

*Executive Brief*

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# Top 10 Patient Safety Concerns for Healthcare Organizations

# 2017



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## **WANT MORE?**

This executive brief summarizes ECRI Institute's top 10 list of patient safety concerns for 2017. *Healthcare Risk Control (HRC)* and ECRI Institute PSO members can access the full report, which discusses each topic in more detail, by logging in at <https://www.ecri.org>.

Additionally, page 14 of this brief lists ECRI Institute resources that provide more in-depth guidance for each topic.

# Top 10 Patient Safety Concerns for Healthcare Organizations 2017

Healthcare is striving to become an industry of high-reliability organizations, and part of being a high-reliability industry 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.

## Why We Create This List

ECRI Institute creates this annual list of Top 10 patient safety concerns to support healthcare organizations in their efforts to achieve the following:

- Proactively identify potential threats to patient safety
- Improve patient safety by addressing concerns

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

## ECRI Institute's Top 10 Patient Safety Concerns for 2017

- 1 Information management in EHRs
- 2 Unrecognized patient deterioration
- 3 Implementation and use of clinical decision support
- 4 Test result reporting and follow-up
- 5 Antimicrobial stewardship
- 6 Patient identification
- 7 Opioid administration and monitoring in acute care
- 8 Behavioral health issues in non-behavioral-health settings
- 9 Management of new oral anticoagulants
- 10 Inadequate organization systems or processes to improve safety and quality

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## How the Concerns Were Identified

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 1.5 million event reports. That means that the 10 patient safety concerns on this list are very real. They are causing harm—often serious harm—to real people.

The process synthesized data from these varied sources:

- Routine review of events in the PSO database
- PSO members' root-cause analyses and research requests
- A survey of *Healthcare Risk Control (HRC)* members regarding their top patient safety concerns
- Topics reflected in weekly *HRC Alerts*
- Voting by a panel of experts from inside and outside ECRI Institute

But this 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.

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## 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 an organization should address. Rather, it's intended to serve as a catalyst for discussion about the top patient safety issues faced by the organization.

**Determine whether your organization faces similar issues that should be targeted for improvement.**

Organizations can investigate whether they are experiencing problems with these or related concerns—and whether they have processes and systems in place to address them.

**Develop strategies to address concerns.** The full report on the top 10 patient safety concerns discusses key strategies for each issue, and other ECRI Institute resources provide more in-depth guidance on individual topics. See page 14 for more information.

**Consider applications across care settings.** Although not all patient safety concerns on this list apply to all healthcare organizations, many are relevant to a range of settings across the continuum of care.



# 1 Information Management in EHRs

Healthcare providers have troves of information to manage, and the advent of electronic health records (EHRs) has brought this challenge to the forefront. **“But the object is still for people to have the information that they need to make the best clinical decision,”** says Lorraine B. Possanza, DPM, JD, MBE, senior patient safety, risk, and quality analyst and health information technology (IT) patient safety liaison, ECRI Institute.

Healthcare organizations must approach health IT safety holistically. One key step is integrating health information management professionals, IT professionals, and clinical engineers into patient safety, quality, and risk management programs. Other strategies include ensuring that users understand the system’s capabilities and potential problems, encouraging users to report concerns and investigating those concerns, engaging patients in information management, and harnessing the power of EHRs to enhance patient safety.



# 2

## Unrecognized Patient Deterioration

Over the past few decades, concerted efforts have enabled speedier recognition of and response to stroke and heart attack. Certain other conditions—including sepsis, some maternal conditions, and serious postsurgical complications—**“need the same type of prompt recognition and attention in order for the patient to have a good outcome,”** says Patricia N. Neumann, RN, MS, senior patient safety analyst and consultant, ECRI Institute.

Organizations must cultivate staff competencies in rapidly identifying conditions of concern. Practice (e.g., in simulations) and the use of tools (e.g., early-warning criteria) may aid speedy recognition. Clinicians can proactively assess patients’ risk, plan for appropriate care and monitoring, educate at-risk patients, and supplement with technological monitoring. Organizations can develop condition-specific protocols for an organized and speedy response and analyze work systems and processes to identify and address barriers.



# 3 Implementation and Use of Clinical Decision Support

Clinical decision support (CDS) encompasses **“tools that we use to ensure that the right information is presented at the right time within the workflow,”** explains Robert C. Giannini, NHA, CHTS-IM/CP, patient safety analyst and consultant, ECRI Institute. But if use is suboptimal, opportunities may be missed. Patient harm—as well as disruption of clinical workflows and provider frustration—could result. Healthcare organizations must design CDS systems judiciously; resources are available from HealthIT.gov, ECRI Institute, and others. A multidisciplinary team should have oversight. End users must be trained in the proper use of CDS, as well as their roles and responsibilities, and have access to support structures.

On an ongoing basis, organizations should monitor the effectiveness and appropriateness of CDS alerts, evaluate the impact on workflow, and review staff response to alerts. The tool should be redesigned as necessary.





# 4 Test Result Reporting and Follow-Up

Testing is a complex process. When inadequately managed, this complexity can contribute to fragmentation. **“Sometimes as clinicians we become very task oriented—labs ordered, blood drawn and sent; imaging ordered, x-ray completed—and we lose sight of the big picture,”** says Kelly C. Graham, RN, patient safety analyst and consultant, ECRI Institute. **“Critical thinking and teamwork get lost when you’re focusing just on your assigned task.”**

Organizations should analyze their test result reporting systems and monitor their effectiveness in triggering appropriate follow-up. Policies and procedures should clearly designate accountability for acting on test results. To help close the loop, organizations can facilitate two-way conversations among healthcare professionals involved in treatment and those involved in diagnostic testing. Patient engagement and health literacy strategies can be used to teach patients what to do—and why it is important.



# 5 Antimicrobial Stewardship

Today, drug choices for treating many bacterial infections are becoming increasingly limited and expensive—and in some cases, nonexistent. Inappropriate prescribing is a key factor. **“If prescribing habits do not change, more people will die from infections for which there is no treatment,”** says Sharon Bradley, RN, CIC, senior infection prevention analyst, ECRI Institute.

Healthcare organizations may decide to hold prescribers accountable for adherence to treatment guidelines. A physician advocate can lead the effort and talk to other physicians as a peer. Organizations can also educate patients, family members, and the general public about antimicrobial stewardship and the reasons behind it.

The Centers for Disease Control and Prevention has outlined core elements for antibiotic stewardship for hospitals, nursing homes, and outpatient settings. To identify gaps, organizations can use the checklists included in each set of core elements.

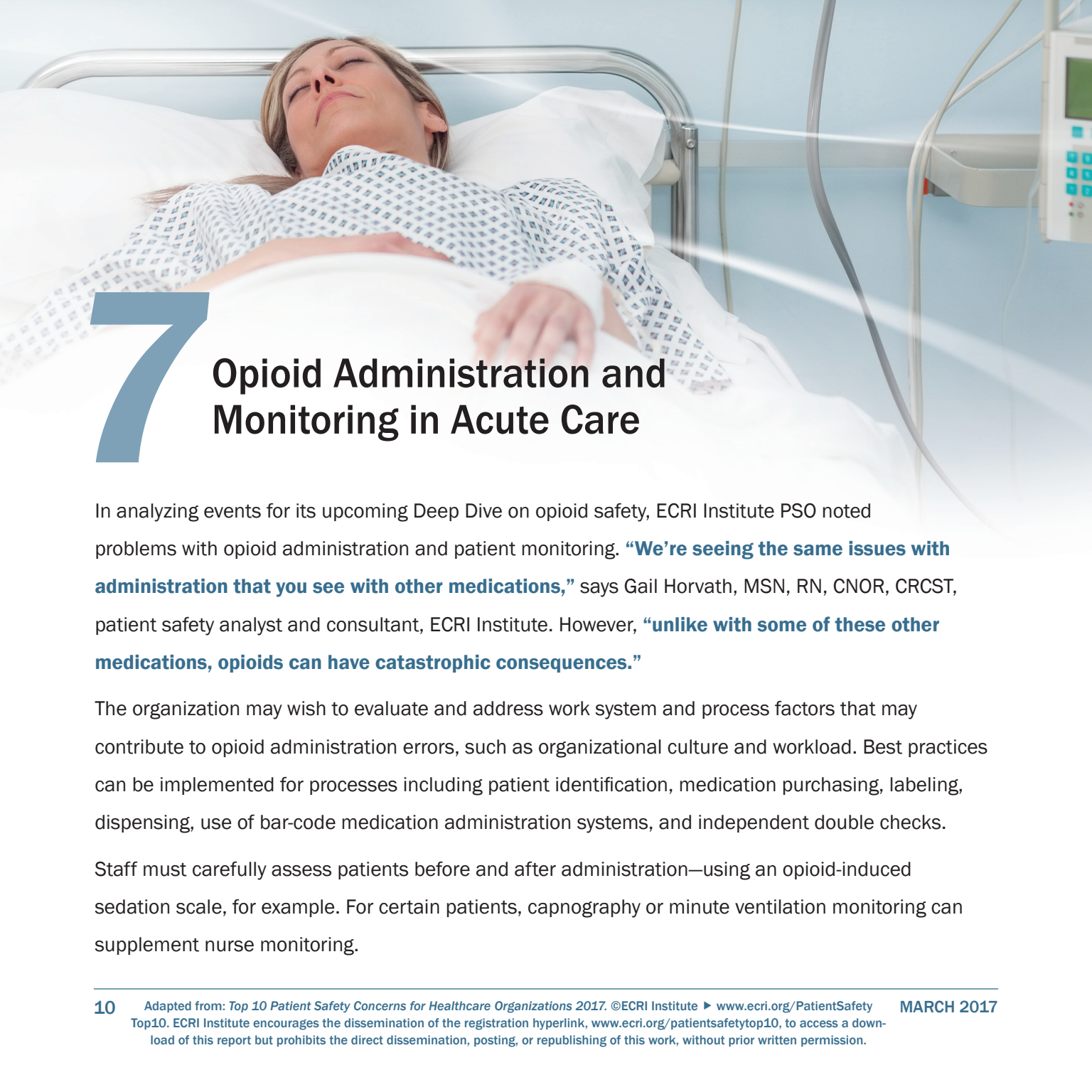


# 6 Patient Identification

Although the majority of the 7,613 events analyzed for ECRI Institute PSO's *Deep Dive: Patient Identification* were caught before they caused patient harm, about 9% resulted in patient injury, including two deaths. **“The report brought national attention to an issue that most healthcare providers recognize as a significant problem,”** says William M. Marella, MBA, MMI, executive director, PSO operations and analytics, ECRI Institute.

Leaders can start by fully supporting patient identification initiatives—by prioritizing the issue, engaging clinical and nonclinical staff, and asking staff to identify barriers to safe identification practices, for example.

Redundant processes for patient identification can increase the likelihood of preventing patient mix-ups. Elements such as electronic displays and patient identification bands may be standardized. When used as intended, bar-code systems and other technologies can also support safe patient identification.



# 7 Opioid Administration and Monitoring in Acute Care

In analyzing events for its upcoming Deep Dive on opioid safety, ECRI Institute PSO noted problems with opioid administration and patient monitoring. **“We’re seeing the same issues with administration that you see with other medications,”** says Gail Horvath, MSN, RN, CNOR, CRCST, patient safety analyst and consultant, ECRI Institute. However, **“unlike with some of these other medications, opioids can have catastrophic consequences.”**

The organization may wish to evaluate and address work system and process factors that may contribute to opioid administration errors, such as organizational culture and workload. Best practices can be implemented for processes including patient identification, medication purchasing, labeling, dispensing, use of bar-code medication administration systems, and independent double checks.

Staff must carefully assess patients before and after administration—using an opioid-induced sedation scale, for example. For certain patients, capnography or minute ventilation monitoring can supplement nurse monitoring.



# 8

## Behavioral Health Issues in Non-Behavioral-Health Settings

Healthcare organizations do not always recognize when a patient has behavioral health needs—and the patient’s needs may therefore go unmet. Some unmet behavioral health needs can cause hostile or aggressive behavior, which can frighten or frustrate staff, especially if they lack training or support. Patients and staff can be injured, sometimes seriously. **“We’re very reactive, and that’s part of the problem,”** says Nancy Napolitano, patient safety analyst and consultant, ECRI Institute.

Comprehensively assessing all patients can help providers proactively determine patients’ behavioral health needs. All staff should be trained to recognize early signs or cues of behavioral health needs, use nonoffensive techniques, and de-escalate a situation and participate in frequent drills.

Behavioral emergency response teams, which staff can call when a patient’s behavior becomes agitated or threatening, can be implemented to support early assessment and response.



# 9

## Management of New Oral Anticoagulants

Since 2010, four new oral anticoagulant medications have been approved. In an analysis of ECRI Institute PSO events involving these agents, almost 34% of events for which a harm score was provided resulted in patient harm, ranging from temporary injuries to death. **“We need more awareness of the proper use of the agents; it’s not ‘one size fits all’ and you’re done,”** says Stephanie Uses, PharmD, MJ, JD, patient safety analyst and consultant, ECRI Institute.

Standardized order sets should specify doses for the different medications based on indication. Organizations can use CDS to alert practitioners to duplication of therapy and track response to alerts. A multidisciplinary team should develop plans for reversal of anticoagulant therapy, and reversal agents should be readily accessible. Collection and analysis of events involving new oral anticoagulants can help organizations identify further prevention strategies.



# 10

## Inadequate Organization Systems or Processes to Improve Safety and Quality

Numerous studies show a link between error prevention and a culture of safety. Nevertheless, healthcare organizations have been slow to adopt all the necessary features of a high-reliability organization.

Root-cause analyses are vital, but Elizabeth Drozd, MS, MT(ASCP), CPPS, patient safety analyst and consultant, ECRI Institute, also recommends that organizations **“be proactive rather than waiting until a patient is harmed.”** Proactive strategies can be used to examine processes, identify what can go wrong, and make the process less vulnerable to error before mistakes can occur. Strong preventive strategies, such as standardization and automation, should be explored.

Leaders should support a “just culture” that emphasizes learning rather than blaming. Individual accountability must be balanced with organizational responsibility to design and improve systems to ensure safe care. Finally, all organizations should have an actionable quality and patient safety plan with high-level approval.

## ECRI Institute Resources for Addressing the Top 10 Patient Safety Concerns

The following ECRI Institute resources provide more in-depth guidance on specific topics. Resources marked with asterisks are publicly available; others are benefits of ECRI Institute membership programs but may be available for purchase separately. Log in at <https://www.ecri.org> to access resources available through your membership. Contact client services at (610) 825-6000, ext. 5891, or [clientservices@ecri.org](mailto:clientservices@ecri.org) for information on purchasing resources that are not part of your membership.

### 1. Information Management in EHRs

- [Electronic Health Records](#)
- [ECRI Institute PSO Deep Dive: Health Information Technology](#)
- [Wrong-Record, Wrong-Data Errors with Health IT Systems](#)
- [Partnership for Health IT Patient Safety\\*](#)

### 2. Unrecognized Patient Deterioration

- [Sepsis: Combating the Hidden Colossus\\*](#)
- [Sepsis at a Glance\\*](#)

- [Obstetrics and Neonatal Safety](#)

- [Health Literacy](#)

- [Improving Recognition and Management of Sepsis and Septic Shock](#)

- [Sepsis and Septic Shock Adverse Events](#) (webinar)

- [Alarm Safety Handbook](#)

### 3. Implementation and Use of Clinical Decision Support

- [Electronic Health Records](#)



# Top 10 Patient Safety Concerns for Healthcare Organizations 2017

- [Implementing Computerized Provider Order Entry](#)
- [Clinical Decision Support: Only Helpful If You Can See It](#)
- [Managing Electronic Health Records Alerts](#)
- [Partnership for Health IT Patient Safety\\*](#)
- [ECRI Institute PSO Deep Dive: Health Information Technology](#)

## 4. Test Result Reporting and Follow-Up

- [Test Tracking and Follow-Up](#)
- [Diagnostic Errors: Monumental Problem or Enormous Opportunity?](#)
- [Ask HRC: Must a Physician Review Normal Test Results?](#)
- [ECRI Institute PSO Deep Dive: Laboratory Events](#)
- [Out-of-Office: Tracking Test Results in the Outpatient Setting](#)

- [Test Tracking and Follow-Up Toolkit](#)

## 5. Antimicrobial Stewardship

- [High-Profile Healthcare-Associated Infections](#)
- [Overview of Infection Prevention and Control](#)
- [Clostridium difficile Infections](#)

## 6. Patient Identification

- [Patient Identification](#)
- [Self-Assessment: Patient Identification](#)
- [ECRI Institute PSO Deep Dive: Patient Identification](#)
- [ECRI Institute PSO Deep Dive on Patient Identification](#) (webinar)
- [INSight Patient Identification Assessments](#)
- [Health IT Safe Practices: Toolkit for the Safe Use of Health IT for Patient Identification\\*](#)

## 7. Opioid Administration and Monitoring in Acute Care

- [Patient-Controlled Analgesia](#)
- [Infusion Pumps](#)
- [Pain Management](#)
- [Pain Relief: How to Keep Opioid Administration Safe](#)
- [Opioids and Oversedation: Still a Common Problem](#)
- [Patient Risk Factors for Opioid-Induced Respiratory Depression](#)
- [Preventing Opioid-Induced Respiratory Depression](#) (webinar)
- [Implementing Monitoring for Opioid-Induced Respiratory Depression in Medical-Surgical and Other General Care Units](#)
- [2017 Top 10 Health Technology Hazards](#)

## 8. Behavioral Health Issues in Non-Behavioral-Health Settings

- [Patient Violence](#)
- [Suicide Risk Assessment and Prevention in the Acute Care General Hospital Setting](#)
- [Mental Health in Aging Services](#)
- [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](#)

## 9. Management of New Oral Anticoagulants

- [High-Alert Medications](#)
- [Medication Safety](#)

# Top 10 Patient Safety Concerns for Healthcare Organizations 2017

- [One Is Enough: Don't Double Up on Oral Anticoagulants](#)
- [Oral Anticoagulant Management](#)
- [Oral Anticoagulants Old and New: Scrutinizing the Risks, Monitoring for Safety](#) (webinar)
- [Getting the Most out of Root-Cause Analyses](#)
- [INsight Safety Culture Assessments](#)
- [The Results from Our Surveys of Safety Culture Are In: Now What?](#)

## 10. Inadequate Organization Systems or Processes to Improve Safety and Quality

- [Culture of Safety](#)\*
- [Failure Mode and Effects Analysis](#)

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\* Publicly available without login.



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