirement, and 16% did not provide an event date). DC Health collects and analyzes the reports and provides an annual report that includes summary data and recommendations. The Medical Malpractice Amendment Act of 2006 contains well-defined confidentiality provisions related to reporters and to any 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 through the web-based reporting system.

II. Reports by Event Type

In the 14th reporting period (October 1, 2020, to September 30, 2021), District medical facilities and healthcare providers submitted 319 reports to DC Health. The most frequently reported types of events were CLABSIs (131; 41.1%), pressure ulcers (148; 46.4%), and other events (18; 5.6%), representing 297 (93.1%) of the reports submitted. Table 5 (p. 11) summarizes the reports submitted by event type (DC Health, 2021; ECRI and the ISMP PSO; NQF, 2011). Figure 2 (p. 14) provides a graphic version.

TABLE 5. NUMBER AND PERCENTAGE OF NQF REPORTS BY EVENT TYPE, FY 2021

Category	Event Type	Reports	Percent
Surgical or invasive procedure events	1A - Surgery or other invasive procedure performed on the wrong site	2	0.6%
	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	5	1.6%
	1E - Intraoperative or immediately postoperative/postprocedure death in an ASA class 1 patient	0	0%
Product or device events	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	0	0%
	2C - Patient death or serious injury associated with intravascular air embolism that occurs while being cared for in a healthcare setting	0	0%
Patient protection events	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	2	0.6%
Care management events	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	0.3%
	4E - Patient death or serious injury associated with a fall while being cared for in a healthcare setting	11	3.4%
	4F - Any stage 3, stage 4, and unstageable pressure ulcers acquired after admission/presentation to a healthcare setting	148	46.4%
	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%
Environmental events	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%
	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%
Radiologic events	6A - Death or serious injury of a patient or staff associated with the introduction of a metallic object into the MRI area	0	0%
Potential criminal events	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	1	0.3%

	7D - Death or serious injury of a patient or staff member resulting from a physical	0	0%	
	of a healthcare setting			
CLABSIs	8 - Central-line-associated bloodstream infection (DC Health, 2021)	131	41.1%	
"Other" event type reported	X - "Other" non-NQF type of event reported	18	5.6%	
Total		319	100%	
ASA: American Society of Anesthesiologists				
MRI: magnetic resonance imaging				
NQF: National Quality Forum				

Figure 2 illustrates the event types for which one or more events were reported during the FY 2021 reporting period; 131 CLABSIs and 188 total NQF event types were reported, including 18 "Other" events (ECRI and the ISMP PSO).



FIGURE 2. NUMBER OF NQF EVENTS BY EVENT TYPE, FY 2021

Comparison with other mandatory reporting systems may also be valuable (see Figure 3, p. 15) (ECRI and the ISMP PSO; Washington State Department of Health, 2021; NQF, 2011). For example, the Washington State Department of Health's Serious Reportable Events Table noted 1,015 NQF events reported between October 1, 2020 and September 30, 2021.

Washington State Department of Health adverse health events are also based on NQF's 2011 list of serious reportable events. Although Washington State's system includes many more types of facilities required to report, when events are broken down by event category percentages, Washington State's most frequently reported events were similar to those reported by DC Health in that they included pressure ulcers (61%) and falls (18%), but they also included retained foreign objects (4%) as well as

patients discharged to the wrong person (<1%). The Washington State system also includes event categories for which the District did not receive reports (e.g., impersonating a healthcare provider and patient abduction).

Figure 3 illustrates the NQF event-report category frequency from both the District of Columbia for FY 2021, (with the exception of the "Other" event category), and the Washington State Department of Health for the same time period (FY 2021: October 1, 2020 through September 30, 2021); the percentages are based on the total number of NQF events (ECRI and the ISMP PSO; Washington State Department of Health, 2021). Data from both DC Health and Washington State reveal that pressure ulcers continue to be reported more frequently than either falls or medication errors in the care management category.

FIGURE 3. COMPARISON OF NQF EVENT CATEGORY FREQUENCY (DISTRICT OF COLUMBIA AND WASHINGTON STATE), FY 2021



Note: Totals do not equal 100% because of rounding.

III. Reports by Level of Harm

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 188 NQF events could be categorized based on the information provided.

Table 6 (p. 16) summarizes the level of harm among DC Health's 188 reports, and Figure 4 (p. 17) shows the percentages of the levels of harm identified (ECRI and the ISMP PSO).

FY 2021						
Harm Score	Description	Reports	Percent			
Α	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%			
С	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)	1	<1%			
D	An event occurred that required monitoring to confirm that it resulted in no harm and/or required intervention to prevent harm	23	12%			
E	An event occurred that contributed to or resulted in temporary harm and required treatment or intervention	154	82%			
F	An event occurred that contributed to or resulted in temporary harm and required initial or prolonged hospitalization	5	3%			
G	An event occurred that contributed to or resulted in permanent harm	2	1%			
Н	An event occurred that resulted in a near-death event (e.g., required ICU care or other intervention necessary to sustain life)	0	0%			
1	An event occurred that contributed to or resulted in death	2	1%			
NULL	No harm score was provided	1	<1%			
Total		188	100%			
ICU: intensive care unit						

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

Note: Totals do not equal 100% because of rounding.



FIGURE 4. PERCENTAGE OF NQF REPORTS BY HARM SCORE, FY 2021

Harm scores classified by the reporting facility and associated with the reports submitted ranged from one event (<1%) in category C, "An event occurred that reached the individual but did not cause harm and did not require increased monitoring," to two events (1%) in category I, "An event occurred that contributed to or resulted in death." When investigating these events of serious harm or death, an organization may benefit from submitting an RCA with CAP for review and analysis (see section V).

The majority of the events (154; 82%), 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.

Near-miss reporting can be valuable in providing lessons learned from "good catches." District facilities continue to voluntarily report events that did not cause patient harm. Harm scores reported during FY 2021 included harm scores C and higher; NQF serious reportable events typically have harm scores of E or higher.

IV. Report Quality

During FY 2021, 72% of the 188 NQF events reported to the District of Columbia Patient Safety Reporting System had thorough event descriptions, and 28% had minimal event descriptions. The "Event Description" field is a free-text field on the web-based form; when reporters complete it, this field may capture the most important event details. 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 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 responding to an adverse event with the following steps:

- 1. Adverse event occurs; report submitted.
- 2. RCA and CAP completed and submitted.
- 3. RCA and CAP analyzed; feedback provided.
- 4. Facility implements CAP.
- 5. Adverse events decrease.

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 188 NQF reports submitted in FY 2021, a few alluded to corrective action(s), which is consistent with the previous fiscal year, but no official CAP submissions were received for review. Although some reports identified contributing factors or root causes, no complete RCAs were submitted for review during FY 2021.

Some facilities have used an additional field within the reporting system labeled "Supplemental Information" and found it 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 within some reports. Some factors cited include the following:

- Environment: culture of safety, management
- Supervision/Support: clinical supervision
- Communication: among staff or team members
- Staff qualifications: training

The following resources are topics directly related to the cited contributing factors:

- <u>Surveys on Patient Safety Culture Action Planning Tool</u> (Agency for Healthcare Research and Quality (AHRQ) (2018)
- <u>Staff Roles and Training for Your Pressure Ulcer Prevention Program</u> (AHRQ)

VI. Central-Line-Associated Bloodstream Infections

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 seven 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. However, data updates may be delayed due to COVID-19. During FY 2021, units from all nine acute care facilities reported a total of 131 CLABSIs and 148,372 central-linedays, for a CLABSI rate of 0.88 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 healthcareassociated infections (HAIs) in the healthcare system (DC Health, 2021).

To take these data one step further, a standardized infection ratio (SIR) was calculated for the eight shortterm 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, 2021).

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 the occurrence of HAIs (DC Health, 2021).

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 2021, the overall SIR for the seven short-term acute care facilities was 0.768 (95% confidence interval: 0.645, 0.908) (DC Health, 2021).

Additional Resource

Current HAI Progress Report: 2020 National and State Healthcare-Associated Infections Progress Report. CDC (2021).

VII. Patient Safety Webinars and Training

Webinars are provided on patient safety topics and are also used to train those who use the reporting system. See Table 1 (p. 7) for a list of 14 webinars offered in FY 2021, as well as for the number of lines that called in for each presentation (note that information about the number of participants on each line is unavailable). Webinars are recorded and posted along with any handouts 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 with disseminating information and advice on best practices. The following is a summary of two important topic categories and a discussion of lessons learned and strategies to help prevent reoccurrence of these event types.

The two event categories are:

- i. Retained foreign objects
- ii. Pressure ulcers

As required by the Medical Malpractice Amendment Act of 2006, the information is deidentified and anonymized with regard to facility, provider, and patient. Root causes, contributing factors, and prevention 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.

Some of the additional resources listed in this section are available through the ECRI web portal; facility staff can obtain access to the DC Patient Safety Reporting System web portal by contacting the liaison in their facilities.

I. Retained Foreign Objects

Surgical events reported included the following event category:

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

DC Health Findings

A review of the five retained foreign object events submitted over the past fiscal year (see Figure 5, p. 21) revealed the following findings (ECRI and the ISMP PSO):

- Forty percent of retained foreign objects were sponges.
- Forty percent involved a retained guidewire.
- Twenty percent involved a retained instrument.

All five reports indicated the surgical specialty in which the event occurred (ECRI and the ISMP PSO).

FIGURE 5. RETAINED FOREIGN OBJECTS, FY 2021



n=5

Recommendations

- Healthcare facilities are encouraged to create a standardized method for counting items (e.g., the way they are placed on a count sheet or board, starting at the head of the bed, and working down the field) (AORN 2021).
- Healthcare organizations should establish systems to prevent retained packing in orifices, such as using radiopaque sponges fully intact, creating an "orifice packing handoff tool," using a "packing armband" that is only cut off when packing is removed, and concise documentation in the medical record (AHRQ 2021).
- Standardize performance of a pre- and postprocedure guidewire inspection and X-ray, as appropriate, to ensure appropriate placement and identify any retained items (ECRI and the ISMP PSO 2022).
- Develop and implement layers of systemic fail-safes for prevention of retained guidewires. Adopt consistent protocols, which includes communication and documentation after successful withdrawal of the guidewire. Consider human factors when developing interventions, such as standardized procedure kits and visual reminders (ECRI and the ISMP PSO 2022).

Additional Resources

- Retained Surgical Items. AORN (2022).
- Prevention of Retained Vaginal Sponges After Birth. ACOG (2018).
- Eliminating guidewire retention during ultrasound guided central venous catheter insertion via an educational program, a modified CVC set, and a drape with reminder stickers. BMJ Quality Improvement Reports (2016).

II. Pressure Ulcers

Pressure ulcer events are defined as:

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

DC Health Findings

A review of 148 pressure ulcer events submitted between October 2020 and September 2021 revealed the following (ECRI and the ISMP PSO):

- Treatment location (unit) was indicated in only three of the reports submitted.
- Pressure ulcer location was indicated in 67% of the reports submitted (Figure 6, p. 23):
 - o Buttocks/sacrum/coccyx: 48%
 - Occiput: 5%
 - Face/ear/chin/nose: 4%
 - two events resulting during prone position
 - o Calf: 3%
 - Single cases at the hip, mid back, upper back, abdomen, tracheostomy site, posterior neck: 6%
- The majority of the reports had a harm score of E. The following shows the breakdown of harm scores:
 - D = 3%
 - E = 97%
- More than 43% of the reports did not have a detailed event description, stating either "hospitalacquired pressure injury" or "HAPI."



FIGURE 6. PRESSURE ULCER INJURY LOCATION, FY 2021

Recommendations

- Use wedges, pillows, or fluidized air repositioners to relieve pressure points (ECRI and the ISMP PSO 2021).
- Practice safely proning patients with simulation training during routine staff education (ECRI and the ISMP PSO 2021).
- Adjust prone patient's positioning every two hours with microturns and "swimmer's position" changes (ECRI and the ISMP PSO 2021).
- Assess the patient's skin while a team assists with repositioning and turning (ECRI and the ISMP PSO 2021).
- While securing endoscopic feeding tubes and endotracheal tubes, ensure they are taped properly to prevent facial pressure (ECRI and the ISMP PSO 2021).
- Review the pressure injury prevention tips included in Additional Resources which provide detailed best practices for prone positioning and how to manage each pressure point.

Additional Resources

- Pressure Injury Prevention PIP Tips for Prone Positioning. NPIAP (2020).
- <u>ECRI COVID-19 Resource Center</u>
- Prone Positioning: A Non-Invasive Maneuver for ARDS that Makes a Difference. Vollman (2020).

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. Throughout FY 2022, the District will have continued opportunities to benefit from custom feedback as well as the ability to submit research requests to support this objective, with the delivery of safe patient care as its ultimate goal.

Technical Credits

This report was prepared by ECRI in collaboration with DC Health. ECRI is an independent, nonprofit organization, and dedicates itself to improving the safety, quality, and cost-effectiveness of care across all healthcare settings worldwide. As pioneers in this science for more than 50 years, ECRI marries experience and independence with the objectivity of evidence-based research. Thousands of healthcare organizations worldwide rely on ECRI's' expertise in patient safety improvement; risk and quality management; healthcare processes, devices, and procedures.

Acronyms and Abbreviations

- AHRQ: Agency for Healthcare Research and Quality
- AORN: Association of periOperative Registered Nurses
- ASA: American Society of Anesthesiologists
- 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 Department of Health
- FY: fiscal year
- HAI: healthcare-associated infection
- HAPI: hospital-acquired pressure injury
- ICU: intensive care unit
- MRI: magnetic resonance imaging
- 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 Events by Type, FY 2019–2021
- FIGURE 2. Number of NQF Events by Event Type, FY 2021
- FIGURE 3. Comparison of NQF Event Category Frequency (District of Columbia and Washington State), FY 2021
- FIGURE 4. Percentage of NQF Reports by Harm Score, FY 2021
- FIGURE 5. Retained Foreign Objects, FY 2021
- FIGURE 6. Pressure Ulcer Injury Location, FY 2021

Tables

- TABLE 1. Educational Webinars (Number of Lines Participating), FY 2021
- TABLE 2. Top Ten Articles, FY 2021
- TABLE 3. Custom Feedback and Research Responses, FY 2021
- TABLE 4. Patient Safety Briefs, FY 2021
- TABLE 5. Number and Percentage of NQF Reports by Event Type, FY 2021
- TABLE 6. Number and Percentage of NQF Reports by Level of Harm, FY 2021

REFERENCES

Agency for Healthcare Research and Quality (AHRQ). (2021 April 28). *Two Cases of Retained Vaginal Packing: When Writing an Order is Not Enough*. PSNet. <u>https://psnet.ahrq.gov/web-mm/two-cases-retained-vaginal-packing-when-writing-order-not-enough</u>

Association of periOperative Registered Nurses (AORN). (2021). *Retained Surgical Items*. <u>https://www.aorn.org/guidelines/clinical-resources/clinical-fags/retained-surgical-items</u>

DC Health. (2021). CLABSI data.

ECRI and the ISMP PSO. PSO Database. Plymouth Meeting (PA).

ECRI and the ISMP PSO. (2022 February 3). *Lost and Found: Retained Guidewires Not Seen until Follow-Up*. <u>https://www.ecri.org/components/PSOCore/Pages/E-lert020322.aspx</u>

ECRI and the ISMP PSO. (2021 November 4). *Ups and Downs: Prone Positioning for ARDS Patients*. <u>https://www.ecri.org/components/PSOCore/Pages/E-lert110421.aspx</u>

National Quality Forum (NQF). (2011 December). Serious Reportable Events in Healthcare —2011 Update. http://www.qualityforum.org/Publications/2011/12/Serious_Reportable_Events_in_Healthcare_2011.aspx

Washington State Department of Health. (2021). Adverse Events: Serious Reportable Events Table 2006-2021. <u>https://www.doh.wa.gov/Portals/1/Documents/2900/689010.pdf</u>