The Results from Our Surveys of Safety Culture Are In: Now What?

Executive Summary
Healthcare organizations conduct culture of safety surveys to assess staff perceptions about their patient safety climate. The findings can help an organization identify areas for improving the patient safety culture, but they must be thoughtfully implemented and supported by leadership to achieve lasting change.

Leadership

ORGANIZATIONS SLOW TO RESPOND TO CULTURE OF SAFETY SURVEY FINDINGS

A positive safety culture is fundamental to enhanced patient safety. Numerous studies have shown a link between a good safety culture and error prevention (Berry et al.; Brilli et al., Fan et al.; Hofmann and Mark; Huang et al.).

ECRI Institute Patient Safety Organization (PSO) recommends that organizations periodically evaluate their progress in patient safety by surveying staff about the organization’s patient safety culture. The anonymous surveys are distributed to all staff, including frontline staff, managers, senior leaders, and clinicians. The findings, along with other internal data, can help an organization identify areas for improving the patient safety culture.

The findings were unexpected. “There hasn’t been much movement of the needle” from one year to the other, says ECRI Institute’s Barbara G. Rebold, RN, MS, CPHQ, director, engagement and improvement.

Indeed, ECRI Institute named failure to embrace a culture of safety among its top 10 patient safety concerns for 2016 (ECRI Institute). Having a culture of safety is vital to all patient safety efforts. “It’s really the foundation,” says Mary Beth Mitchell, MSN, RN, CPHQ, CCM, SSBB, ECRI Institute patient safety analyst and consultant.

In this issue of the PSO Navigator, ECRI Institute’s patient safety analysts share their insights for using the findings from safety culture surveys to make lasting improvements in patient safety. One hospital that worked with ECRI Institute PSO to administer its survey also describes how it acted on its survey findings. For a summary of ECRI Institute PSO tips for building on the findings from safety culture surveys, refer to “Strategies to Address Safety Culture Survey Results.”

What Is a Culture of Safety?
Generally, a safety culture is defined as the collective product of individual and group values and attitudes, competencies, and patterns of behaviors in safety performance. Simply put, says Elizabeth Drozd, MS, MT(ASCP)SBB, CPPS, ECRI Institute patient safety analyst and consultant, “a safety culture is the combination of behaviors and attitudes you get toward patient safety the moment you step in the front door of the health facility.”

Strategies to Address Safety Culture Survey Results

- Present findings to leadership; seek leaders’ support for the action plan.
- Assign multidisciplinary team to review findings and develop the action plan.
- Include frontline staff in developing the action plan.
- Focus priorities on poor-performing areas of the safety culture survey.
- Ensure that organization priorities have a safety culture focus.
- Cultivate open communication about errors to learn from failures.
- Consider findings in context of the organization’s other patient safety performance data.
- Tailor strategies to specific needs; avoid a one-size-fits-all approach.
- Give feedback about results to staff.
- Plan to resurvey to evaluate the impact of changes.
Essential to a safety culture is a foundation built on a just, or fair, culture and a willingness to learn from failures by adopting systems thinking to error prevention. The safety culture must permeate “every nook and cranny” of the organization so that staff “speak up and point out when a process is not safe,” says Rebold. “If we’re depending on frontline staff to stop the line, they need to be empowered to move forward without fear that they will get in trouble for doing so. People will not speak up if the culture is a blameful one,” she explains.

Accrediting and Regulatory Requirements
Support for a safety culture is also an expectation of accrediting organizations and regulators. The Joint Commission’s accreditation standards, for example, require an organization’s leaders to create, maintain, and regularly evaluate a culture of safety and quality (Joint Commission). During accreditation surveys, surveyors ask facilities about their process to survey staff about the safety culture and to develop and implement an action plan based on the findings, says ECRI Institute’s Patricia Neumann, RN, MS, HEM, senior patient safety analyst and consultant.

Additionally, this year the Centers for Medicare and Medicaid Services (CMS) began collecting the following data from hospitals on patient safety culture surveys (CMS):

- If so, what tool does the hospital use to collect the data?
- How frequently is the survey administered?
- Are the data reported to a centralized location other than the facility’s (e.g., a national data repository)?
- What was the response rate to the most recently conducted survey?

The agency is collecting data about patient safety culture surveys as a quality measure and will provide hospitals’ responses to these questions on its Hospital Compare website, which is accessible to the public. CMS recognizes that a patient safety culture survey is important and wants to understand whether hospitals are using survey data to improve their patient safety culture, says Neumann.

Safety Culture Survey Just the Beginning
Conducting the survey is just a first step to developing and sustaining a safety culture. “You can’t just ask people to take the survey and put the findings in a binder on the shelf,” says Drozd.

Nor can an organization expect quick results. Culture change can take time to become ingrained within an organization, says Mitchell. “Culture is about beliefs. It needs to permeate every angle and every resource of the organization so that it eventually overwhelms the few people who don’t want to change.”

Safety Culture Surveys
What We Are Seeing

WIDESPREAD SURVEY PARTICIPATION NECESSARY FOR MEANINGFUL RESULTS

Various surveys, as listed in “Safety Culture Surveys,” are available to healthcare organizations to assess their safety culture. ECRI Institute uses the Agency for Healthcare Research and Quality’s (AHRQ’s) Hospital Survey on Patient Safety Culture, which measures 12 key areas of a safety culture, such as organizational learning, teamwork within and across units, and a nonpunitive response to error.* For most of the key areas, the survey asks individuals to respond to three to four statements using a predefined scale (i.e., “strongly disagree,” “disagree,” “agree,” “strongly agree”). One area asks individuals to indicate the frequency of various types of event reports at their organizations using a predefined scale (i.e., “always,” “most of the time,” “sometimes,” “rarely,” “never”). Examples of survey items include:

- Mistakes have led to positive changes here.
- Hospital management provides a work climate that promotes patient safety.
- We are given feedback about changes put into place based on event reports.
- Staff are afraid to ask questions when something does not seem right.
- Staff feel like their mistakes are held against them.

ECRI Institute has automated the AHRQ survey so that staff can complete it online. Each participant is given a unique password to access the survey and anonymously complete it online. “Anonymity is important so people respond and are not afraid to give honest answers,” says Drozd.

Facilities are encouraged to seek widespread participation from their workforce and to include nonemployees, such as clinicians. The initial request to complete the survey should be sent by a senior leader, such as the chief executive officer or chief medical officer, so that people participate in the survey, says Drozd.

ECRI Institute PSO monitors participation rates and sends reminders to individuals who have not completed the survey so that facilities achieve a high participation rate. “We encourage a high participation rate, so that the survey is representative of the majority of employees,” says Mitchell. “If the completion rate is less than 60%, it can be difficult to make determinations of issues and concerns.”

“We also look to see that we have enough respondents from different areas,” Mitchell adds. Individual department results are not provided if the response rate from a particular department is low enough to risk survey participants’ anonymity; instead, the results are rolled up into the overall findings.

Safety Culture Survey Results

The aggregate safety culture scores, as illustrated in “Figure. Composite Scores from Three Patient Safety Culture Surveys” reflect the average percentage of positive responses across each of the items within a key area. The figure captures the results from safety culture surveys conducted by ECRI Institute PSO and the most recent data compiled by AHRQ from its comparative database report as follows:

- 2009 results representing 3,214 participants
- 2015 results representing 11,751 participants

* ECRI Institute also conducts safety culture surveys for continuing care facilities and medical offices. The focus of this article is on hospital safety culture surveys.
AHRQ 2014 user comparative database report, representing 405,281 participants
AHRQ’s 2014 report is based on hospital surveys administered between July 2011 and June 2013 (Sorra et al. “Hospital Survey”); the data are voluntarily submitted to AHRQ for inclusion in its comparative database. ECRI Institute PSO survey results reflect the year the survey was administered.

High- and Low-Scoring Areas
Although the results are not year-to-year comparisons of surveys administered by the same group of hospitals, they do provide a snapshot of the safety climate as perceived by staff who responded to the survey. The results reported by ECRI Institute PSO members are generally consistent with the findings in the AHRQ comparative database of hospitals that have voluntarily submitted the results from their safety culture surveys.

“Table 1. Culture of Safety Surveys: High- and Low-Scoring Areas” lists the areas of strength and areas with potential for improvement for most hospitals, based on recent culture of safety survey results from ECRI Institute PSO 2015 surveys and AHRQ’s 2014 report on comparative database results.

Culture of Safety Concerns Echoed in Event Reports
Staff concerns about an organization’s safety culture also come through in the event reports submitted to ECRI Institute PSO and its collaborating organizations. ECRI Institute PSO conducted a search of events occurring in 2015 using a word query (e.g., “attitude,” “disruptive,” “behavior,” “unprofessional,” “training,” “education,” “listen,” “rude,” “condescending,” “punitive”), applied to event narratives, to identify events that may be linked to the organization’s culture of safety.

The events reaffirm staff concerns about attitudes and behaviors that can undermine patient safety, even in those key areas that typically have higher positive responses in the culture of safety surveys. Some events also underscore staff frustration with organizations’ silence about their concerns. Examples are provided in “Table 2. Sample Events Express Concerns about Behavior Undermining Patient Safety.”

“By the time these concerns reach the event reports, it’s a cry for help from staff,” says Drozd. Using the findings from their culture of safety surveys and other data collected by the organization, leadership can respond with a call to action to improve and sustain a safety culture. Although culture change takes time, Rebold reminds organizations that “a little bit of change can make a big difference.”
Figure. Composite Scores from Three Patient Safety Culture Surveys

Table 1. Culture of Safety Surveys: High- and Low-Scoring Areas*

<table>
<thead>
<tr>
<th>Area of Strength (High Scores)</th>
<th>Area with Potential for Improvement (Low Scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork within units</td>
<td>Staffing levels</td>
</tr>
<tr>
<td>Supervisor/manager expectations and actions promoting patient safety</td>
<td>Handoffs and transitions</td>
</tr>
<tr>
<td>Organizational learning—continuous improvement</td>
<td>Nonpunitive response to error</td>
</tr>
</tbody>
</table>

* High- and low-scoring areas are listed in descending order by average percent positive response.


Table 2. Sample Events Express Concerns about Behavior Undermining Patient Safety

<table>
<thead>
<tr>
<th>Culture of Safety Key Area</th>
<th>Sample Deidentified Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication openness</td>
<td>Patients were put at risk by a fatigued doctor and no one stopped this.</td>
</tr>
<tr>
<td></td>
<td>The doctor’s response to me was, “This is not on my priority list. When you stop wasting my time, I will be able to get something done.”</td>
</tr>
<tr>
<td>Handoffs and transitions</td>
<td>A patient was admitted from the emergency department [ED] today. I tried to look up the phone number for the RN in the ED taking care of the patient, but she had failed to leave her phone number in the ED patient summary progress note. I took a few minutes to look up the information and called the ED nurse with questions. She didn’t take her part in the patient handoff process seriously. When the patient arrived on the floor, he stated that his experience in the ED had been very poor. He felt that no one was listening to him.</td>
</tr>
<tr>
<td></td>
<td>I transported a patient from the ED to his room. When I arrived at the room, there was information that the patient was on droplet precautions because the patient was swabbed in the ED to rule out flu. There was no indication from the ED that the patient was on any precautions. I am very disturbed that this continues to happen.</td>
</tr>
<tr>
<td>Management support</td>
<td>It would be great if someone in upper management would sit down with the doctor and let him know his behavior is unacceptable.</td>
</tr>
<tr>
<td></td>
<td>Anesthesia’s behavior puts patient safety at risk. When will this hospital decide enough is enough and patient safety comes first?</td>
</tr>
<tr>
<td></td>
<td>I hope that more staff feel compelled to report these types of issues that get swept under the rug by our management far too often.</td>
</tr>
<tr>
<td>Response to error</td>
<td>The medication was not given as ordered. Will discuss at staff meeting and also try to identify the nurse involved to follow up about education.</td>
</tr>
<tr>
<td>Staffing</td>
<td>The patient had concerns about medications. We have so many complaints from patients due to lack of staff. Everyone is working very hard here.</td>
</tr>
<tr>
<td></td>
<td>In their infinite wisdom and flawed decision making, administration finds that paying registered nurses to perform custodial and orderly jobs far outweighs nurses providing direct patient care. What we should be doing is the right thing and not the cheap thing! It might also improve patient and family satisfaction not to mention reduce burnout of nursing and physician staff.</td>
</tr>
<tr>
<td>Teamwork</td>
<td>The surgeon is a bully. His tone is rude and condescending. This is a patient safety issue, in addition to being unprofessional. Our team needs to work together for the best patient outcomes. When one team member is belittled, the entire team suffers. This leaves all team members more prone to making mistakes and unable to perform at optimal levels. This sets up an environment that is ripe for mistakes.</td>
</tr>
</tbody>
</table>

Source: ECRI Institute PSO, Component of ECRI Institute (Plymouth Meeting, Pennsylvania).
Lessons Learned

USING SURVEY RESULTS FOR LASTING CHANGE

What can organizations do with the findings from their safety culture surveys? Their responses must be carefully planned and supported by leadership for lasting impact (Morello et al.). Neumann is familiar with one organization that assigned each of its care units with responsibility to address its survey findings. But without a system-wide approach that held each unit accountable to the organization’s goals, the initiatives lost momentum, she says.

Listed below are ECRI Institute PSO recommendations for ensuring that the findings from safety culture surveys lead to change. Many of these recommendations are also echoed in AHRQ’s recently released planning tool for addressing the findings from patient safety culture surveys (Sorra et al. “Action Planning Tool”).

Engage Leadership

Just as senior leadership support is needed to encourage staff participation in safety culture surveys, their ongoing commitment to a culture of safety has to be sincere, visible, and backed with resources. “Leadership sets the priorities. You have to start by presenting the findings to leadership for their agreement and buy in,” says Mitchell. “No matter how much an employee wants to embrace this, if leadership doesn’t embrace this, it’s not going to happen,” she says.

Besides making resources available to support patient safety improvement, leaders can support change through specific actions and behavior that embody a commitment to safety. Some organizations, for example, have implemented leadership walkthroughs, in which leaders take turns rounding on the units to see how things are going. “It shows that they’re invested in making things better and that they’re supportive,” says Mitchell.

“A common complaint from frontline staff is that they don’t know their organization’s executives and don’t see them,” adds Drozd.

“Staff are grateful when they see executives on their units asking about what they need.”

Support A Just Culture

Cultivating a culture of safety depends on the organization’s openness about errors and problems. Organizations must know about the problems and unsafe conditions that need fixing by supporting an atmosphere in which healthcare workers can report actual or potential errors, events, and hazards without fear of reprisal. “A nonpunitive response to error and near misses is key to a safety culture; it needs to be encouraged,” says Rebold.

Unfortunately, results from the safety culture surveys over the years find that organizations’ support for a nonpunitive response to error remains among the lowest scoring of the 12 areas evaluated in the surveys. Only 42% of responses to the 2015 surveys were positive about statements regarding a nonpunitive error response. Despite nearly two decades of emphasis about the importance of a just culture to support patient safety, staff are still concerned that mistakes will be held against them. Not only is this concern reflected in the safety culture surveys, it is also echoed in the events in ECRI Institute PSO’s database and consulting projects on event investigations.

Error decision tree. To encourage reporting of medical errors, facilities must demonstrate through policy and action that reporting is expected and encouraged, says Rebold. Disciplinary action is reserved only for those who willfully disregard policies and procedures and jeopardize patient safety. Some organizations have adopted algorithms to assist in determining whether a safety event was the result of systems issues that permitted the individual to adopt workarounds and other at-risk behaviors or was the result of unjustified, reckless behavior on the part of the individual. ECRI Institute PSO has developed a sample algorithm or error decision tree to apply to any event
investigation. (refer to “ECRI Institute PSO Safety Culture Resources” for information on accessing the error decision tree). “I would make it a standard operating procedure to use the error decision tree to look at whether a reasonable individual, in the same situation, could have made the same error because of a system failure,” says Rebold.

Enlist A Multidisciplinary Team

With leadership support in place, the organization can begin to analyze the survey results by assigning a multidisciplinary team to review the findings and develop an action plan. Although the composition of the team will vary with each organization, Drozd recommends the following three elements as essential to the team’s success:

1. A senior leader who can join the team and sponsor its efforts.
2. A well-trained facilitator, familiar with process improvement techniques.
3. Frontline staff who bring a stakeholder perspective and can drive changes recommended by the action plan.

One hospital that worked with ECRI Institute in conducting its survey and compiling the survey results devoted a full day to reviewing the results of its safety culture survey and devising an action plan. For information about its approach, refer to “Case Study: How One Hospital Addressed Safety Culture Survey Findings.”

Focus on Priorities

In reviewing survey results, ECRI Institute PSO recommends that organizations focus on addressing the areas with the most opportunity for improvement. “We guide our clients in understanding you can’t fix everything at once. You look at the top-three and bottom-three performing areas, and you focus on the bottom three to work on,” says Drozd. Typically, these three poor-performing areas are staffing, handoffs and transitions, and nonpunitive response to error. “Intuitively, I don’t think the survey results are a surprise to many organizations,” Drozd notes.

Organizations can also further analyze their performance in the top-three areas by comparing their performance to the averages reported in the AHRQ comparative database. “It is important to note that although some areas are designated in the ‘top’ category, they may actually be below the comparative average and, therefore, still require attention and interventions,” says Drozd. “Alternatively, top category areas that are above the comparative averages offer a great opportunity to congratulate and recognize staff for a job well done.”

Maximize impact. Neumann recommends aligning the safety culture action plan with other initiatives. “If you choose an area for improvement that affects multiple points, it will be more successful,” she says. “For example, if the area selected can improve patient satisfaction scores, decrease adverse events, and more, it will have more support,” she explains. She is aware of one organization that is considering an initiative to improve patient discharge because it weaves together several issues: staff concerns about handoffs and transitions identified in the safety culture survey, problems with medication reconciliation at discharge, and the organization’s strategic plan to provide services spanning the continuum of care. “It’s an initiative that works on multiple dimensions,” says Neumann.

Dig Deeper

Look for differences. Instead of just looking at overall results in a particular area, Rebold recommends digging deeper to analyze department-level responses to individual questions. “If you roll up the results to a high level, you can fool yourself into thinking everything is fine. When you bring it down to a department or unit level, that’s when you start to see differences,” she says.

Learn from top performers. Rebold also suggests that organizations examine why some departments have more positive responses than others and learn from departments that are achieving success. “If you see that some departments are doing well, but others are, then look to those high-performing areas as experts in your organization who can help others learn,” says Rebold.
The safety culture results should be considered within the context of other patient safety and performance data for the organization. For example, Mitchell recalls how one organization’s results showed that staff responded positively about the number of events that were reported. “But when we looked at the number of events reported over two years, we found out they really weren’t reporting more,” she says. Those findings prompted the organization to examine the discrepancy.

While staff supported event reporting, it turned out there were misunderstandings about the reporting policy and, specifically, who should fill out the reporting form. “Staff thought events were being reported, but, in actuality, they were not” because there was no directive about who should be reporting, Mitchell explains.

Customize Strategies
Don’t expect to design an action plan with a one-size-fits-all approach. Solutions must be
customized to the needs of a specific unit or department, says Mitchell. For example, one of the poor performing areas in the safety culture surveys is related to hand-offs and transitions. “If the response is to develop tools to help with shift-change handoffs, they should be specific to the units” where information needs will vary, she says. “A shift-change handoff can happen in the OR [operating room], but it is different from a handoff in the ED or ICU [intensive care unit].”

“For process improvements to be sustained, they must be incorporated into the work process of each unit,” agrees Rebold. “You don’t want to simply overlay an improvement on an existing process. You have to look at their work flow and find out where and how it makes the most sense.”

As organizations develop an action plan, Neumann reminds them of the “SMART” acronym for setting goals as follows (50Minutes.com):

- **Specific** (state what will be accomplished by the goal)
- **Measurable** (establish metrics for measuring progress toward the goal)
- **Achievable** (set goals that are within the organization’s capability to reach)
- **Relevant** (ensure that the action plan dovetails with the organization’s big picture goals)
- **Time bound** (set a time limit for achieving goals)

Because change can take several years to achieve, Rebold recommends setting year-to-year measurable goals so that the changes are phased in gradually. As an example, refer to “Table 3. Sample Action Plan with Five Year Phase-In,” for an approach an organization might take to gradually implement changes for three areas measured by the safety culture survey.

Additionally, ECRI Institute PSO has developed a template safety culture survey action plan that can be used by organizations to identify planned actions for any of the 12 key areas of the safety culture survey, establish year-to-year goals, and evaluate year-to-year progress in meeting those goals. Refer to “ECRI Institute PSO Safety Culture Resources” to access the template online.

**Give Feedback**

One area evaluated by safety culture surveys is staff perceptions regarding feedback about event reporting and changes put in place as a result of the events. If there’s no follow-up, a feeling grows among the staff that nothing is going to be done anyway. “Staff will feel that reporting is a waste of time,” says Mitchell. Similarly, staff want to know about the findings from safety culture surveys. If they’re not informed about the survey findings and the organization’s response to the results, they’re less likely to respond to requests to complete the survey the next time it is distributed.

In fact, one of the events identified from the search of culture of safety events reported to ECRI Institute PSO is actually a request to learn about earlier survey results before another one is conducted. “It is our understanding that a new culture of safety survey is about to begin,” the event narrative says. “We are still anxiously awaiting management to share results from the previous survey.”

Organizations can use the usual formats for sharing information, such as newsletters, e-mail blasts, meetings, and flyers, as well as try other less traditional venues to gain staff’s attention. For example, managers might highlight the survey findings during patient safety huddles at the start of a unit shift, and leaders can discuss the findings during their walkarounds, says Drozd.

Information sharing should reflect the adult learning styles of staff and be provided in several formats to be effective, says Rebold. “Some staff respond to verbal communication like hearing stories at staff meetings; others respond to visual information like presentations with charts and graphs or to nonverbal
Table 3. Sample Action Plan with Five Year Phase-In

<table>
<thead>
<tr>
<th>Culture of Safety Key Area</th>
<th>Planned Action</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of events reported</td>
<td>Increase event reports/1,000 patient days</td>
<td>10% increase from 2015</td>
<td>10% increase from 2016</td>
<td>10% increase from 2017</td>
<td>10% increase from 2018</td>
<td>10% increase from 2019</td>
</tr>
<tr>
<td>Handoffs and transitions</td>
<td>Disseminate SBAR* handoff tool to all staff</td>
<td>Core team formed and training begins. 10% of staff trained.</td>
<td>40% of staff trained.</td>
<td>All staff trained. New employee training continues, SBAR re-education implemented for current staff every 2 years.</td>
<td>All staff trained or re-educated about SBAR</td>
<td>All staff trained or re-educated about SBAR</td>
</tr>
<tr>
<td>Nonpunitive response to error</td>
<td>Adopt error decision tree for event response</td>
<td>Board and senior leaders trained in error decision tree</td>
<td>Repeat annual refresher education for board and senior leaders. New training rolled out to physician leadership and committee chairs.</td>
<td>Repeat annual refresher training, New training rolled out to middle management.</td>
<td>Repeat annual refresher training, New training rolled out to frontline managers, supervisors, and charge staff.</td>
<td>Error decision tree fully implemented. Repeat annual refresher training.</td>
</tr>
</tbody>
</table>

* SBAR is the Situation, Background, Assessment, and Recommendation communication technique.

communication. Organizations should use all methods and communication paths available. Also, do not assume that the message will be absorbed after one communication. In a busy healthcare environment, staff may need to receive the message multiple times and ways,” she explains.

**Benchmark**

Although an organization may be tempted to compare its safety culture survey results to the performance of others, the best benchmark is the organization’s past performance. “You have to compare yourself to yourself,” says Drozd. Therefore, organizations should plan to conduct the survey again to evaluate the effects of interventions put in place after the initial survey. “You take the assessment. You look at areas you want to improve. You implement different types of interventions, and you take the assessment again,” says Drozd.

ECRI Institute PSO recommends waiting at least 18 months between surveys. “You need to allow time for the results to take shape,” says Drozd.

**Give It Time**

Finally, organizations must plan for culture change to take effect over several years. Initiatives to create and sustain a culture of safety should ultimately become ingrained in the systems of care delivery. “This is not a simple thing to do. It is not something that can be done alone. It needs to affect all decision-making in the organization, and it needs to involve all levels of leadership. It takes time,” says Rebold.
REFERENCES


