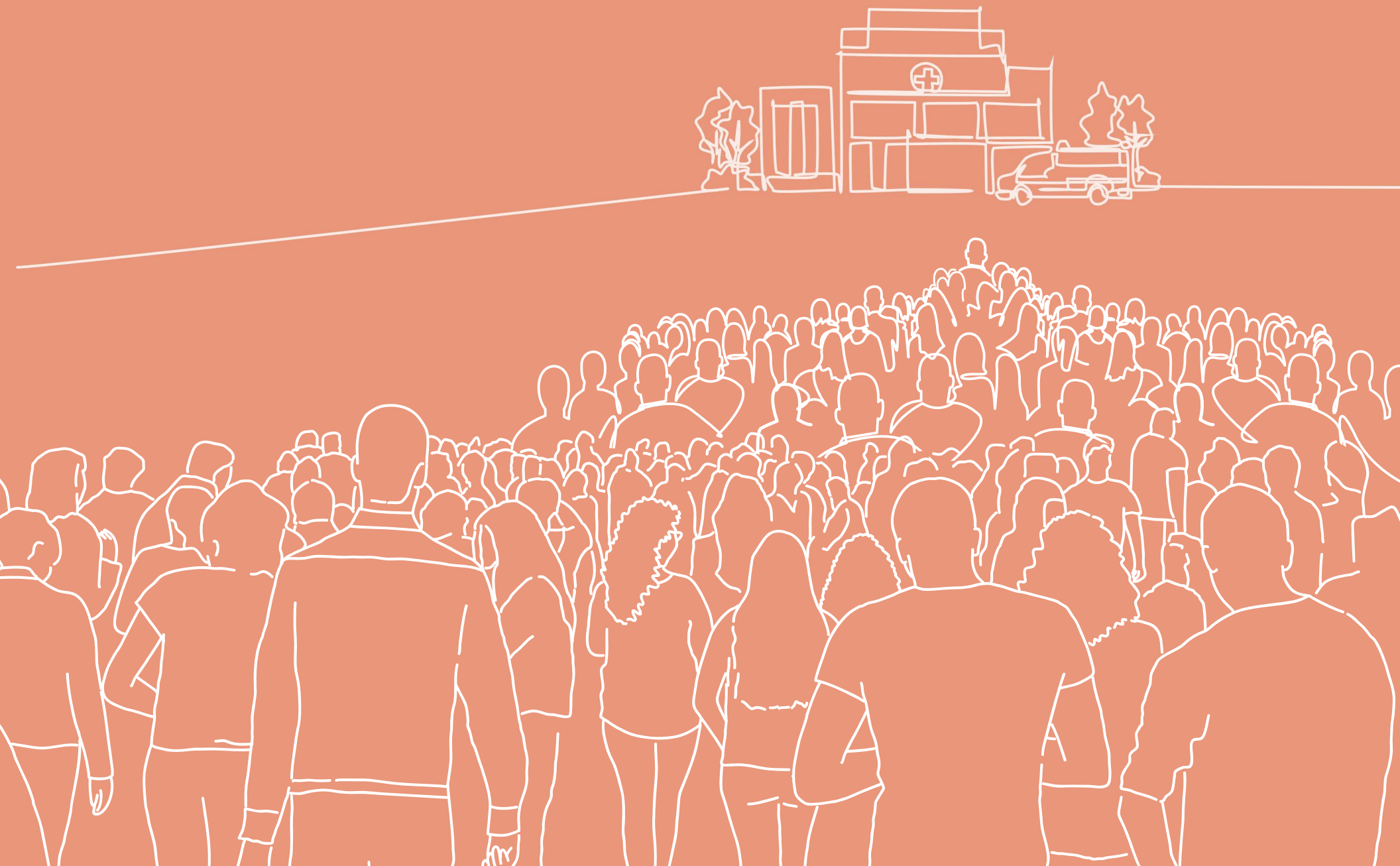
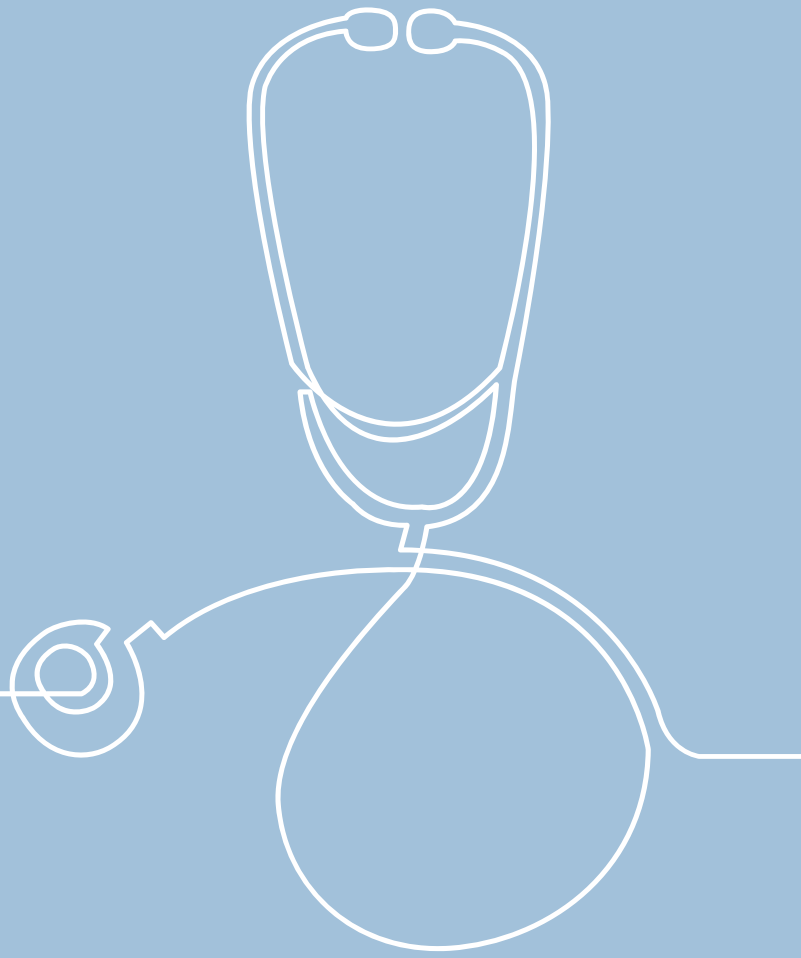
Patient Safety Authority

2021 Annual Report



Contents



Board of Directors

Stanton N. Smullens, MD (Chair Emeritus)

Denise A. Johnson, MD (Chair)
Physician Appointed by the Governor

Daniel Glunk, MD, MHCDS (Vice Chair)
Appointee of the President Pro Tempore of the Senate

Veronica Richards, Esq. (Secretary/Treasurer)
Appointee of the Minority Leader of the Senate

Arleen Kessler, PharmD, MBA, RPh
Pharmacist Appointee of the Governor

Kathleen Law, MS, RN
Healthcare Worker Appointed by the Governor

Amelia Paré, MD
Appointee of the Speaker of the House of Representatives

Linda Waddell, MSN, RN
Nurse Appointed by the Governor

Eric Weitz, Esq.
Appointee of the Minority Leader of House of Representatives

William J. Wenner, MD, JD
Physician Appointed by the Governor

Leadership

Regina M. Hoffman, MBA, RN, *Executive Director*
Howard Newstadt, JD, MBA, *Sr. Dir., Finance & Business Ops/CIO/CISO*
Caitlyn Allen, MPH, *Director, Engagement*
Michelle Bell, BSN, RN, *Director, Outreach & Education*
Rebecca Jones, MBA, RN, *Director, Data Science & Research*
Rodney R. Akers, Esq., *Legal Counsel*

Contractors

Katie Adams, MS
Julia Barndt, MA
Chris Bonk, MSN, RN
Christian Boxley, BS
Phyllis Bray
Deanna Busog, BS
Ram Dixit, MS
Dave Eppley
Allan Fong, MS
Ella Franklin, MSN, RN
Barbara Gall
Joanna Grimes, BSN, RN
Jessica Howe, MA
Tracy Kim, MPS
Shawn Kincaid, BSME, EIT
Seth Krevat, MD
Donna Lockette
Natasha Nicol, PharmD
Zoe Pruitt, MA
Raj Ratwani, PhD
Lori Russell, MS, RN
Laura Schubel, MPH
Lucy Stein, MS, OTR/L
Carly Sterner
Bev Volpe

Staff

JoAnn Adkins, BSN, RN, *Senior Infection Preventionist*
Amanda Bennett, MPH, MLS, *Infection Preventionist*
Christine Bingman, DNP, RN, *Infection Preventionist*
Jeffrey Bomboy, BS, RN, *Senior Patient Safety Liaison*
Lea Anne Gardner, PhD, RN, *Patient Safety Analyst*
Kelly R. Gipson, BSN, RN, *Project Manager*
Amy Harper, PhD, RN, *Infection Preventionist*
Shawn Kepner, MS, *Data Analyst*
Elizabeth Kukielka, PharmD, MA, RPh, *Patient Safety Analyst*
Richard Kundravi, BS, *Senior Patient Safety Liaison*
Christopher Mamrol, BSN, RN, *Senior Patient Safety Liaison*
Karen McKinnon-Lipsett, *Admin. Specialist, Executive & Data Science*
Shelly M. Mixell, *Admin. Specialist, Outreach & Education*
Melanie A. Motts, MEd, RN, *Senior Patient Safety Liaison*
Eugene Myers, BA, *Associate Editor, Engagement & Pub.*
Jessica Oaks, MIT, *Program Manager, Data Science & Research*
Jacqualine Peck, BS, *Comm. Specialist, Engagement & Pub.*
Teresa Plesce, *Office Manager/HR Liaison*
Catherine M. Reynolds, DL, MJ, RN, *Senior Patient Safety Liaison*
Terri Lee Roberts, BSN, RN, *Senior Infection Preventionist*
Christine Sanchez, MPH, *Patient Safety Analyst*
Megan Shetterly, MS, RN, *Senior Patient Safety Liaison*
Krista Soverino, BA, *Comm. Specialist, Engagement & Pub.*
Heather A. Stone, BSW, *Admin. Specialist, Engagement & Pub.*
Matthew Taylor, PhD, *Patient Safety Analyst*
Alex Ulsh, BCS, *Systems Administrator/Deputy CISO*
Susan Wallace, MPH, *Senior Patient Safety Liaison*
Robert Yonash, RN, *Senior Patient Safety Liaison*

Public Board Meetings in 2021

- January 14, 2021
- March 18, 2021
- April 29, 2021
- June 24, 2021
- September 23, 2021
- December 9, 2021

Find summary minutes of public board meetings online at patientsafety.pa.gov.

Contact Information

333 Market Street - Lobby Level
Harrisburg, PA 17101
patientsafety.pa.gov
patientsafetyauthority@pa.gov
717.346.0469

Annual Report Production Staff

Daniel Glunk
Eric Weitz
Regina Hoffman
Caitlyn Allen
Eugene Myers
Krista Soverino
Heather Stone

Introduction

> “I attribute my success to this–I never gave or took an excuse.
>
> – Florence Nightingale

The World Health Organization (WHO) declared 2020 the Year of the Nurse in honor of Florence Nightingale’s 200th birthday. COVID had other plans.

Instead of celebrating two centuries of advancements, nurses and the rest of their healthcare colleagues awoke each day to unprecedented staffing shortages, constant supply chain disruptions, and the deadliest disease in a generation.

Yet, they found the resolve to keep taking care of us, even when they were at their breaking point. In response, the WHO named 2021 as a second Year of the Nurse. We couldn’t agree more.

Over the past year, we’ve worked with organizations across the state, nation, and globe to improve patient care, on topics ranging from emergence delirium, sepsis, and infant falls to wrong-site surgery—all while watching them battle the pandemic.

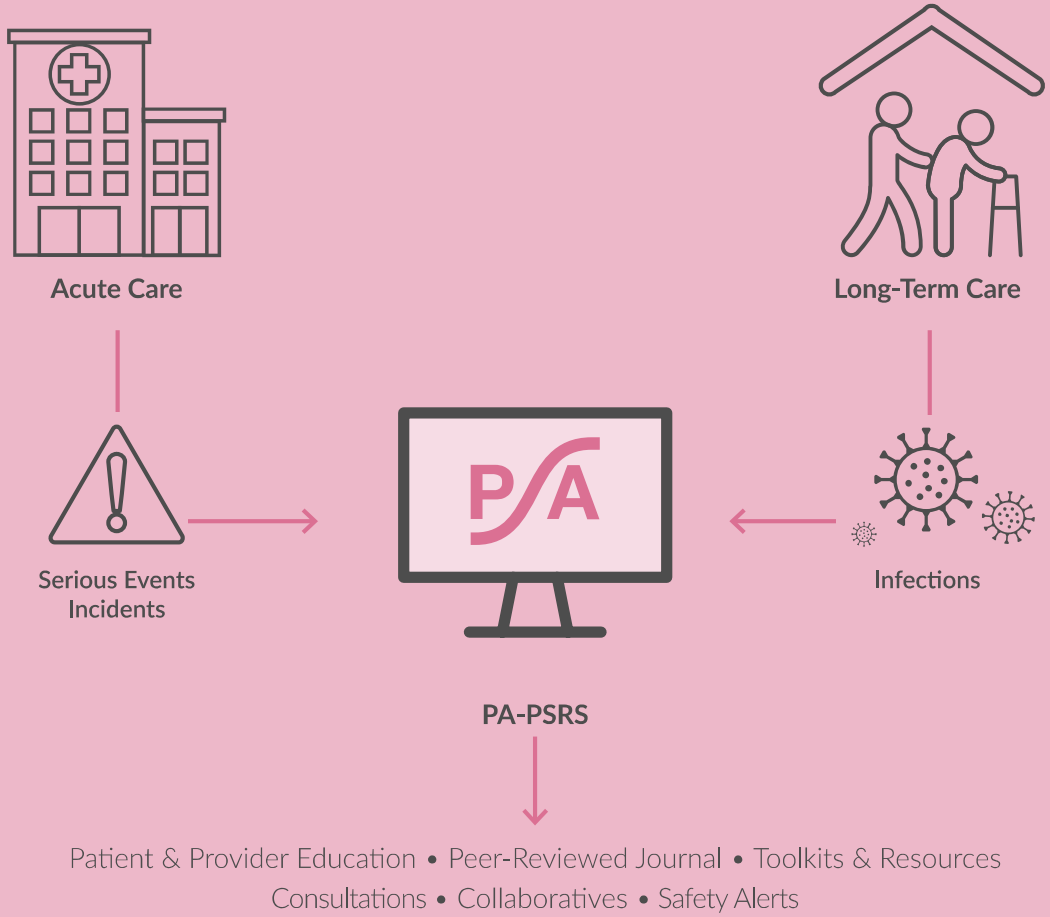
Contained in these pages are just a smattering of these stories, and some insights learned along the way.

We at the Patient Safety Authority thank nurses—and every healthcare hero—for their continued sacrifice.

Fast Facts

The Patient Safety Authority (PSA) is an independent state agency that collects reports of patient safety events from Pennsylvania healthcare facilities. Pennsylvania is the only state that requires acute care facilities to report all incidents of harm (serious events) or potential for harm (incidents). Long-term care facilities report infections into the Pennsylvania Patient Safety Reporting System (PA-PSRS), as outlined by Pennsylvania Act 52 of 2007.

The PSA analyzes those reports to prevent recurrence—either by identifying trends unapparent to a single facility or flagging a single event that has a high likelihood of recurrence—and disseminates that information through multiple channels.



- Founded in 2002 by the Medical Care Availability and Reduction of Error Act (commonly referred to as "Act 13" or "the MCARE Act")
- Vision: Safe healthcare for all patients
- PA-PSRS is one of the largest patient safety databases in the world, with more than 4 million event reports
- Governed by an 11-member board appointed by the governor and Pennsylvania legislature

Definitions

ABORTION FACILITY

Act 30 of 2006 extended the reporting requirements in the Medical Care Availability and Reduction of Error (MCARE) Act to abortion facilities that perform more than 100 procedures per year. At the end of 2021, Pennsylvania had 17 qualifying abortion facilities.

ADVERSE EVENT

This term is commonly used when discussing patient safety, but it is not defined in the MCARE Act. The Institute of Medicine Committee on Data Standards for Patient Safety defines an adverse event as "an event that results in unintended harm to the patient by an act of commission or omission rather than by the underlying disease or condition of the patient."

The PSA considers this term to be broader than "medical error," because some adverse events may result from clinical care without necessarily involving an error. And not all adverse events are preventable.

Although PA-PSRS includes reports of events that resulted from errors, the PSA's focus is on the broader scope of actual and potential adverse events, not only those that result from errors.

AMBULATORY SURGICAL FACILITY

The Health Care Facilities Act (HCFA) defines an ambulatory surgical facility (ASF) as "a facility or portion thereof not located upon the premises of a hospital which provides specialty or multispecialty outpatient surgical treatment.

"ASF does not include individual or group practice offices of private physicians or dentists, unless such offices have a distinct part used solely for outpatient treatment on a regular and organized basis. ... Outpatient surgical treatment means surgical treatment to patients who do not require hospitalization but who require constant medical supervision following the surgical procedure performed." At the end of 2021, there were 335 qualifying ASFs in Pennsylvania.

ANALYST

The analyst is a member of the PSA with education and experience in medicine, nursing, pharmacy, product engineering, statistical analysis, and/or risk management. Analysts review events submitted through PA-PSRS and compose the majority of the articles included in the PSA's quarterly, peer-reviewed journal, *Patient Safety*.

BIRTHING CENTER

The HCFA defines a birthing center as "a facility not part of a hospital which provides maternity care to childbearing families not requiring hospitalization. A birth[ing] center provides a homelike atmosphere for maternity care, including prenatal labor, delivery, and postpartum care related to medically uncomplicated pregnancies." At the end of 2021, Pennsylvania had five qualifying birthing centers.

HOSPITAL

The HCFA defines a hospital as "an institution having an organized medical staff established for the purpose of providing to inpatients, by or under the supervision of physicians, diagnostic and therapeutic services for the care of persons who are injured, disabled, pregnant, diseased, sick, or mentally ill, or rehabilitation services for the rehabilitation of persons who are injured, disabled, pregnant, diseased, sick, or mentally ill. The term includes facilities for the diagnosis and treatment of disorders within the scope of specific medical specialties, but not facilities caring exclusively for the mentally ill." At the end of 2021, Pennsylvania had 223 qualifying hospitals.

INCIDENT

A "potential adverse event": An event which either did not reach the patient ("near miss") or did reach the patient but the level of harm did not require additional healthcare services. The legal definition from the MCARE Act: "an event, occurrence, or situation involving the clinical care of a patient in a medical facility which could have injured the patient but did not either cause an unanticipated injury or require the delivery of additional healthcare services to the patient. The term does not include a serious event."

INFRASTRUCTURE FAILURE

A potential patient safety event associated with the physical plant of a healthcare facility, the availability of clinical services, or criminal activity. The legal definition from the MCARE Act: "an undesirable or unintended event, occurrence, or situation involving the infrastructure of a medical facility or the discontinuation or significant disruption of a service which could seriously compromise patient safety." Infrastructure failures are submitted only to the Pennsylvania Department of Health (DOH) and are not addressed in this report.

MEDICAL ERROR

A "preventable adverse event": This term is commonly used when discussing patient safety, but it is not defined in the MCARE Act. The word "error" appears in PA-PSRS and in this report. For example, one category of reports discussed is "medication errors." The Institute of Medicine Committee on Data Standards for Patient Safety defines an error as the "failure of a planned action to be completed as intended (i.e., error of execution) or the use of a wrong plan to achieve an aim (i.e., error of planning). It also includes failure of an unplanned action that should have been completed (omission)."

Within the MCARE Act, the term "medical error" is used in section 102: "Every effort must be made to reduce and eliminate medical errors by identifying problems and implementing solutions that promote patient safety." It is also used in defining the scope of chapter 3, "Patient Safety": "This chapter relates to the reduction of medical errors for the purpose of ensuring patient safety."

NURSING HOME

Act 52 of 2007 revised the MCARE Act to require nursing homes to report healthcare-associated infections (HAIs) to the PSA. Specifically, the act states that "the occurrence of a healthcare-associated infection in a healthcare facility shall be deemed a serious event as defined in section 302." Reporting from these facilities began in June 2009. For this report, Pennsylvania had 698 qualifying nursing homes at the end of 2021.

OTHER EVENT TYPE

The Centers for Medicare & Medicaid Services (CMS) requires hospitals to report to DOH any death of patients in restraints or in seclusion, or in which restraints or seclusion were used within 24 hours of death (other than soft wrist restraints).

Deaths in which the restraints or seclusion are suspected of or confirmed as having played a role in the death should be reported as serious events. Other deaths in which the restraint or seclusion use was incidental or not suspected should be reported under this "Other" category.

Reports of serious events and incidents are submitted to the PSA for the purposes of learning how the healthcare system can be made safer in Pennsylvania. Reports of serious events and infrastructure failures are submitted to DOH so it can fulfill its role as a regulator of Pennsylvania healthcare facilities.

PATIENT SAFETY EVENT

An event, occurrence, or condition that could have resulted or did result in harm to a patient and can be but is not necessarily the result of a defective system or process design, a system breakdown, equipment failure, or human error. They can also include adverse events, no-harm events, near misses, and hazardous conditions.

PATIENT SAFETY LIAISON

The patient safety liaison (PSL) is a unique resource to Pennsylvania MCARE facilities. Serving as the face of the PSA, the PSL provides education and consultation to MCARE facilities and ensures that facilities are aware of the resources available to them through the PSA, such as educational toolkits, presentations, and webinars. The program has eight liaisons located regionally throughout Pennsylvania.

PATIENT SAFETY OFFICER

The MCARE Act requires each medical facility to designate someone to serve as that facility's patient safety officer (PSO). In addition to other duties, the MCARE Act requires the PSO to submit reports to the PSA.

SERIOUS EVENT

The legal definition from the MCARE Act: "an event, occurrence, or situation involving the clinical care of a patient in a medical facility that results in death or compromises patient safety and results in an unanticipated injury requiring the delivery of additional healthcare services to the patient. The term does not include an incident."

STANDARDIZATION

Twenty-eight guiding principles went into effect on April 1, 2015, to improve consistency in event reporting through PA-PSRS. The guidance was developed to help provide consistent standards to acute healthcare facilities in Pennsylvania in determining whether occurrences within facilities meet the statutory definitions of serious events, incidents, and infrastructure failures as defined in section 302 of the MCARE Act.

The PSA, DOH, and healthcare facility staffs have worked together toward a shared understanding of the requirements. The reporting guidelines were identified based on frequently asked questions (FAQs), controversies, and inconsistencies that were evident in the data collected by the PSA and DOH.

Executive Summary

The PSA provides numerous training and education programs to facilities, including programs related to reporting, investigating, and analyzing patient safety events; risk assessment; and patient safety–specific education.

In 2021 and throughout the pandemic, the PSA's Outreach & Education patient safety liaisons and infection preventionists continued to provide expert patient safety support and education to the commonwealth's 1,200 licensed MCARE facilities. Also in 2021, the Outreach team released the initial modules of the PSA's new online patient safety Learning Management System (LMS).

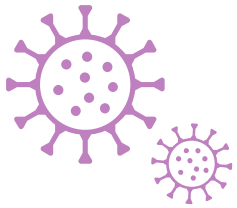
Additionally in 2021, the PSA continued publication of its award-winning, peer-reviewed quarterly journal, *Patient Safety*, and furthered the mission of the PSA's Center of Excellence for Improving Diagnosis. These programs are provided at no additional cost to facilities.

The PSA continues to expand its services by organizing and maintaining research collaborations with reporting facilities and other patient safety–centric organizations. In addition, the PSA offers education and patient safety curriculum development, and maintains the PSA speakers bureau. By directly providing clinical guidance, feedback, and educational programs derived from reported patient safety events occurring in Pennsylvania, the PSA provides significant and unique value back to the Pennsylvania healthcare industry funding this program.

Highlights from 2021 include:

- Lea Anne Gardner was a member of four of the Patient Safety Movement Foundation's Actionable Patient Safety Solutions (APSS) workgroups: Nasogastric Tube Placement and Verification, Social Determinants of Health, Care Coordination, and Health Literacy.
- Matthew Taylor and Robert Yonash co-developed a poster presentation about wrong-site surgery for the Society for Investigative Dermatology Meeting.
- Catherine Reynolds and Matthew Taylor presented to the Healthcare Council of Western Pennsylvania Risk/Quality Committee regarding patient safety challenges in the isolation environment.
- Amy Harper and Elizabeth Kukielka presented at the Pennsylvania Pharmacists Association (PPA) Virtual Mid-Year Conference regarding safety in the medication reconciliation process.
- Shawn Kepner and Jessica Oaks presented at the Commonwealth of Pennsylvania Tableau Day, sharing PSA's implementation of Tableau and highlighting various dashboards created to streamline processes and improve efficiency.
- Rebecca Jones served as co-chair of the Society to Improve Diagnosis in Medicine's (SIDM) Practice Improvement Committee and co-led a special interest group session for the SIDM annual conference regarding practice improvement in hospitals and health systems.
- Robert Yonash was interviewed and featured in the January 2021 *Outpatient Surgery Magazine* article, "Positioned to Prevent Wrong-Site Surgery."
- *Patient Safety* received three additional awards for publication excellence, including the prestigious Eddie Award for best full issue of a healthcare journal.
- In conjunction with UPMC-Magee, PSA developed a first-of-its-kind video to educate new parents about preventing infant falls.
- Susan Wallace and Caitlyn Allen presented about infant falls prevention at the Patient Safety Movement Foundation's annual conference.

Strategic Plan

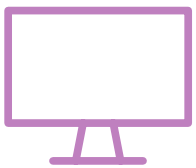


Healthcare-Associated Infections

- Surveyed Pennsylvania long-term care (LTC) facilities to ascertain facility involvement with several key infection prevention processes (education of staff, communication, auditing and reporting, transmission-based precautions, emergency preparedness, vaccination, and Act 52). 113 facilities responded to and completed the LTC process measure survey.
- Starting in March 2021, PSA infection preventionists (IPs) began reaching out to LTC facilities that indicated that they had a new IP at the facility. 433 individuals received an email containing information about IP education, resources, and offers for individualized support.
- Added new position to support expansion of infection prevention support.

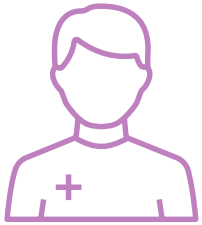
Improving Diagnosis

- The PSA Center of Excellence for Improving Diagnosis (CoE) team developed version 1.0 of a comprehensive assessment tool to measure organizational maturity across key domains of diagnostic excellence, with plans to pilot the tool with a group of Pennsylvania hospitals in 2022.
- PSA continued as an active member of the Coalition to Improve Diagnosis—a collaboration of more than 60 leading healthcare organizations convened and led by SIDM—including involvement in drafting and submitting comments regarding the Common Format for reporting diagnostic safety events.
- PSA hosted an educational webinar presented on behalf of Geisinger Health System and the SaferDx Learning Lab in collaboration with Baylor College of Medicine, aimed at influencing a culture of learning from diagnostic errors at a health system.



Data

- Prepared to add new mandatory demographics questions to the Pennsylvania Patient Safety Reporting System (PA-PSRS) on January 1, 2022, including race, ethnicity, sex assigned at birth, gender identity, sexual orientation, and ZIP code.
- Implemented new rules for PA-PSRS reports to improve data quality, such as expanding character limits and limiting time frames between report submission and certain dates within the report.
- Began developing algorithmic approaches and automated solutions to identify anomalies and significant trends in PA-PSRS reports.
- Analyzed and compared data from PA-PSRS and the Pennsylvania Health Care Cost Containment Council (PHC4) related to three healthcare-acquired conditions—air embolism, blood incompatibility, and foreign object retained after surgery—and shared a report containing key findings with Pennsylvania healthcare facilities.



Culture: CANDOR Collaborative

- PSA hosted two webinars in February targeting risk retention groups and facility leadership. They provided an introduction to Communication and Optimal Resolution (CANDOR) and provided an overview of collaborative expectations.
- Patient safety liaisons communicated directly with facility patient safety teams to discuss and encourage participation in the collaborative.
- Facilities self-enrolled with a signed statement of intent from senior leadership (to ensure project knowledge and support by senior leadership).
- A self-assessment provided each facility insight into opportunities for improvement and potential focus for the collaborative work. The goal was to keep the work individualized to facility needs.

Patient Safety

The Award-Winning Journal of the PSA

With 10 issues and more than 100 articles published, *Patient Safety* is no longer the new kid in town. 2021 marked the third year of the journal's existence, with highlights including three additional awards in publication excellence, its first international manuscript, from Ireland; and surpassing 50,000 readers worldwide.

Patient Safety featured several first-of-their-kind analyses such as an in-depth look at emergence delirium, safety events following a motor vehicle crash, and a statewide assessment of the impact of isolation on patients.

Patient Safety won 3 more awards for publication excellence

NAGC Blue Pencil and Gold Screen Awards

2021 FOLIO: Eddie and Ozzie Awards Winner

Digital Health Awards WINNER

50K
Readers

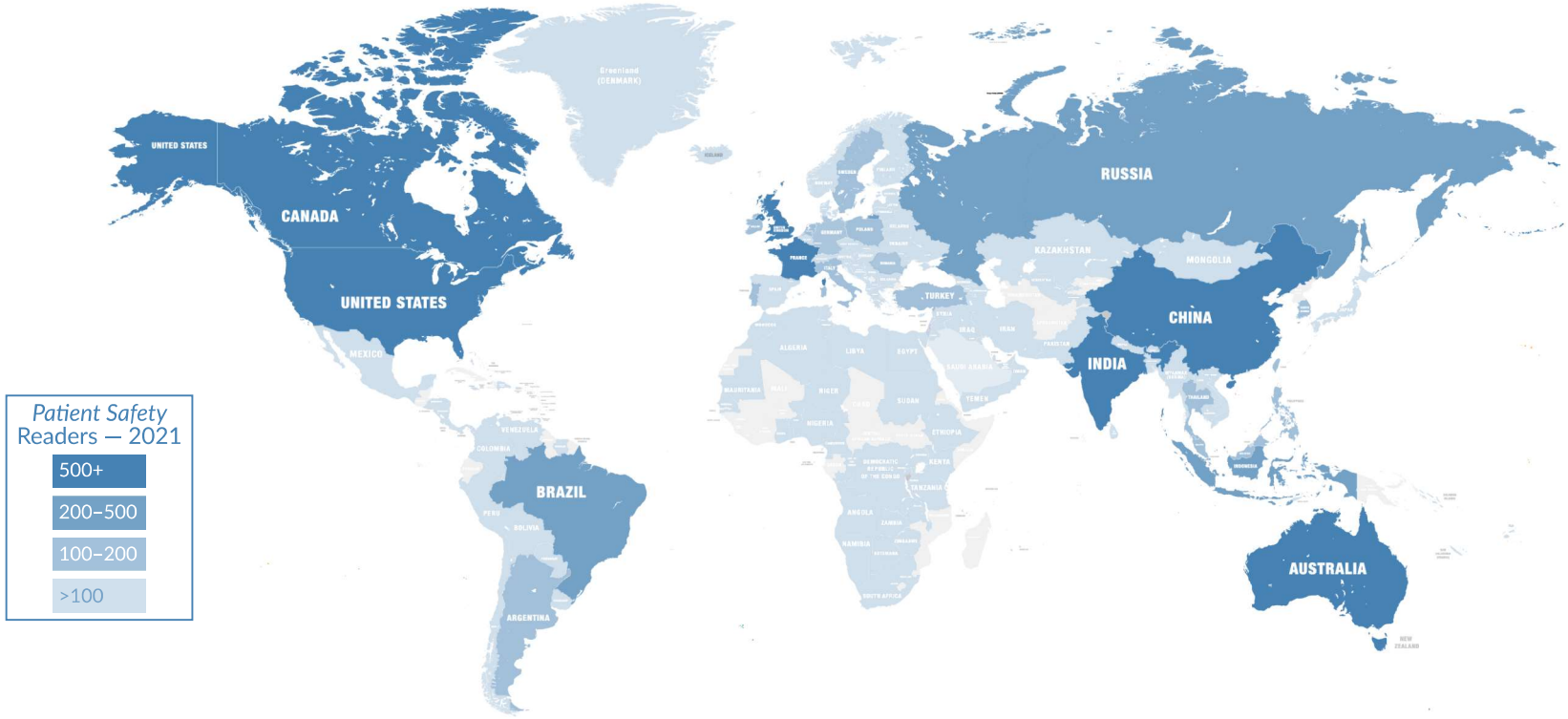
4.7K
Cities/Regions

165
Countries

50
States

68
Articles Published

Sharing Knowledge



- A state health department working to improve their process for capturing adverse event data reached out to PSA for guidance.
- A state hospital association reached out to learn more about the work of our Center of Excellence for Improving Diagnosis (CoE).
- Physicians and other healthcare providers from Pennsylvania and other states reached out to the Data Science & Research team to collaborate on presentations and manuscripts regarding various patient safety topics.
- In its *Common Formats for Event Reporting—Diagnostic Safety*, the Agency for Healthcare Research and Quality (AHRQ) referenced PSA's 2018 article regarding analysis of PA-PSRS events involving diagnostic error.
- PSA invited the Canadian Patient Safety Institute to discuss their national strategies to reduce harm.
- Pennsylvania Medical Society featured four articles from *Patient Safety* for continuing medical education (CME):
  - Trocar-Related Safety Events in Minimally Invasive Surgical Procedures: Risks for Organ and Vascular Complications
  - Prone Positioning in Patients With Acute Respiratory Distress Syndrome and Other Respiratory Conditions: Challenges, Complications, and Solutions
  - Challenges With Measurement and Transcription of Patient Height: An Analysis of Patient Safety Events in Pennsylvania Related to Inaccurate Patient Height
  - Health Information Technology–Related Wrong-Patient Errors: Context is Critical

I AM Patient Safety
Annual Achievement Award Winners

129 Nominations

66 Facilities

Executive Director's Choice
HAI Focus Team at WellSpan Good Samaritan Hospital

To decrease the number of central line–associated blood stream infections (CLABSI) and bring Zero Harm back to patient care, WellSpan created a multidisciplinary HAI Focus Team which began process observations at the unit level to identify variations in central line insertion techniques, site selection, daily maintenance, and dressing care, as well as conduct daily assessments of all current central lines for discontinuation opportunities. They also developed appropriate blood culture order sets, education for clinicians, and an audit process to ensure coaching was available in real-time. Due to their efforts, WellSpan has been CLABSI-free for 310 days and has embraced a 28% decrease in overall hospital-acquired infections.

Ambulatory Surgical Facility
Jesse Hixson, MSN, Greg Purnell, MD, and the AHN-Monroeville Surgery Center Team at Allegheny Health Network — Monroeville Surgery Center

In early 2021, surgeons were discussing that they had been experiencing an increased incidence of suture issues after surgery. Jesse Hixson, director of Nursing (DON), met with them and began investigating the suture issues. She expanded the investigation into the broader Allegheny Health Network (AHN) and found that many surgeons in different facilities were having the same problem: some patients just weren't absorbing the suture while others were developing infections, requiring further surgery. In response to this widespread problem, AHN contracted with another suture company to convert to a different product, and no further incidents were reported after the conversion.

Runners-Up
- Bethel Park Surgery Center Team — Allegheny Health Network – Bethel Park Surgery Center
- Jamie Hallam and Front Office Staff — Spartan Health Surgicenter

Improving Diagnosis
Joyce Litwak, RN — Lehigh Valley Health Network

A patient who was admitted and treated for an isolated hip fracture was to be discharged the following day pending a COVID test result. Joyce Litwak, RN, completed a full assessment and found the patient to have a subtle symptom that could indicate a stroke. Litwak notified the attending, who assessed the patient. A stroke alert was called and subsequent diagnostic scans revealed a severe intraluminal carotid artery (ICA) thrombus. Due to the patient's inability to receive tissue plasminogen activator (tPA), a "clot buster" drug, without intervention the patient was at high risk of massive and likely fatal stroke. The patient was in the operating room a short time later to remove the ICA clot.

Runners-Up
- Dr. Jaber Monla-Hassan — Einstein Medical Center Montgomery
- Dixon Foundation Health Center Team: Anila Gidwani, Rebecca Topping, Bethany Dieffenderfer — WellSpan Dixon Foundation Health Center

Individual Impact
Kristin Keane, RN, Short Procedure Unit — Phoenixville Hospital

Kristin Keane had a patient going home with multiple drains. She brought a family member back to educate them on emptying the drains and discharge instructions. The family member stated they pass out at the sight of blood and could not do it, and the patient was unable to do it herself. Keane devised a plan to use the patient's cellphone to FaceTime another relative who could help with the drains. She demonstrated and explained exactly what she was doing and recorded the video as a reference. Keane called the patient the next day to check on them and how their caregiver was doing with the drain process. The family member was using her video as a reference.

Runners-Up
- Theresa Lasko, RN & Deborah Gruntz, RN, Welcome Center Senior Teammates — Advanced Surgical Hospital
- Adrienne Bellino-Ailinger, RN — Einstein Medical Center Montgomery – Einstein Endoscopy Center Blue Bell

Long-Term Care Facility

Desiree Schuler, LPN, Restorative Nurse — Hometown Nursing & Rehabilitation Center

Desiree Schuler is a great safety champion who consistently makes herself available to provide staff education, even on off-shifts. When it comes to resident safety, she solicits feedback from staff and serves as a role model for her peers by wearing her critical thinking cap. Doing the "deeper dive" related to the prevention of all incidents and accidents is the norm for her. With Schuler's leadership, falls in the facility were reduced by 25% this year compared to last—an awesome accomplishment.

Runners-Up

- Alicia Elvidge, NHA, Chief Executive Officer — South Mountain Restoration Center
- Kimberly Krall — Thornwald Home

Nationwide Warriors

Perioperative Surgery — Northwell Health

Based on literature on the effectiveness of safety checklists on surgery outcomes and the potential for video recording to promote surgical quality improvement and patient safety, the team implemented remote video auditing in operating rooms. By providing nonpunitive feedback to surgical teams in real-time, they saw a dramatic increase in compliance with the sign-in, time-out, and sign-out elements of the World Health Organization (WHO) surgical safety checklist.

Runners-Up

- The Second Victim Committee — VA Pittsburgh Healthcare System
- Rinisha Thomas, RN & Tatiana Ziegler, RN — Delaware Valley Veterans Home

Physician Offices

Melissa Bauman, CRNP — Lehigh Valley Physician Group Family Medicine–Bath

During a routine physical of a 33-year-old patient, Melissa Bauman heard a heart murmur. The patient had no medical history but the patient's father had died suddenly in his 60s of an unknown cause. Though the patient had no other symptoms, Bauman insisted that the patient get a 2D echocardiogram, which indicated a possible aortic dissection and led to an emergency chest scan that confirmed the diagnosis. The patient was admitted and underwent surgery and has been doing well. The cardiologist credits Bauman with saving the patient's life.

Runners-Up

- Tammy Bowman, Office Coordinator, LVPG Hematology/Oncology Office — Lehigh Valley Physician Group
- Outpatient Falls Prevention Team — Einstein Medical Center Montgomery

Safety Story

Registered Nurses on 5 Cathcart/Schiedt (Med-Surg Unit) — Pennsylvania Hospital

The registered nurses on 5 Cathcart/Schiedt raised their concerns about the possible lack of safety and security in dispensing oral liquid methadone from the pharmacy to the unit, which resulted in a hospitalwide shift to storing the drug in the unit-based medication dispensing machine. The change allowed the RNs to remove the methadone when the patient was ready for it and enabled accurate tracking of syringe removal and wasting as with other controlled substances on the unit.

Runners-Up

- The PAR (Patient At Risk) Bundle Team — Pennsylvania Hospital
- Monitor Technician Department — UPMC Community Osteopathic

Sepsis

Emergency Department Team, Dr. Christopher Stromski & and Ryan Kloss — St. Luke's Allentown

St. Luke's Allentown's emergency department team has consistently achieved high sepsis bundle compliance by engaging in process improvement, reviewing opportunities, and providing timely assessment and intervention in the sepsis patient population. The leadership team engages in monthly review of internal performance, and shares the great discussion with their team.

Runners-Up

- WellSpan Health Sepsis Team — WellSpan Health
- Dr. Jaber Monla-Hassan, Dr. Robert Czincila, Kim Mikula, Kim Vitelli, Olivia Johnson, Scott Urbinati — Einstein Medical Center Montgomery

Time-Outs

The Pre-Procedure Time-Out Taskforce — Pennsylvania Hospital

In response to a troubling increase in safety event reports related to surgical consent, Pennsylvania Hospital's perioperative leadership created a taskforce to reduce the number of safety events occurring prior to patients' arrival in the OR. The Pre-Procedure Time-Out process the team designed and implemented ultimately reduced consent and wrong-site/wrong-patient safety events per day by over 87%.

Runners-Up

- Radiology Department — Chester County Hospital
- The Allegheny Health Network Perioperative Education Team — Allegheny Health Network

Transparency and Safety in Healthcare

Nursing Leadership and Education, Physicians, Epic Team, Patient Safety, and Library Staff — UPMC Carlisle and Central Pennsylvania Hospitals

In response to an adverse event related to continuous urinary bladder irrigation, a multidisciplinary team at UPMC Central Pennsylvania hospitals—including nursing leadership, nursing education, urology physicians, ED physicians, hospitalists, Epic Team, Patient Safety Department, and library representatives—created and implemented a continuous urinary bladder irrigation order set and nursing education. These were implemented at all UPMC hospitals in the region, and the event was discussed in forums and shared in a patient safety newsletter to show how transparency and collaboration can result in system improvement for patient safety.

Runners-Up

- Central Sterile Processing Department — UPMC Hamot
- Rosanna Catania-Venuto, MSN, RN — Chester County Hospital

Outreach & Education

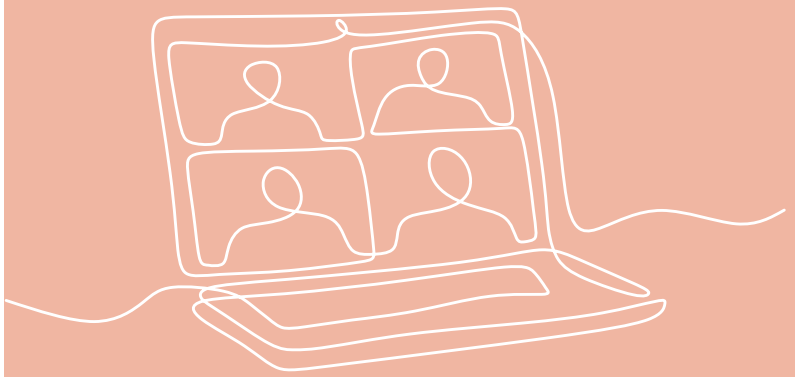
The COVID-19 pandemic continued to have a profound effect on long-term care facilities throughout 2021. The most noted impacts included supply issues, staffing shortages, and high rates of turnover.

PSA infection preventionists interviewed staff at all 14 Pennsylvania critical access hospitals (CAH). Sessions were held virtually and structured to identify areas of opportunity at individual hospitals, as well as within the CAH cohort. Several opportunities were identified, and this project will continue in 2022.

In April 2021, PSA launched our new Learning Management System (LMS), which is free to access and offers Pennsylvania nursing credits on applicable courses. There were 148 completions in 2021 across the nine available courses: three general patient safety topics, five *Patient Safety* journal articles, and one based on a PSA webinar.

The 2021 PSO Engagement Roundtable discussions are quarterly virtual networking opportunities for Pennsylvania healthcare facilities. These sessions focused on the four topics below, with 298 total participants in attendance:

- COVID-19 and the Implications of Care
- Together Towards Tomorrow: Sharing Stores About Ongoing Challenges During COVID-19 and Lessons Learned About the Importance of Self-Care
- Mining Data for Insights: A Look Beneath the Surface of PA-PSRS
- Fall Prevention Evidence-Based Best Practices and Targeted Interventions



61
Education Events

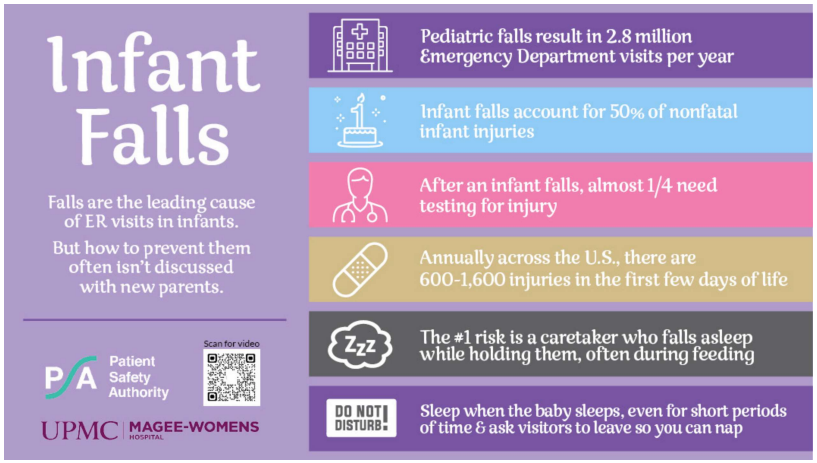
4.7K
Individuals Trained

2,755
Facility Contacts

2021 Webinar Topics:

- Artificial Intelligence in Medicine: Risk Management and Litigation
- Health Disparities and Health Equity
- OSHA Common COVID-19 Citations and Revised Guidance
- Leadership: Emotional Intelligence During Uncertain Times
- Active Shooter: Planning and Response in a Healthcare Setting
- Safe and Inclusive Behavioral Health Care for the LGBTQ Community
- Influencing a Culture of Learning From Diagnostic Errors at a Health System
- Implementing a Bundle-Based Improvement Initiative to Prevent Catheter-Associated Urinary Tract Infections in the ICU Setting
- Vaccines — The Safer Substitute
- Lose Weight-Based Errors! Health IT and Safety Culture
- Improving Sepsis Processes of Care With Remote Patient Monitoring and Interventions
- Can You (Un)Catch My Drift?: Dealing With Practice Drift in Healthcare
- OSHA's Emergency Temporary Standard (ETS) for COVID-19
- Building a Culture of Safety Through Reporting
- Nasogastric Tube Verification

Infant Falls



According to the Centers for Disease Control and Prevention, pediatric falls result in about 8,000 emergency room visits every day and account for 50% of nonfatal injuries in infants. All infants are at risk for falls, and the number one risk factor is a tired parent—and what new parent isn't exhausted all the time? The good news is that infant falls are preventable.

In collaboration with UPMC Magee-Womens Hospital, PSA developed a parent-focused campaign to raise awareness about newborn falls. This included multiple media stories and a video outlining prevention strategies.

PSA, in conjunction with local pediatric experts, also developed a prevention video for older infants and toddlers.

2.2K
Impressions

800
Video Views

Falls are the leading cause of ER visits in infants. But how to prevent them often isn't discussed with new parents.

Data Science & Research

Now more than ever the healthcare community needs support, and the goal of the Data Science & Research (DS&R) team is to assist facilities by analyzing important patient safety trends and providing resources that aid in addressing these issues. The DS&R team analyzes event report data entered by healthcare facilities in the Pennsylvania Patient Safety Reporting System (PA-PSRS) and synthesizes these findings with literature and expert knowledge to bring awareness and share potential safety strategies through publications in *Patient Safety*, courses in PSA's Learning Management System, and webinars.

Data drives the DS&R team in providing the most relevant and meaningful content for facilities. To achieve this, it is important to have comprehensive, high-quality data. In 2021, the team made several efforts to improve data quality, while concurrently making internal data consumption easier. The DS&R and O&E teams worked together to create a PA-PSRS Tip Sheet for facilities to help ensure data is consistently entered in event reports. Another project included a data cleanup initiative to provide clarity and consistency to analysts when using the PA-PSRS data for their analyses. Alongside this work, Tableau data visualization dashboards and Python programming were developed to enhance data delivery for the team, providing automated alerts and insights with telemetry events, high harm events, and anomaly detection. As the team looks forward, the goal is to continue streamlining and simplifying PA-PSRS to make the data entry and output as efficient and effective as possible.

PSA's vision—safe healthcare for all patients—cannot be fulfilled without evaluating and addressing disparities. Being inclusive and identifying important patient safety issues affecting specific populations are essential. During 2021, the DS&R team prepared to add new mandatory demographics questions to PA-PSRS on January 1, 2022, including race, ethnicity, sex assigned at birth, gender identity, sexual orientation, and ZIP code. PSA and its contractor Gainwell worked with facilities and patient safety software vendors to plan for these updates.

In 2021, PSA continued to work with its contractor MedStar Health Research Institute (MHRI). The MHRI team encompasses a wide range of expertise, with many specializing in human factors research.

Region	All Reports	Incidents	Serious Events
North Central	20,238	19,337	901
Northeast	27,061	25,964	1,097
Northwest	22,803	22,139	664
South Central	48,618	46,901	1,717
Southeast	99,753	97,056	2,697
Southwest	70,409	68,443	1,966
Total	**288,882**	**279,840**	**9,042**

289K
Acute Care Reports 2021

280K
Incidents

9K
Serious Events

Visit patientsafetyj.com to see the full analysis of PA-PSRS data from 2021 in the June 2022 issue of *Patient Safety*.

Fiscal Statements and Contracts

The Medical Care Availability and Reduction of Error (MCARE) Act[1] establishes the Patient Safety Trust Fund as a separate account in the Pennsylvania Treasury. Under the MCARE Act, the Patient Safety Authority (PSA) determines how those funds are used to effectuate the patient safety provisions of the MCARE Act and administers funds in the Patient Safety Trust Fund. Funds come primarily from assessment surcharges collected by the Pennsylvania Department of Health (DOH) from licensed MCARE medical facilities.

Pennsylvania hospitals, ambulatory surgical facilities, abortion facilities, birthing centers, and nursing homes bear the financial responsibility for funding the MCARE mandatory reporting program. Accordingly, the PSA has focused on two fiscal goals: (1) to be prudent in the use of moneys contributed by the healthcare industry, and (2) to assure that healthcare facilities paying for the Pennsylvania Patient Safety Reporting System (PA-PSRS) receive in return direct benefits from PA-PSRS and other PSA programs. Pursuant to Section 304(A)(4) of the MCARE Act, as a general rule, the PSA is authorized to receive funds from any source consistent with the PSA's purposes under the Act. Consistent with this mandate, the PSA at times contracts with and receives funding from other healthcare-related entities to reduce medical errors and promote patient safety in the commonwealth. In 2021, the PSA received no contract funding additional to MCARE Assessments.

Within the design of PA-PSRS, the PSA includes a variety of integral and analytical tools that provide immediate, real-time feedback to facilities on each facility's own adverse event and near-miss reports and activities. Additionally, in 2021, the PSA continued to enhance its newly designed public website patientsafety.pa.gov, providing expanded access to the PSA's educational materials and programs, as well as mobile accessibility. The PSA continued its PA-PSRS Application Modernization (AMOD), with both functional and design upgrades in 2021. The AMOD project entailed a complete redesign of the PA-PSRS application in 2019.

Funding Received From Hospitals, Ambulatory Surgical Facilities, Birthing Centers, and Abortion Facilities

The MCARE Act[1] set an initial limit of $5 million on the total aggregate assessment to acute care facilities in the first year of the MCARE Act beginning in 2002, with an annual increase based on the consumer price index (CPI) in each subsequent year. For fiscal year 2021–2022 (FY21–22), the maximum allowable acute care assessment is $8,203,696, against the PSA's Board-approved aggregate acute care assessment of $6,360,000.

On December 9, 2021, the PSA Board authorized a recommendation to the DOH for FY21–22 acute care assessment surcharges totaling $6.36 million. The FY21–22 acute care assessment maintains the prior fiscal year's acute care assessment total, and is 22.5% less than the maximum allowable acute care assessment that could be assessed pursuant to Section 305(d) of the MCARE Act. The PSA utilizes the Northeast medical care services consumer price index (CPI) to calculate maximum allowable assessments.

In making the FY21–22 acute care assessment recommendation, the PSA Board considered several points, including the following:

- The PSA's FY21–22 budget totals $7.5 million. Of this amount, approximately $6.346 million is budgeted for acute care related expenditures and funded by the $6.36 million in FY21–22 acute care assessments. The acute care assessments also fund certain infection prevention activities within the acute care facilities; these are separate and apart from Act 52 nursing home HAI assessment–funded activities.

- The PSA's FY21–22 budget of $7.5 million is a $125 thousand increase over the FY20–21 budget of $7.375 million, and equals the FY19–20 budget of $7.5 million.
- The FY21–22 acute care assessment of $6.36 million represents a $1.36 million increase from the PSA's initial FY2002–2003 acute care assessment of $5.0 million, a 1.5% per year average increase.
- The FY21–22 assessment levels provide the PSA with liquidity and planning flexibility moving into FY22–23 budget year.

Table 1 shows the number of acute care facilities assessed, authorized assessments, and assessment receipts for each fiscal year.

Funding Received From Nursing Homes

Act 52[2] of the MCARE Act allows the DOH to assess Pennsylvania nursing homes through license surcharges up to an aggregate amount of $1 million per year for any one year beginning in 2008, plus an annual increase based on the CPI for each subsequent year. In 2008, following the PSA's suggestion, the DOH assessed 725 nursing home facilities a total of $1,000,000 and transferred $1,000,782 to the Patient Safety Trust Fund for FY08–09. This money can be spent only on activities related to healthcare-acquired infections (HAI) and the implementation and maintenance of Chapter 4 of the MCARE Act. For FY21–22, the Act 52 maximum allowable assessment is $1,324,445, while the PSA Board's authorized FY21–22 Act 52 assessment is $1,140,000.

On December 9, 2021, the PSA Board authorized a recommendation to the DOH for the FY21–22 nursing home assessment surcharges of $1.14 million. The FY21–22 Act 52 assessment is equal to and maintains the FY20–21 nursing home assessment total, and is 13.9% below the maximum annual amount that could be assessed in the current fiscal-year pursuant to Section 409(b) of the MCARE Act. The PSA utilizes the Northeast medical care services CPI to calculate maximum allowable assessments.

Table 1. Acute Care Facility Assessments

FISCAL YEAR	NUMBER OF FACILITIES ASSESSED BY DOH[a]	APPROVED ASSESSMENTS	TOTAL ASSESSMENTS RECEIVED BY DOH[B]
2002–03	356	$5,000,000	$4,663,000
2003–04	377	$2,500,000	$2,542,316
2004–05	414	$2,500,000	$2,508,787
2005–06	450	$2,500,000	$2,500,149
2006–07	453	$2,500,000	$2,500,034
2007–08	526	$5,400,000	$5,391,583
2008–09	524	$4,000,000	$3,972,677
2009–10	519	$5,000,000	$4,989,781
2010–11	542	$5,000,000	$4,981,443
2011–12	550	$5,100,000	$5,063,723
2012–13	545	$5,500,000	$5,504,549
2013–14	556	$5,500,000	$5,492,002
2014–15	564	$6,200,000	$6,209,459
2015–16	569	$6,500,000	$6,494,845
2016–17	575	$6,675,000	$6,656,359
2017–18	583	$6,860,000	$6,860,164
2018–19	585	$6,860,000	$6,834,611
2019–20	558	$6,360,000	$6,300,845[c]
2020–21	557	$6,360,000	$6,388,433[d]
2021–22[e]	553	$6,360,000	
Total			$95,854,760

a. The number of facilities assessed by the DOH differs from the number of the MCARE Act's facilities cited elsewhere in this report because of differences in the dates chosen to calculate the number of facilities for these two different purposes.

b. Amounts assessed and amounts received differ because a few facilities may have closed in the interim or are in bankruptcy. In a few cases, the DOH has pursued action to enforce facility compliance with the MCARE Act's assessment requirement. Amounts received by DOH are then transferred to the Patient Safety Trust Fund.

c. FY2019–20 Acute Care Assessment receipts include $66,301.70 transferred to Patient Safety Trust Fund in calendar year (CY) 2021.

d. FY2019–20 Acute Care Assessment receipts include $15,737.27 transferred to Patient Safety Trust Fund in CY2022.

e. 2020–21 missing figures were unavailable at the time of publication and will appear in next year's annual report.

Table 2 shows the number nursing homes assessed, approved assessments, and assessments amounts received for each fiscal year.

Annual Expenditures and Non-Assessment Revenue Receipts

During calendar year 2021 (CY2021), the PSA spent about $6,929,695 million **(Table 3a)**. The PSA received no contract- or service-related receipts in 2021, and received investment income of $6,715 **(Table 3b)**.

Patient Safety Authority Contracts

The MCARE Act requires the PSA to identify a list of contracts entered into pursuant to the Act, including the amounts awarded to each contractor.

Table 2. Nursing Home Assessments

FISCAL YEAR	NUMBER OF FACILITIES ASSESSED BY DOH	APPROVED ASSESSMENTS	TOTAL ASSESSMENTS RECEIVED BY DOH
2008–09	725	$1,000,000	$1,000,782
2009–10	711	$800,000	$799,382
2010–11	707	$800,000	$799,829
2011–12	707	$800,000	$804,473
2012–13	711	$900,000	$913,315
2013–14	698	$1,000,000	$998,751
2014–15	703	$1,050,000	$1,049,842
2015–16	702	$1,080,000	$1,079,505
2016–17	704	$1,111,000	$1,110,185
2017–18	699	$1,140,000	$1,139,483
2018–19	699	$1,140,000	$1,139,645
2019–20	695	$1,140,000	$1,137,933
2020–21	693	$1,140,000	$1,139,038
2021–22[a]	681	$1,140,000	
Total			$13,112,163

a. FY2021–22 missing figures were unavailable at the time of publication and will appear in next year's annual report.

Table 3a. 2021 Expenditures

CONTROL LEVEL	AMOUNT
61: Personnel	$4,698,444
63: Operating	$2,231,251
Total 2021 Expenditures	$6,929,695

Table 3b. 2021 Revenue Receipts

REVENUE RECEIPTS	AMOUNT
Acute Care Assessments	$6,438,998
Nursing Home Assessments	$1,139,038
Non-Assessment Revenue	$0
Investment Income	$6,715
Total 2021 Revenue Receipts	$7,584,751

During CY2021, the PSA received services under the following contracts (FC or funds commitment; PO or purchase order):

Gainwell Technologies, LLC
(previously DXC Technology Services, LLC and DXC MS, LLC)
FC # 4000022708

- Five-year contract (including two option years) for Pennsylvania Patient Safety Reporting System (PA-PSRS) software development and maintenance, and other IT services. DXC MS, LLC spun off from DXC Technology Services, LLC in 2020 as the result of a merger and assignment of the contract. On October 1, 2020, DXC MS LLC became a wholly owned subsidiary of the newly formed Gainwell Technologies, a holding of Veritas Capital. In CY2021, DXC MS, LLC was renamed and invoiced as Gainwell Technologies, LLC (Gainwell). On September 23, 2021, the PSA Board authorized extending the Gainwell contract through the two option years (through June 30, 2024).
- July 1, 2019, through June 30, 2024
- Total Contract Amount: $7,071,540 over 5 years
- Amount invoiced for 2021 (12 months, Jan–Dec): $1,221,652

MedStar Health Research Institute,
FC # 4000022717

- Five-year contract (including two option years) for analyzing and evaluating patient safety data. On September 23, 2021, the PSA Board authorized extending the MHRI contract through the two option years (through June 30, 2024).
- July 1, 2019 through June 30, 2024
- Total Contract Amount: $3,419,185.85 over 5 years
- Amount invoiced for 2021 (12 months, Jan–Dec): $492,077

Ricoh USA, Inc.

- Ricoh Color MFD lease, PO # 4500841111
- September 1, 2017, to August 31, 2021 @ $328.17/month
- 12-month Ricoh lease expense (Jan–Dec) paid in 2021: $2,625.36

Xerox Corp.

- Xerox color MFD lease, PO # 4600015253
- October 1, 2017, to September 30, 2021 @ $315.41/month
- 12-month Xerox lease expense (Jan–Dec) paid in 2021: $2,838.69

Patient Safety Authority Balance Sheet

Table 4 reflects the status of the Patient Safety Trust Fund as of December 31, 2021.

Source: Office of Comptroller Operations, Commonwealth Bureau of Accounting and Financial Management. CY21 methodology includes an accrual of Board-approved FY21–20 Assessment Revenue.

Table 4. Patient Safety Trust Balance Sheet

ASSETS	
Temporary Investments	$9,070,708
Receivables, net:	
Assessment Revenue	7,500,000
TOTAL ASSETS	**$16,570,708**
LIABILITIES AND FUND BALANCE	
Accounts Payable and Accrued Liabilities	$69,467
Invoices Payable	305,086
TOTAL LIABILITIES	**374,553**
Deferred Assessment Revenue	7,500,000
TOTAL DEFERRED INFLOW OF RESOURCES	**7,500,000**
Restricted	8,696,155
TOTAL FUND BALANCE	**8,696,155**
TOTAL LIABILITIES, DEFERRED INFLOW OF RESOURCES, AND FUND BALANCE	**$16,570,708**

NOTES

1. Medical Care Availability and Reduction of Error (MCARE) Act of March 20, 2002, P.L. 154, No 13 40. Available: http://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2002&sessInd=0&act=13.

2. Medical Care Availability and Reduction of Error (MCARE) Act - Reduction and Prevention of Health Care-Associated Infection and Long-Term Care Nursing Facilities Act of July 20, 2007, P.L. 331, No.52, Cl.40. http://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2007&sessInd=0&act=52.

Anonymous Reports/Referrals to DOH

Anonymous Reports

The MCARE Act allows healthcare workers to submit an "anonymous report." Under the provision, a healthcare worker who has complied with section 308(a) of the Act may file an anonymous report regarding a serious event.

The form is available on the PSA's website and through PA-PSRS. The PSA developed an "anonymous reporting" guide to ensure healthcare workers are aware of their option to submit an anonymous report and encourages them to do so when they believe their facility is not appropriately reporting or responding to a serious event.

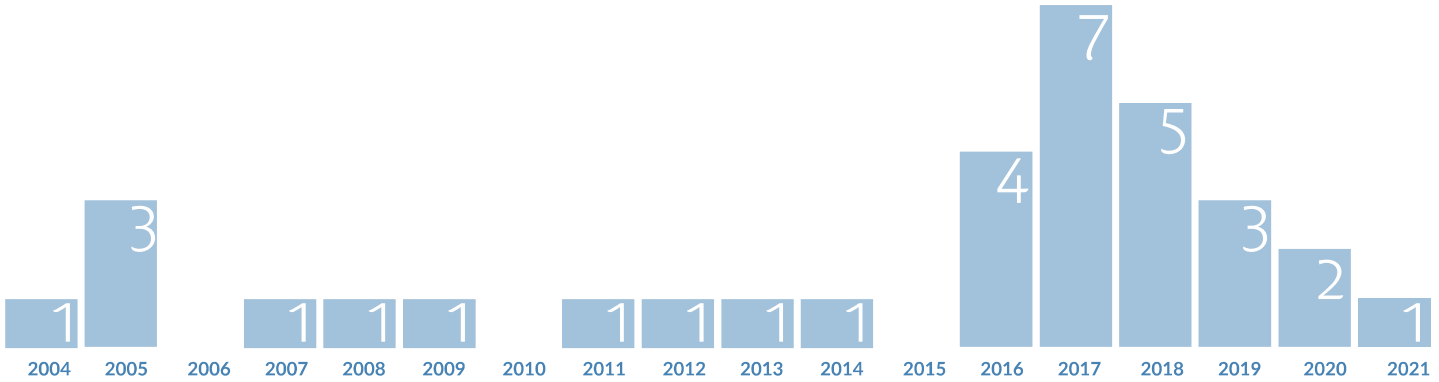
Patient safety liaisons also review the anonymous reporting process with new patient safety officers as part of their onboarding program. Individuals completing the form do not need to identify themselves, and the PSA assigns professional clinical staff to conduct any subsequent investigations. In 2021, the PSA received one anonymous report that complied with MCARE Act requirements.

Referrals to Licensure Boards

The MCARE Act requires that the PSA identify referrals to licensure boards for failure to submit reports under the Act's reporting requirements. MCARE specifies that it is the medical facility's responsibility to notify the licensee's licensing board of failure to report.

No such situations were reported to the PSA last year. However, the PSA is unlikely to receive information related to a referral to licensure board because PA-PSRS reports do not include the names of individual licensed practitioners.

Anonymous Reports (2004–2021)



Thank You

Thank you to the members of our Healthcare-Associated Infection Advisory Panel and Patient Advisory Panel for your service and expertise!

Your insights help us take action.

Panels

Healthcare-Associated Infection Advisory

Kenneth J. Brubaker, MD
Susan E. Coffin, MD, MPH
Bettina Dixon, DNP, CRNA
Patricia Hennessey, MSN, RN
James Hollingsworth, MSN, RN
Darryl Jackson, MD
Tricia Kradel, PhD, MPH
Chris Marshall, PharmD, MBA
David A. Nace, MD, MPH
David Pegues, MD
Molly Quesenberry, BSN, RN
Jason Raines, MPA, MBA
Emily G. Shears, MPH
Paige Van Wirth, MD
Shane Walker
Hope Waltenbaugh, MSN, RN
Mohamed H. Yassin, MD, PhD
Kelly Zabriskie, MLS, BS

Patient Advisory

Dory Frain
Jennifer Hamm
Danielle Jurgill
Dwight D. McKay
Lisa Rodebaugh
Cindy Sidrane
Lucas Wickard

Patient Safety Authority

patientsafety.pa.gov