2019 Top 10 Patient Safety Concerns
Executive Brief
2019 Top 10 Patient Safety Concerns
Executive Brief

Organizations across the continuum of care are striving to become high-reliability organizations, and part of being highly reliable means staying vigilant and identifying problems proactively. This annual top 10 list helps organizations identify looming patient safety challenges and offers suggestions and resources for addressing them.

Safety across the Continuum

This top 10 report highlights patient safety concerns from across the continuum of care because strategies increasingly focus on collaborating with other provider organizations, community agencies, patients or residents, and family members. For each patient safety concern, icons indicate some of the settings where the concern may arise.
Why We Create This List

ECRI Institute creates the annual list of Top 10 Patient Safety Concerns to support organizations in their efforts to proactively identify and respond to threats to patient safety.

This report offers perspectives from some of our many experts, as well as links to further guidance addressing these issues.

How We Identified the Concerns

In selecting this year’s list, ECRI Institute relied both on data regarding events and concerns and on expert judgment. Since 2009, when our patient safety organization (PSO), ECRI Institute PSO, began collecting patient safety events, we and our partner PSOs have received more than 2.8 million event reports. That means that the 10 patient safety concerns on this list are very real. They are harming people, sometimes seriously.

The process synthesized data from these varied sources:

— Review of events in the ECRI Institute PSO database
— PSO members’ root-cause analyses and research requests
— Topics reflected in weekly HRC Alerts
— Voting by a panel of experts from inside and outside ECRI Institute

But development of the list is not an exercise in simple tabulation. The list does not necessarily represent the issues that occur most frequently or are most severe. Most organizations already know what their high-frequency, high-severity challenges are. Rather, this list identifies concerns that might be high priorities for other reasons, such as new risks, existing concerns that are changing because of new technology or care delivery models, and persistent issues that need focused attention or pose new opportunities for intervention.
How to Use This List

Use this list as a starting point for conducting patient safety discussions and setting priorities. This list is not meant to dictate which issues organizations should address. Rather, we hope it will serve as a catalyst for discussion about the top patient safety issues your organization faces.

Determine whether your organization faces similar issues that should be targeted for improvement. You can investigate whether these problems are occurring in your organization and whether you have processes and systems in place to address them.

Develop strategies to address concerns. This report offers a few key recommendations for each topic and links to other ECRI Institute resources that provide more in-depth guidance. Some resources are available without charge; others are benefits of ECRI Institute membership programs or are available through our partner PSOs. Contact client services at (610) 825-6000, ext. 5891, or clientservices@ecri.org for information on purchasing resources that are not part of your membership.

2019 Top 10 Patient Safety Concerns

1. Diagnostic Stewardship and Test Result Management Using EHRs
2. Antimicrobial Stewardship in Physician Practices and Aging Services
3. Burnout and Its Impact on Patient Safety
4. Patient Safety Concerns Involving Mobile Health
5. Reducing Discomfort with Behavioral Health
6. Detecting Changes in a Patient’s Condition
7. Developing and Maintaining Skills
8. Early Recognition of Sepsis across the Continuum
9. Infections from Peripherally Inserted IV Lines
10. Standardizing Safety Efforts across Large Health Systems
When diagnoses and test results are not properly communicated or followed up, the potential exists to cause serious patient harm or death. Providers have begun relying on the electronic health record (EHR) to help with clinical decision support, to track test results, and to flag issues. However, the EHR is only part of the solution. “Technology is just a tool—there’s currently not an algorithm that is going to identify all the key elements and analyze them to give you the correct diagnosis,” says Lorraine B. Possanza, DPM, JD, MBE, program director, Partnership for Health IT Patient Safety.

According to Patricia Stahura, RN, MSN, senior analyst and consultant, ECRI Institute, three key components—the diagnosis, the treatment plan, and the follow-up plan—must be clearly communicated in the EHR. “The information must be accurate and must be written so that future clinicians looking at the EHR can understand it,” says Stahura. “If you have faulty information or missing test results, you are predisposed to making a diagnostic error.”

“**If you don’t get the diagnosis right, appropriate care cannot follow.**”

To help “close the loop,” providers must not only fully utilize an EHR designed to meet their practices’ unique needs, but also recognize the importance of clear communication, both among caregivers and between caregivers and patients.

“**You need to have all the information and test results available, and you have to know when and where to look for that information to make the right diagnosis,**” says Possanza. “**If you don’t get the diagnosis right, appropriate care cannot follow.**”
“We need to combat antibiotic resistance before the situation gets worse,” says Stephanie Uses, PharmD, MJ, JD, patient safety analyst/consultant, ECRI Institute PSO, noting that not many newly approved drugs are antibiotics. As antibiotic resistance increases, “your treatment options can be limited,” she explains.

Perhaps the most significant challenge facing antibiotic stewardship is managing patient expectations. Patients “expect an antibiotic to help them get better,” Uses says. Moreover, unnecessary antibiotic administration puts patients at unnecessary risk of adverse drug reaction. And the broadest concern, she notes, is that overprescribing leads to antimicrobial resistance.

“Patients need to feel like they are being taken care of, even without a prescription for an antibiotic,” explains Sharon Bradley, RN, CIC, senior infection prevention and patient safety analyst/consultant, ECRI Institute. “Instead, give them a prescription for what to do, what to watch for. Follow up with them. Everyone needs to know their role: the physician needs to know what to do, and the patient needs to know what to do.” Organizations need to be able to implement and support antimicrobial stewardship programs.

Bradley recommends that the provider ask four questions to determine an antibiotic’s appropriateness for the patient being treated:

1. Does this patient have an infection that will respond to antibiotics?
2. If so, is the patient on the right antibiotic(s), dose, and route of administration?
3. Can a more targeted antibiotic be used to treat the infection (de-escalate)?
4. How long should the patient receive the antibiotic(s)?

“Antibiotic stewardship does not mean withholding necessary treatment,” emphasizes Bradley. “But we have casually and cavalierly handed around the candy dish of antibiotics without a second thought as to how we may be harming our patients.”
Burnout is indiscriminate. It affects physicians (including trainees), nurses, allied healthcare providers, and organizational leaders alike. And it can no longer be ignored.

News sources carry numerous stories about providers struggling with burnout, depression, and suicidal ideation. Studies show that burnout has a consistent negative relationship with safety and quality.

“Healthcare providers tend to be self-critical, high functioning, and very motivated,” says Ellen S. Deutsch, MD, MS, FACS, FAAP, CPPS, medical director, ECRI Institute. “They will increase demand on themselves and have high expectations for their own performance, which is laudable, but it can also be problematic.”

The electronic health record is a contributing factor, but burnout goes beyond providers’ oft-described frustrations with documentation. Healthcare is evolving rapidly and keeping up with the changes can be a challenge. Time pressures are intense. Providers are caring for an increasing number of patients with complex medical conditions, drawing on limited resources.

Reprioritizing what a clinician needs to do is one way to reduce burnout, but ultimately the system must change. If burnout is to be addressed effectively, organizations must listen to providers’ concerns about workload, performance criteria, and suboptimal resource allocation and fix these problems at a system level. Moving to a safety culture that rewards and recognizes a job well done is necessary. Leadership must strive to make providers feel they are treated as human beings, whose opinions and abilities are valued, rather than as cogs in a wheel.

“Ideally, it’s the patient’s goals that are the most important.”

Burnout is a complex issue, with diverse stakeholders who sometimes have conflicting goals. Most of these goals individually are worthy. But the accumulation can become overwhelming.

It is important for all stakeholders to remember whose goals they should be working to achieve: Deutsch says, “Ideally, it’s the patient’s goals that are the most important.”
Mobile health technology opens up a world of opportunities by transporting healthcare from traditional settings into the home. It also opens up a world of risk.

Risks of mobile health technology include lack of regulation of new technologies, barriers to ensuring that providers are accurately receiving the data a device collects, and the possibility that a patient is not using the technology correctly or is not using it at all.

Mobile health is a constantly evolving area. Many devices are released without U.S. Food and Drug Administration testing. Healthcare organizations must ensure the safety and validity of any device they recommend to a patient and be certain the device will work when the patient leaves the healthcare facility.

“The measurement itself may be working, but how well does it work in the real world?” asks Juuso Leinonen, senior project engineer, Health Devices Group, ECRI Institute. “Part of that goes to usability. It has to be almost foolproof.”

“It’s no use to have a technology that the patient is supposed to use at home if the patient is not going to use it.”

Usability concerns mean that methods for informing clinicians about user error and inactivity must be established. Along with assessing ease of use, organizations must identify the right candidates for mobile health, and provide training for both providers and patients on how to use a device.

“It’s no use to have a technology that the patient is supposed to use at home if the patient is not going to use it,” says Leinonen. Providers must clearly define objectives before recommending any care plan featuring mobile health technology. Most important is matching patient health conditions to the right piece of technology as well as assessing the likelihood the patient will accept mobile technology.
Reducing Discomfort with Behavioral Health

When working with individuals who have behavioral health needs, “you fear what you don’t know, and fear can make you react defensively,” says Nancy Napolitano, BS, patient safety analyst, ECRI Institute. This fear can lead providers and staff to behave in ways that fail to meet patients’ needs or even escalate situations, with consequences for patients and staff.

In many healthcare settings, behavioral and physical health are siloed. But people with behavioral health needs are in every setting, and it is not always obvious when an individual has such needs. A behavioral health need “is not a broken leg that you can see and feel,” says Napolitano. “How do we change our mindset so that everyone belongs here and is treated with dignity and respect?”

All providers and staff need communication skills, but the training may vary by setting, unit, or role. Options include certified training, training led by internal experts or consultants, community behavioral health first-aid workshops (which may be free), or a combination of modalities. Opportunities to practice (e.g., mock codes) are key to reducing fear and keeping skills sharp. “The only way not to be afraid of something is to experience it positively over and over again,” says Napolitano.

Healthcare organizations can also develop internal and external support systems. Examples include behavioral emergency response teams for hospitals; additional training for “specialist” certified nursing assistants in aging services; and process changes in physician practices.

Working with external resources can improve care coordination and identify ways to develop behavioral health skills and support in non-behavioral-health settings. Organizations can also reach out to community resources (e.g., first responders; housing, employment, and transportation agencies). “Engage these groups in learning what you do for the community and how they can get involved,” says Napolitano. “Community partnerships are critical.”

“Community partnerships are critical.”
Failure to detect changes in a patient’s condition is an ongoing patient safety concern across the continuum of care. Problems can arise within a care unit and during transitions of care within a facility and from one facility to another.

“Patient safety may be jeopardized when there is a lack of detailed communication back to the provider to address whatever the issue is at hand,” says Kelly C. Graham, BS, RN, patient safety analyst, ECRI Institute.

“Transitions of care and handoffs are critical times for care delivery, and they’re fraught with danger,” says Mary Rodger, BSN, RN, CPASRM, senior risk management analyst and consultant, ECRI Institute. “Passing along and receiving the correct information sets providers up for success.”

Sometimes staff are inadequately trained in recognizing changes in a patient’s condition or in responding to an alarm that is alerting caregivers to check on a patient.

Organizations must have a sufficient number of well-trained staff. Training covers both patient assessment and communication skills. Many healthcare organizations also encourage providers to develop multidisciplinary team-building skills to break down the silos that can impede good communication. In addition, teams may use structured opportunities, such as patient safety huddles and rounding at the patient’s bedside, to promote information sharing.

Technology can alert caregivers to a patient’s changing condition, but it must be used appropriately. Staff must be trained in how to operate the equipment and understand the organization’s policies and their responsibilities for responding to alarms.

Finally, staff must listen to concerns that patients and family members raise. Likewise, be the patient’s advocate. “We should be their eyes and ears,” says Graham. “They should be able to trust us.”
Patient harm can occur if staff are uncomfortable using medical equipment or performing a procedure, or are unaccustomed to an organization or care area’s processes.

ECRI Institute has received reports of adverse events occurring because a healthcare professional was unfamiliar with equipment, such as infusion pumps and robotic-assisted surgical systems, or lacked competence with procedures and processes, ranging from Foley catheter insertion to management of a hemorrhaging patient after childbirth.

“There are a range of skills that providers need, and there are a range of providers who need the skills,” says Ellen S. Deutsch, MD, MS, FACS, FAAP, CPPS, medical director, ECRI Institute.

Simulation training replicates real-life scenarios and offers an ideal opportunity for health professionals to practice their skills. “Simulation ranges from low-cost approaches to high-tech virtual or augmented reality representations that learners can manipulate,” explains Deutsch, who has directed simulation training for healthcare professionals. Simulation poses no risk of direct harm to patients.

Simulations can be designed for individuals to practice and learn technical skills or for healthcare teams to conduct drills of situations that may occur infrequently but require knowledge of other team members’ roles and capabilities.

“Simulation has been repeatedly proven in meta-analyses to be effective.”

Debriefings, an essential component of simulation training, are provided by a facilitator who observes the simulation and gives feedback—sometimes while the trainee is practicing skills or, for more complex scenarios such as team interactions, at the end of the simulation.

Simulation training need not be costly or complex. “There’s a lot you can do with what’s at hand,” says Deutsch. Studies have proven that patient outcomes can be improved using simulation-based education. “Simulation has been repeatedly proven in meta-analyses to be effective,” she says.
Sepsis can be difficult to detect, but early recognition is vital because sepsis can quickly turn deadly. “We’re in a time rush,” says James Davis, MSN, RN, CCRN-K, HEM, CIC, FAPIC, senior infection prevention and patient safety analyst/consultant, ECRI Institute. The challenge is, “Can we intervene quicker to get patients the care they need to prevent shock and death?” Davis adds.

In recent years, sepsis has gained attention in acute care. But as healthcare delivery changes, “we’re moving that early recognition of sepsis outside the hospital” as much as possible, says Davis. Timely screening and recognition of sepsis is a challenge for other settings as well, including aging services and physician practices.

Healthcare workers throughout the continuum of care must be able to recognize sepsis. Certified nursing assistants can be trained to use screening tools, and physician practices can screen for sepsis both in the exam room and on the phone. Simulation and skills practice can help workers recognize sepsis and communicate their concerns.

To facilitate timely diagnosis and management, healthcare organizations across the continuum should have protocols for response when sepsis is suspected, much as they do for chest pain. Organizations may use checklists, tools, or algorithms to support the response.

Another key is sharing information across the continuum. For example, knowing that an individual normally has only mild confusion can help providers suspect sepsis when that person seems very confused. Settings across the continuum can also identify opportunities for collaboration. Because hospital readmissions are concerns for both hospitals and nursing facilities, they may collaborate to address problems—for example, by ensuring safe discharge, communicating necessary information, sharing strategies, and establishing a consultation system. “Foster that cooperative behavior,” advises Davis. “Are there things we can do to help each other out?”


Members can access the full report online. ECRI Institute encourages the dissemination of the registration hyperlink, www.ecri.org/patientsafetytop10, to access a download of this Executive Brief, but prohibits the direct dissemination, posting, or republishing of this work, without prior permission.
Peripheral intravenous (PIV) catheters are commonly used items in healthcare. Often, PIVs are inserted upon admission as a matter of course, in case the patient needs IV therapy at a later point. However, PIVs can expose patients to a significant risk of infection—one that is underreported, underrecognized, and often ignored, according to James Davis, MSN, RN, CCRN-K, HEM, CIC, FAPIC, senior infection prevention and patient safety analyst/consultant, ECRI Institute.

“Any time you break the skin, you’re breaking down the body’s first line of defense against infection,” says Davis. “Patients might not need a peripheral line, but your staff might put one in just because the patient is admitted and they may need it at some point. Staff may say, ’Well, it’s only going to be in for an hour or two,’ not realizing that that’s enough time for an infection to develop.”

Tracing infections back to the PIV line can be difficult, according to Davis, because healthcare workers tend to overestimate their safety. “If a patient gets both a peripheral line and a central line and later develops a bloodstream infection, clinicians will often attribute it to the central line without even considering the PIV line,” says Davis.

Increased awareness of PIV-catheter-related infections, coupled with routine active surveillance and follow-up reporting, can help reduce the risk. “Staff need to understand that it can happen, and that it can be serious,” says Davis.

Staff should also slow down and assess whether a patient actually needs a PIV catheter inserted. “Staff need to respect putting in that PIV catheter, so that they slow down and treat it with the same reverence as if they were making an incision,” says Davis. “It is a thoughtful process.”
“Healthcare organizations as we used to know them are now becoming nationwide ‘mega-systems,’” says Sheila Rossi, MHA, manager, ECRI Institute PSO. As this evolution occurs, “how do you keep patient safety at the forefront?” she asks. “How do organizations internally structure themselves to address patient safety needs?”

Rossi points to such processes as reporting and quality initiative prioritization that require careful attention: “You are adding layers to these processes,” and these layers can hinder safety efforts if not thoughtfully implemented.

Regardless of organization size, the goal is to institute structures that effectively allow patient safety leaders to support organization leadership in engaging with patient safety priorities. Foundational principles of continuous communication up and down the chain of command, clear organizational structure, consistent committee configuration, and universal strategic planning and implementation can help the organization reduce inconsistencies and embed a strong focus on patient safety.

**Leverage the Protections of a Patient Safety Organization**

As health systems grow and expand across the continuum, it is beneficial to leverage the protections that a PSO affords to all affiliated providers within the health system. State privilege and confidentiality protections may extend only to acute care facilities or to limited care settings, but the Patient Safety and Quality Improvement Act of 2005 (PSQIA) enables all licensed or certified healthcare facilities and clinicians to participate in a PSO and take advantage of the privilege and confidentiality protections it affords. Additionally, for health systems with providers across multiple states, the protections afforded under PSQIA are uniform nationwide. Thus a corporate system can share its protected data across the system with affiliated providers, thereby increasing the sharing not only of adverse events but also of patient safety solutions identified across the system.


Members can access the full report online. ECRI Institute encourages the dissemination of the registration hyperlink, www.ecri.org/patientsafetytop10, to access a download of this Executive Brief, but prohibits the direct dissemination, posting, or republishing of this work, without prior permission.
Resources

1. Diagnostic Stewardship and Test Result Management Using EHRs
   - ECRI Institute PSO Deep Dive™: Laboratory Events
   - Diagnostic Errors: Monumental Problem or Enormous Opportunity?
   - Diagnostic Errors: Why Do They Matter, and What Can You Do?
   - Learning Opportunities: Five Ways to Reduce Risk of Diagnostic Error
   - Making the Wrong Call: Diagnostic Errors
   - Partnership for Health IT Patient Safety: Closing the Loop Workgroup
   - Test Tracking and Follow-Up
   - Test Tracking and Follow-Up Toolkit
   - Out-of-Office: Tracking Test Results in the Outpatient Setting
   - Ask HRC: Must a Physician Review Normal Test Results?

2. Antimicrobial Stewardship in Physician Practices and Aging Services
   - Overview of Infection Prevention and Control
   - Medication Safety
   - Antibiotic Stewardship: Engaging Physician Compliance
   - Antibiotic Stewardship: Solutions to Turn the Tide Against the Threat of Antibiotic Resistant Bacteria (webinar)

3. Burnout and Its Impact on Patient Safety
   - Burnout in Healthcare Workers: The Elephant in the Room
   - Burnout at a Glance
   - Fatigue in Healthcare Workers
   - Stress and Its Impact on Healthcare Workers
   - The Hospital Occupational Health Service
4. Patient Safety Concerns Involving Mobile Health
   — Clinical Apps: The Essentials
   — Health Apps and Safety: Views from Recent Sources
   — Are Apps the Answer to Keeping Patients Engaged in Care?
   — Evaluation Criteria for Prescribing Mobile Health Apps
   — Evaluation Background: Smartphone-Enabled Portable Blood Glucose Meters

5. Reducing Discomfort with Behavioral Health
   — ECRI Institute PSO Deep Dive™: Meeting Patients’ Behavioral Health Needs in Acute Care
   — Suicide Risk Assessment and Prevention in the Acute Care General Hospital Setting
   — Assessing and Managing the Behavioral Health Needs of the Medical Patient (webinar)
   — Managing Behavioral Health Needs of Adult Medical Inpatients
   — Behavioral Rapid Response Teams for Acute Care Medical Units
   — Mental Health in Aging Services (HRC version and CCRM version)
   — Patient Violence

6. Detecting Changes in a Patient’s Condition
   — Communication
   — Clinical Alarms
   — Discharge Planning
   — ECRI Institute PSO Deep Dive™: Care Coordination
   — Subacute Care in Long-Term Care Settings
   — Handoffs: Opportunity for Safe Care
7. Developing and Maintaining Skills
   — Nursing Students: Supervision and Support Key to Success
   — Orientation and Training Gaps Jeopardize Safety
   — ECRI Institute PSO Fourth Annual Meeting: Insights into Patient Safety
   — Shoulder Dystocia
   — Disaster Drills

8. Early Recognition of Sepsis across the Continuum
   — Sepsis: Combating the Hidden Colossus
   — Sepsis at a Glance
   — Improving Recognition and Management of Sepsis and Septic Shock
   — Sepsis and Septic Shock Adverse Events (webinar)
   — Sepsis and Children in the Outpatient Setting (infographic)

9. Infections from Peripherally Inserted IV Lines
   — Invasive Lines
   — Overview of Infection Prevention and Control
   — High-Profile Healthcare-Associated Infections
   — Sharps Injury Prevention Programs

10. Standardizing Safety Efforts across Large Health Systems
    — Culture of Safety
    — Managing a Multifacility Risk Management Program
Want More?

This executive brief summarizes ECRI Institute’s 2019 Top 10 Patient Safety Concerns. Members of ECRI Institute PSO, Healthcare Risk Control (HRC), Continuing Care Risk Management (CCRM), and Physician Practice Risk Management (PPRM) can access the full report, which discusses each topic in more detail, by logging in at https://www.ecri.org
Advancing Effective Evidence-Based Healthcare Globally

As an independent, non-profit organization, ECRI Institute serves as a trusted authority on healthcare practices and products that improve the safety, quality, and cost-effectiveness of patient care.

Our integrity has been built on evidence-based research, strict conflict-of-interest policies, and transparent reporting of our findings. We give healthcare professionals the knowledge and assurance they need to make patient safety a top priority in healthcare settings around the world.