

Hospital CEO Survey on Patient Safety Research Report

Julie Robbins, PhD, *director, MHA Program, The Ohio State University*
Griffin Olsen, MD, *resident, University of Texas Southwestern Medical Center*
Leslie A. Athey, *director, Research, Department of Member Services, American College of
Healthcare Executives*

INTRODUCTION

Ensuring the safety of patient care is an ongoing priority for U.S. hospitals and their leaders continue to look for better ways to realize the goal of zero harm to patients in their care. Despite significant improvements over the last 20 years, preventable medical errors persist as a significant challenge and were identified as the third leading cause of death in the United States, behind heart disease and cancer (Makary & Daniel, 2016; Owens et al., 2018). For healthcare organizations, creating a *Culture of Safety*, in which a commitment to improving safety is embedded and maintained at all levels of the organization, has been identified as a key feature for eliminating patient harm (AHRQ PSNet Safety Culture, 2018).

In 2016, the American College of Healthcare Executives (ACHE) partnered with the IHI Lucian Leape Institute to collaborate with some of the most progressive healthcare organizations and globally renowned experts in leadership, safety and culture to develop [*Leading a Culture of Safety: A Blueprint for Success*](#). The *Blueprint* is designed as a guide for healthcare organization leaders and summarizes evidence-based leadership and organizational practices that contribute to creating a strong patient safety culture. This resource delineates specific practices that healthcare leaders can adopt to “achieve their mission of total system safety.”

Seeking to understand the degree to which the patient safety practices outlined in the *Blueprint* are being implemented in healthcare organizations across the country, ACHE partnered with researchers at The Ohio State University to develop the *2017 Hospital CEO Survey on Patient Safety*. Using the *Blueprint* as the framework, the survey was designed to assess the current state of patient safety efforts across the country and gain insight into the CEO’s role in advancing these efforts. Specifically, this survey asked respondents to identify whether they had adopted, or had plans to adopt, 38 different safety practices in the following six categories:

- Patient safety goals
- Senior staff involvement
- Responding to safety events
- Training
- Board involvement
- Physician and nurse involvement

This report describes the survey methodology, key findings and a discussion of implications. ACHE has also issued a CEO Circle white paper based on the results of this survey entitled *The CEOs Role in Driving Patient Safety Outcomes*, which considers these results and highlights the critical role that CEOs personally play in leading a culture of safety.

METHODS

Survey Design

Drawing on the *Blueprint*, the *2017 Hospital CEO Survey on Patient Safety* asked respondents to report on whether they had adopted or had plans to adopt 38 patient safety practices grouped into six different sections, including: 1) patient safety goals, 2) senior staff involvement, 3) responding to safety events, 4) training, 5) board involvement, and 6) physician and nurse involvement.

Specifically, respondents indicated whether a practice was “in place,” whether they “plan to have [the practice] in place by the end of 2018,” or whether they had “no plans to have in place by the end of 2018.” For section five, board involvement, respondents also had the option to select “do not know.” To gather qualitative insight into each practice, each of the sections included an optional, open-ended response question for respondents to provide any additional explanation or comments regarding the practices assessed in that section. Finally, the survey contained three open-ended response questions that asked respondents to report the *one* most effective thing they do to improve patient safety, the *one* greatest success in improving patient safety in the last five years, and the key to making it happen, and any additional comments.

Survey Sample and Distribution

This survey was sent to 1,045 CEOs of community hospitals who were members of ACHE. Hard copies of this survey, the *2017 Hospital CEO Survey on Patient Safety*, were mailed in October 2017. Completed surveys were mailed back to ACHE research staff who coded multiple-choice responses and transcribed open-ended responses. Data without identifiers were entered into multiple Excel files, and responses were merged with deidentified organizational demographic information provided by ACHE. ACHE then presented these data to researchers at The Ohio State University for analysis.

RESULTS

Of the 1,045 member organizations that received the survey, 364 (34.8 percent) responded to the survey. The study sample had significant variation based on bed size (0–70, 71–200, 200+), population setting (metropolitan, micropolitan, rural) and ownership (not-for-profit, government, investor). The research team conducted detailed analyses comparing the distribution of hospitals in the population that received the survey versus the sample of respondents based on these dimensions. This comparison showed no difference in the distribution for bed size (Figure 1) and population setting (Figure 2). The analysis for ownership indicates a slight underrepresentation of investor-owned hospitals (11 percent in the survey versus 17 percent in the population) and corresponding overrepresentation of not-for-profit hospitals (67 percent versus 61 percent), in our sample distribution (Figure 3). We analyzed the data to evaluate whether differences in bed size, population setting, or ownership impacted patient safety practice adoption. We found no relationship between these organizational characteristics and practice adoption. Therefore, all of our results are based on an analysis of the entire sample, taken as a whole.

Figure 1: Respondents by Bed Size

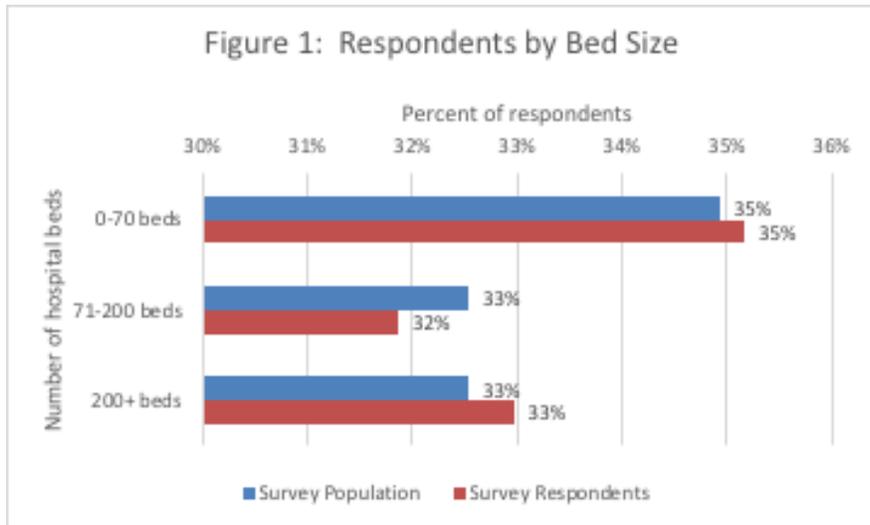
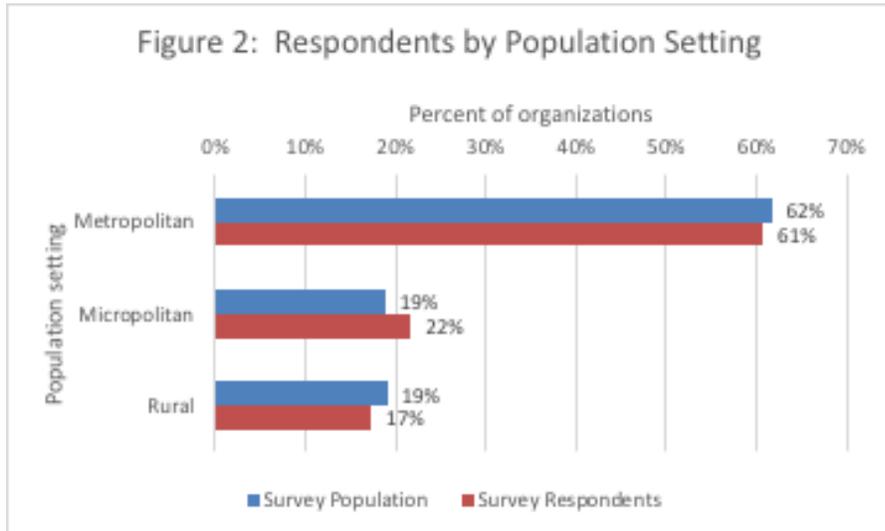
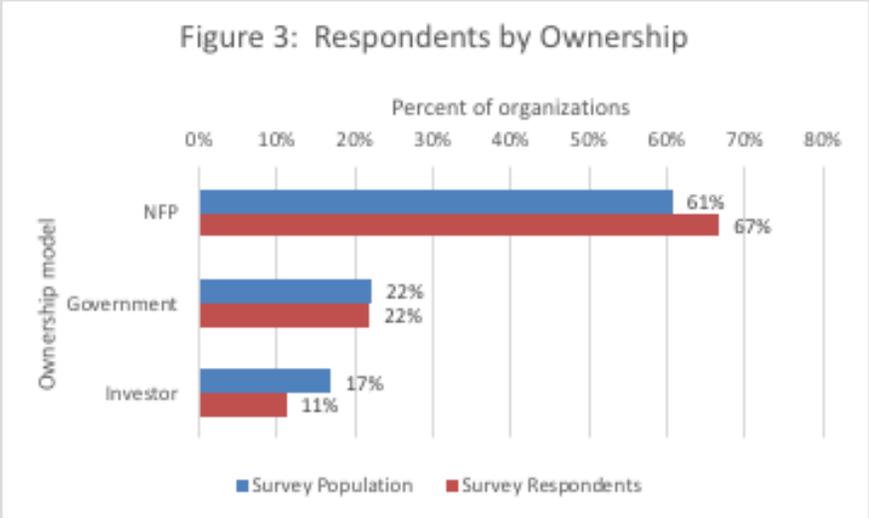


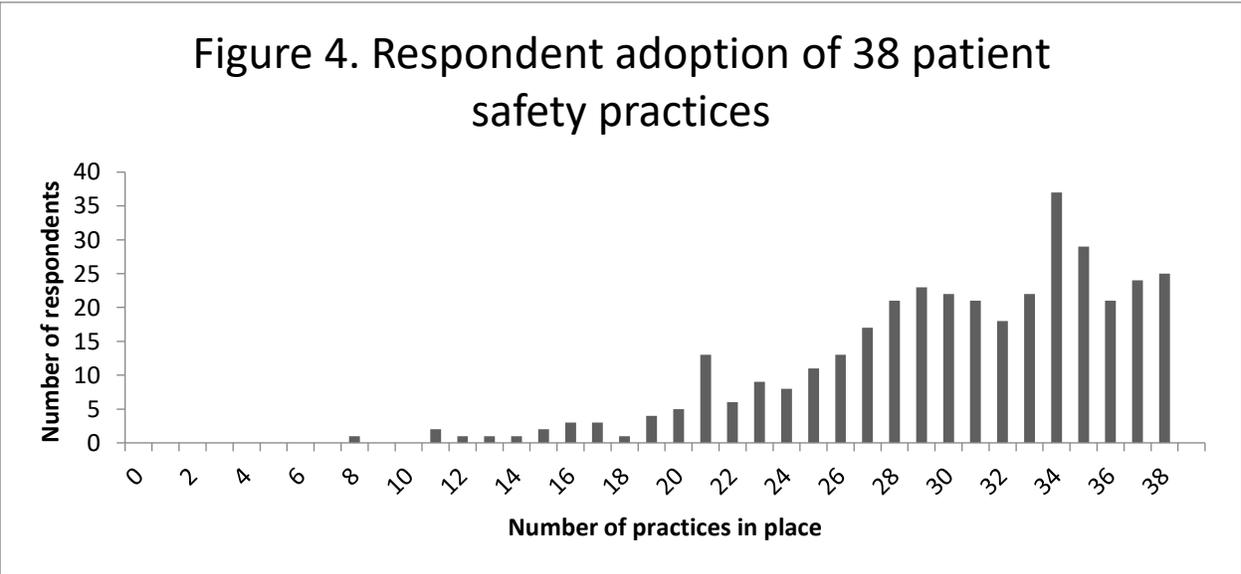
Figure 2: Respondents by Population Setting





Patient Safety Practice Adoption

To determine the degree to which hospitals have adopted the 38 patient safety practices included in the survey, we tallied the number of “in place” responses for each respondent organization. Overall, we found widespread adoption of patient safety practices with two-thirds (67 percent) of hospitals indicating that they had adopted 75 percent or more of the 38 recommended practices at the time of the survey. Only 4 percent had adopted less than 19 (50 percent) of the recommended practices. The minimum number of practices “in place” was eight (one respondent) and the maximum was all 38 (25 respondents) with a median value of 31.



We found some variation in practice adoption in the six categories. Table 1 gives an overall view of rates of adoption of practices in the six categories. Adoption was highest in the categories of Clinician Engagement and Patient Safety Goals, with 78 percent and 77 percent of CEOs in the survey, respectively, reporting that their organizations had adopted three-quarters or more of the

recommended practices. This is followed in descending order by Response to Safety Events, Patient Safety Training, Board Engagement and Senior Leader Engagement, with 72 percent, 67 percent, 63 percent and 62 percent of CEOs, respectively, reporting that 75 percent or more of the recommended practices were in place in their hospitals. (Please note that these sums may appear to differ slightly from the sums achieved by adding the table entries together; this is due to rounding.)

Table 1: Patient Safety Practice Adoption, by Category

Categories	No. of practices	Percent of hospitals (N = 364) with the following proportions of recommended practices in place:			
		Less than half (< 50%)	Half to three-quarters (50–74%)	More than three-quarters but less than all (75–99%)	All (100%)
Patient Safety Goals	9	6%	17%	52%	24%
Senior Leader Engagement	6	10%	29%	24%	37%
Response to Safety Events	3	19%	9%	0%	72%
Patient Safety Training	6	8%	26%	26%	41%
Board Engagement	6	10%	27%	30%	32%
Clinician Engagement	8	5%	18%	51%	26%
Total	38	4%	29%	60%	7%

The section below includes a more detailed review of the specific practices in each category and their rates of adoption or planned adoption among survey respondents.

Category 1: Patient Safety Goals

This category includes practices that leaders use to a) communicate the organization’s commitment to, and goals for, patient safety improvement to key stakeholders, and b) motivate their support for advancing these goals. These practices are listed in the figure below along with adoption rates among survey respondents. Overall, these results indicate that:

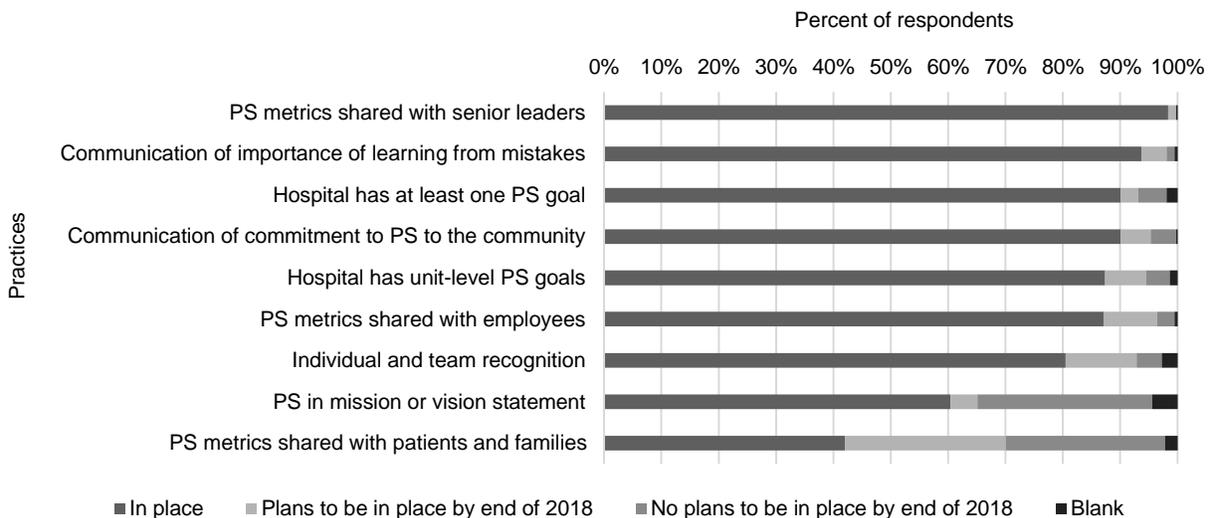
- Nearly all CEOs (94 percent) reported that they communicated the importance of learning from mistakes to employees, an important aspect of maintaining a safety culture.
- Nearly all organizations represented in the study had established patient safety goals at the organizational (90 percent) and unit (87 percent) levels.

- According to CEOs in the study, patient safety metrics were routinely shared with senior leaders (98 percent) and employees (87 percent), but leaders of fewer than half of the organizations in the study (42 percent) said they were shared with patients or families. An additional 28 percent said they plan to share these metrics with patients and families by the end of 2018, bringing the projected proportion of organizations with this practice to 70 percent by the end of the year.

While nearly all CEOs in the study (90 percent) said they communicate the importance of patient safety to the community, only 60 percent report that they have incorporated patient safety into their organization’s mission and vision statement, an important vehicle for codifying organizational priorities. And, only an additional 5 percent of organizations plan to add patient safety to their mission and vision statements by the end of 2018. Comments suggest that at least some organizations that do not incorporate patient safety into vision or mission include it in the formal organizational values and/or strategic goals.

- Eighty percent of CEOs in the study said their organizations recognize individuals and teams for meeting safety goals, although an additional 12 percent expect this to be something they do by the end of 2018.

Figure 1. Adoption of Patient Safety (PS) Goals Practices

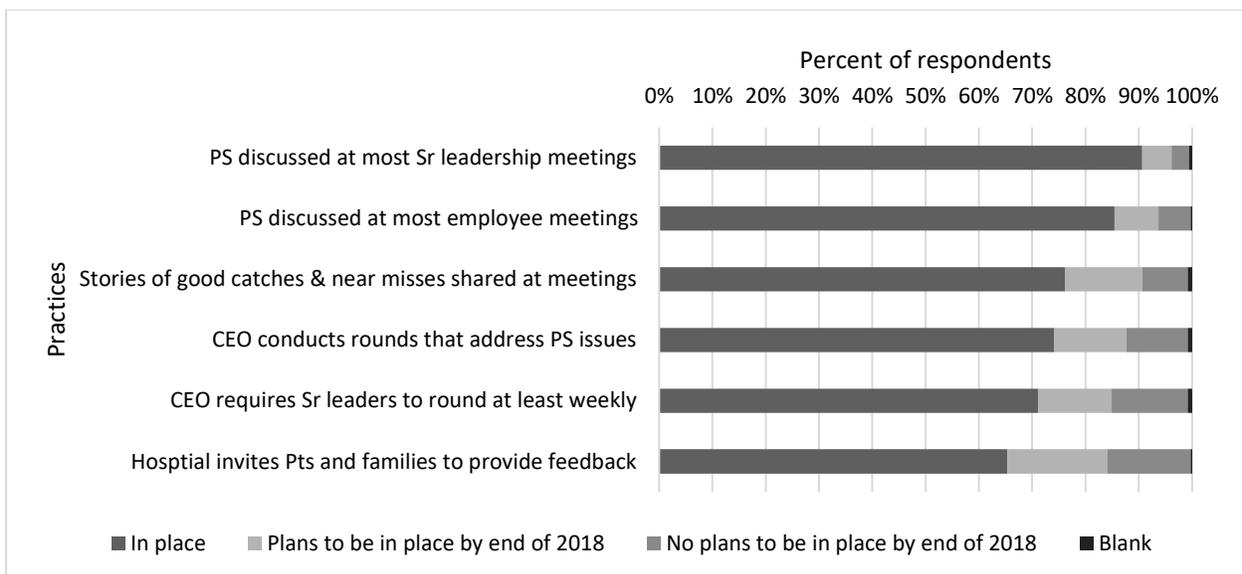


Category 2: Senior Leader Engagement

This category includes actions that CEOs and senior leaders can personally take to drive patient safety results. These practices are listed in the figure at the end of this section, along with current and planned adoption rates among survey respondents. Overall, these results indicate that:

- Patient safety is widely discussed at leadership and employee meetings, with 91 percent of CEOs in the study reporting that these discussions occur in leadership meetings, and 85 percent reporting that they occur in employee meetings. Stories of “good catches” and “near misses” were reported as being shared regularly at employee meetings in 76 percent of the organizations included in the study, with another 15 percent saying they plan to have this practice in place by the end of 2018.
- About three-quarters, 74 percent, of CEOs said they personally conduct patient safety rounds and an additional 13 percent plan to institute this practice by the end of 2018. Similarly, 71 percent of CEOs in the survey said they required their senior leaders to conduct these patient safety rounds at least weekly, and an additional 14 percent plan to require their senior leaders to do so by the end of 2018.
- Currently, about 65 percent of organizations studied actively invite patients and families to provide feedback for patient safety; an additional 19 percent say they plan to do so by the end of 2018. Comments suggest that this typically occurs, or is planned, through formal patient and/or family advisory councils.

Figure 2. Adoption of Senior Leader Engagement Practices

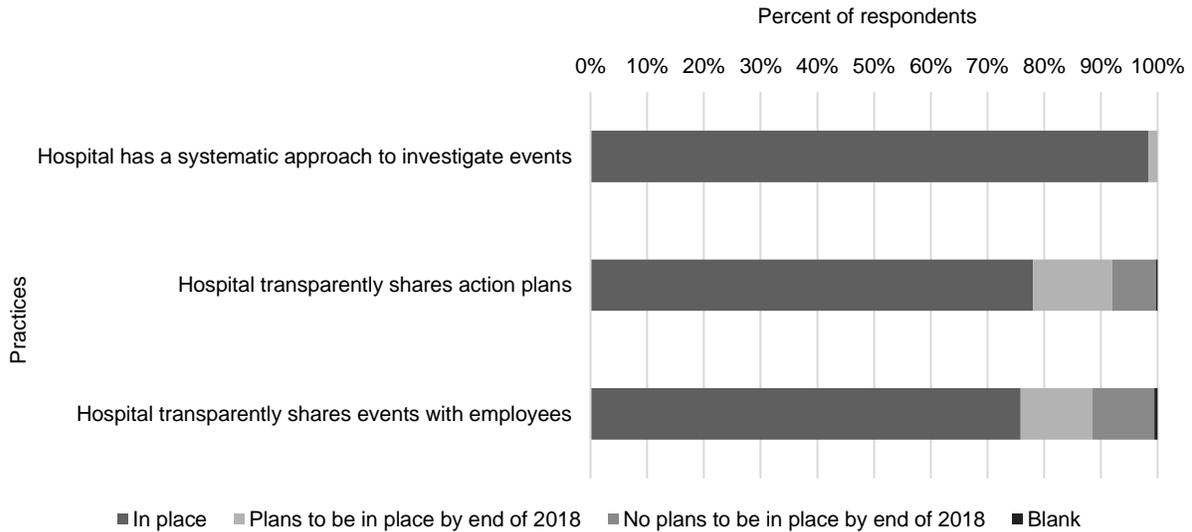


Category 3: Response to Patient Safety Events

Questions included in this category assessed three ways in which organizations investigate and respond to patient safety events. As indicated in the figure below, nearly all respondents (98 percent) indicated that they had a systematic approach to investigating safety events, however, somewhat fewer said they shared action plans for responding to safety events (78 percent) or the

reported events themselves (76 percent) with employees across the organization. According to plans reported by CEOs in the survey, these proportions will be 92 percent and 89 percent, respectively, by the end of 2018.

Figure 3. Adoption of Practices Regarding Response to Safety Events



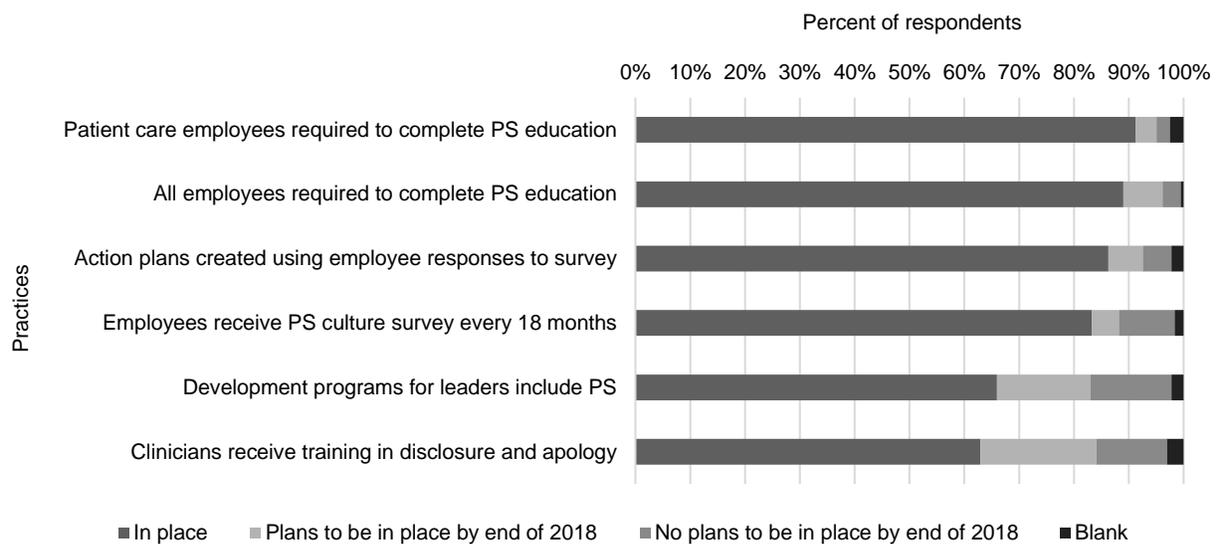
Category 4: Patient Safety Training

This category includes ways in which organizations advance safety culture through their commitment to a) education and training, and b) systematic monitoring and improvement. These practices are summarized in the figure below, which also shows current and planned adoption rates among respondents. These results suggest:

- Patient safety training has been widely adopted for employees, with 91 percent of CEOs reporting that hospital employees who directly impact patient safety (e.g., are involved in direct patient care) were required to complete patient safety education, and 89 percent reporting that this education was required for *all* employees. However, patient safety is less widespread as a specific focus for developing leaders, with 66 percent of CEOs surveyed reporting that development programs for leaders included developing competencies in patient safety. According to plans reported by CEOs in the study, 83 percent of their organizations will include patient safety in leadership development programs by the end of 2018.
- Organizations are working to systematically evolve a patient safety culture; 83 percent of CEOs in the study reported that employees are surveyed at least every 18 months about their perceptions of the organization’s safety culture. Whether employee surveys are conducted with that frequency, 86 percent of respondents indicated that they use employee responses to safety culture surveys to focus improvements.

- The least widely adopted recommendation from the *Blueprint* regarding patient safety training, as reported by survey respondents, was providing clinicians and other hospital employees with training in communicating with patients that includes disclosure and apology. CEOs overseeing 63 percent of the organizations represented in the study reported that this practice is currently in place in their hospitals; an additional 21 percent said this practice would be in place by the end of 2018.

Figure 4. Adoption of Patient Safety Training Practices



Category 5: Board Engagement

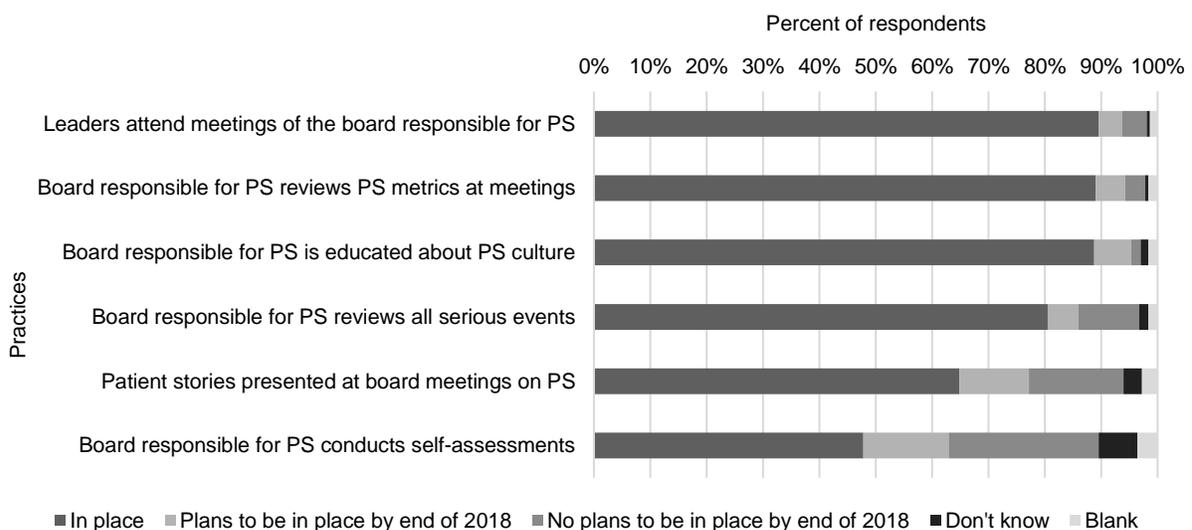
Questions in this category are concerned with the degree to which boards are educated and engaged to drive patient safety improvements. Practices in this category are summarized in the figure below, which indicates current and planned adoption rates among responding organizations. These results suggest:

- Widespread engagement regarding patient safety at the board level, with 90 percent of respondents reporting that patient safety leaders attend meetings of the board responsible for patient safety in the hospital and 89 percent saying that members of the responsible board are educated about patient safety and a safety culture.
- Boards were commonly involved with reviewing patient safety data, with 89 percent of CEOs in the study reporting that the board overseeing patient safety for the hospital reviews patient metrics and dashboards at each meeting, and 80 percent saying the responsible board reviews all serious safety events at the hospital.

- According to survey respondents, sharing of patient stories, including stories involving safety, occurred less often during meetings of the board responsible for patient safety. Roughly two-thirds (65 percent) of respondents indicated that they share patient stories at board meetings, a practice that can “bring patient safety to life.” An additional 12 percent of respondents said they planned to have this practice in place by the end of 2018.
- The least widely adopted practice regarding board-level engagement in patient safety was for members of the board responsible for patient safety for the hospital to conduct regular self-assessments related to their knowledge and understanding of safety culture. This practice was reported as being currently in place in less than half, 48 percent, of hospitals represented in the study. Further, about one-quarter, 27 percent, of CEOs responding to the survey said there were no plans to institute this practice by the end of 2018. Whether this indicates that knowledge in this area is not frequently included on the board self-assessments, or if the practice of board self-assessments does not occur in many organizations, is not clear from the data.

Because the procedures pertaining to the boards responsible for patient safety for their hospitals might not be known to all survey respondents, questions about board engagement in patient safety contained options for CEOs to answer “don’t know” regarding any particular practice. CEOs were the least informed about board practices regarding self-assessments covering knowledge and understanding of safety culture, with 7 percent responding “don’t know” to this item in the questionnaire.

Figure 5. Adoption of Board Engagement Practices

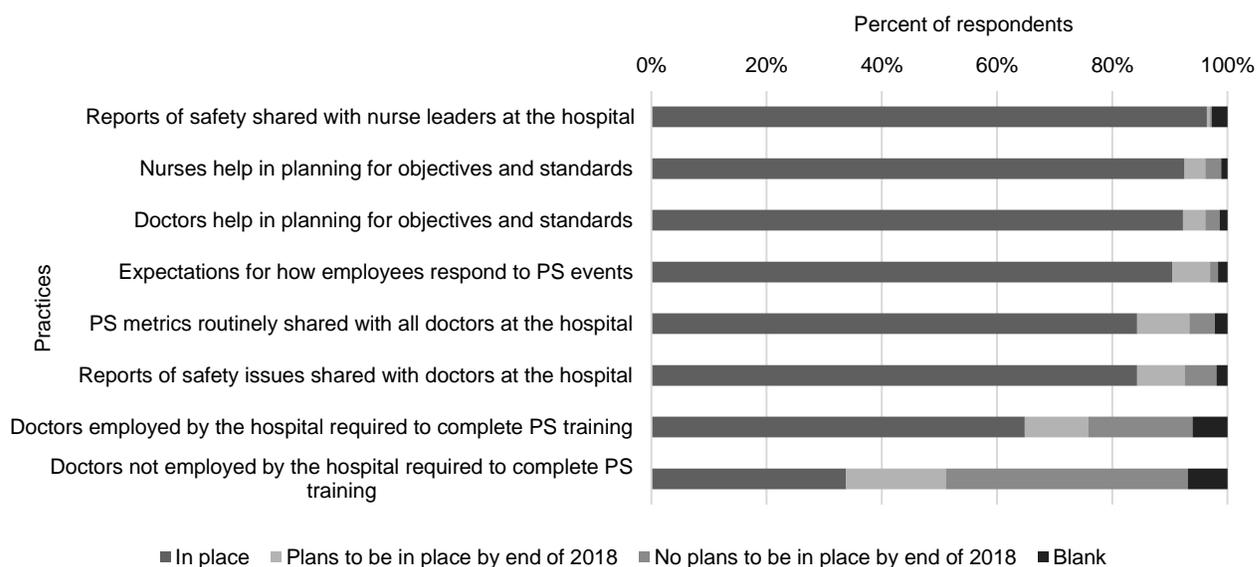


Category 6: Clinician Engagement

Questions in this category assessed different ways in which organizations educate and engage different groups of clinicians in patient safety improvement efforts. The results are summarized in the figure below, which lists different clinician engagement practices recommended in the *Blueprint* along with rates of current and planned adoption in hospitals. Key findings include:

- Nearly all CEOs in the study (96 percent) reported that their hospitals shared reports of patient safety issues with nurse leaders, but somewhat fewer (84 percent) said they share them with all physicians practicing in the hospital, including those employed by the hospital and those who are not. An additional 8 percent of organizations plan to have the latter practice in place by the end of 2018. Similarly, 84 percent of responding CEOs said that safety metrics were routinely shared with physicians practicing in the hospital, whether those physicians were hospital employees, and an additional 9 percent expect to have this practice in place by the end of 2018.
- Almost all CEOs in the study reported that their hospital actively engage both nurses (93 percent) and physicians (92 percent) in setting patient safety objectives and standards.
- Almost all CEOs in the study (90 percent) said there were clear expectations for how all employees, including physicians, are to respond to safety issues or incidents in the hospital. An additional 7 percent plan to have this in place by the end of 2018.
- By contrast, only 65 percent of hospitals in the study require employed physicians to complete patient safety training, and the proportion is even lower for physicians who are not employed by the hospital—34 percent. Substantial proportions of the CEOs responding said they plan to add these practices by the close of 2018. An additional 11 percent of CEOs who answered the survey said they plan to require employed physicians to complete safety training by the end of the year, and an additional 17 percent said that physicians not employed by the hospital would be required to complete patient safety training by the close of 2018.

Figure 6. Adoption of Clinician Engagement Practices



DISCUSSION

The results of the *2017 Hospital CEO Survey on Patient Safety* demonstrate widespread adoption of patient safety practices among a voluntary sample of U.S. hospitals whose leaders were members of ACHE. At the same time, we found considerable variation in the rates of adoption between the six major categories of practices and specific practices within each, suggesting both areas of notable success as well as key challenges for healthcare organizations as they pursue patient safety improvements.

We found the highest levels of practice adoption in ***Category 3: Response to Patient Safety Events***, with the vast majority of hospitals indicating that they have adopted a systematic approach to investigating safety events, sharing action plans for responding to these events, and transparently reporting these events within the organization. Adoption rates were similarly high in ***Category 1: Adoption of Patient Safety Goals***, which includes actions that CEOs and senior leaders personally take to drive results, e.g. communicating commitment to safety, sharing metrics, driving outcomes. These results are promising, suggesting that healthcare leaders are both committed to improving patient safety and have embedded practices to systematically improve safety.

We also identified three key areas with lower rates of adoption. These suggest either potential challenges or barriers, or opportunities for health systems seeking to move to the next level in their patient safety journey.

- Inclusion of patient safety in organizational mission or vision.*** Including patient safety as part of a compelling, inspirational vision is an effective way to codify and communicate an organization’s deep commitment (*Blueprint*). Only 60 percent of respondents indicate that they have incorporated patient safety into their organization’s

mission and vision statement and less than 5 percent indicate any plans to do so. Qualitative comments suggest that these organizations have incorporated patient safety in other documents, e.g. strategic plans or goals documents, but not formally in the mission or vision. Organizations that are deeply committed to patient safety improvements may want to consider explicitly including this commitment in their vision and mission statements.

- ***Inclusion of patients and families in patient safety dialogue.*** Many organizations have started to incorporate the patient experience into their patient safety efforts. For example, nearly two-thirds of respondents indicate that they invite patients and families to share their experiences with senior leaders. Similarly, over 60 percent indicate that they share patient stories at board meetings, an important practice for bringing patient safety issues “to life” as part of the governance process. Yet, while nearly all respondents indicate that they share patient safety metrics with leaders and nearly 90 percent share these with employees, fewer than half share patient safety metrics with patients and families, a practice that can foster widespread transparency, trust and respect (*Blueprint*). Qualitative comments suggest that even though they may not be sharing detailed metrics with patients, many organizations do publish aggregate and benchmark data for key indicators and have begun to engage patient and family dialogue through the establishment of “patient advisory councils.”
- ***Physician education and engagement.*** We found that the vast majority (~90 percent) of hospitals require all nonphysician employees to complete patient safety education and 65 percent have incorporated patient safety as part of their leadership development programs. Notably, far fewer (65 percent) require similar education for employed physicians and even fewer for nonemployed (34 percent) physicians. Given the critical role that physicians play in improving patient safety, reducing medical errors and engaging families, this is a critical opportunity for improvement. Training that is designed to educate providers on the importance of patient safety, to develop their competencies for patient safety improvement, and to support effective disclosure and apology, are critical features in a strong safety culture (*Blueprint*).

Overall, the results of this survey provide valuable baseline understanding of the degree to which 38 patient safety practices have been adopted in a sample of U.S. hospitals. More specifically, the findings from this survey provide directional insight into those practices that have been adopted more widely and those that may continue to be challenges for organizations seeking to establish a strong safety culture.

LIMITATIONS

This study has several limitations. First, the population from which we drew the sample is comprised of organizations that have self-selected to participate in ACHE research, a group that may not reflect the broader field. Second, although we were able to demonstrate that our respondent sample was similar to the survey population key organizational demographics (bed size, population setting, ownership), we do not know if there are other differences, e.g.,

differential commitment to quality, which could bias the results. Notwithstanding these limitations, this survey provides valuable general insight into patient safety practice adoption in a wide variety of hospitals and/or health systems.

CONCLUSION

The survey demonstrates that hospitals across the nation have made significant strides in adopting practices that support culture of safety. However, multiple challenges remain, including systematically engaging patients and families in patient safety efforts, sharing data more transparently with patients, families and/or the public, and engaging more physicians, particularly those who practice independently, in required patient safety education.

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