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Promoting a Culture of Safety: Use of the Hospital Survey on Patient Safety Culture in CAHs (Briefing Paper #30)

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in Critical Access Hospitals

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A Performance Monitoring Resource for
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The Medicare Rural Hospital Flexibility Program

The Medicare Rural Hospital Flexibility Program (Flex Program), created by Congress in 1997, allows small hospitals to be licensed as Critical Access Hospitals (CAHs) and offers grants to States to help implement initiatives to strengthen the rural health care infrastructure. To participate in the Flex Grant Program, States are required to develop a rural health care plan that provides for the creation of one or more rural health networks; promotes regionalization of rural health services in the State; and improves the quality of and access to hospital and other health services for rural residents of the State.

The core activity areas of the Flex Grant Program are: 1) support for quality improvement in CAHs; 2) support for financial and operational improvement in CAHs; 3) support health system development and community engagement, including the integration of EMS into local and regional systems of care; and 4) conversion of eligible rural hospitals into CAHs. States use Flex resources for performance management activities, training programs, needs assessments, and network building. The Flex Program is also beginning a new special project, the Medicare Beneficiary Quality Improvement Project (MBQIP) focused on Medicare Beneficiary Health Status improvement.

CAHs must be located in a rural area (or an area treated as rural); be more than 35 miles (or 15 miles in areas with mountainous terrain or only secondary roads available) from another hospital or be certified before January 1, 2006 by the State as being a necessary provider of health care services. CAHs are required to make available 24-hour emergency care services that a State determines are necessary. CAHs may have a maximum of 25 acute care and swing beds, and must maintain an annual average length of stay of 96 hours or less for their acute care patients. CAHs are reimbursed by Medicare on a cost basis (i.e., for the reasonable costs of providing inpatient, outpatient and swing bed services).

The legislative authority for the Flex Program and cost-based reimbursement for CAHs are described in the Social Security Act, Title XVIII, Sections 1814 and 1820, available at http://www.ssa.gov/OP_Home/ssact/title18/1800.htm

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Introduction

This Briefing Paper is one in a series of Flex Monitoring Team reports that assess patient safety and quality improvement initiatives appropriate for use by state Flex Programs and Critical Access Hospitals (CAHs).

Over a decade ago, the Institute of Medicine (IOM) urged health care organizations to adopt proven organizational models and strategies from other high-risk industries to minimize error and reduce harm to patients.[1] To promote a *culture of safety* and ensure safer systems of care, the IOM emphasized the importance of developing clear, highly visible patient safety programs that focus organizational attention on safety; use non-punitive systems for reporting and analyzing errors; incorporate well-established safety principles such as standardized and simplified equipment, supplies, and work processes; and establish proven interdisciplinary team training programs for providers.[1]

The IOM also noted that, "the biggest challenge to moving toward a safer health system is changing the culture from one of blaming individuals for errors to one in which errors are treated not as personal failures, but as opportunities to improve the system and prevent harm".[2] By developing a "systems" orientation to understanding and addressing medical errors, hospitals can foster an organization-wide continuous learning environment where members of the workforce feel comfortable reporting and discussing adverse events without fear of reprisal.[1,3]

In recent years, consensus has emerged among patient safety experts that cultural attributes such as leadership support, teamwork, communication, and fair and just culture principles remain central to achieving high reliability and ensuring patient safety in health care organizations.[4-12]

This Briefing Paper considers the use of patient safety culture surveys as a means to promote organizational learning and build a culture of safety. To inform our work, we reviewed the literature and convened a rural patient safety expert panel with representatives from federal and state government and academia to share their experiences and offer guidance to CAHs.[*] Following a brief discussion of patient safety culture and the evidence base for safety culture

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[*] Panel members included Katherine Jones, PT, PhD, Assistant Professor in the Department of Physical Therapy Education at the University of Nebraska; Paul Moore, DPh, Senior Health Policy Advisor at the Federal Office of Rural Health Policy; Judy Tupper, MS, CHES, Managing Director of Population Health and Health Policy at the Cutler Institute for Health and Social Policy and Director of the Maine Patient Safety Collaborative; and Mary Sheridan, RN, Director of the Idaho State Office of Rural Health and Idaho Flex Coordinator.

surveys, we provide an overview of the Agency for Healthcare Research and Quality's (AHRQ) Hospital Survey on Patient Safety Culture (Culture Survey) and its use in CAHs.

Organizational Safety Culture: What is it?

Hospital leaders face increasing pressure to cultivate an organizational culture of safety that protects patients from medical error. However, the definitional ambiguity and breadth of safety culture as a construct can make it difficult, if not daunting, to operationalize.[13-15] In developing the Culture Survey, AHRQ adopted the definition of safety culture used by the Health and Safety Commission of Great Britain: "The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measures."[16]

Reason and Hobbs suggest that rather than attempt a single comprehensive definition of patient safety culture, it is often more useful to think of safety culture in terms of three essential, interlocking attributes or components: (1) a just culture, (2) a reporting culture and (3) a learning culture.[17] They note that culture is further defined by what an organization *is* (beliefs, attitudes and values), as well as what an organization *does* (structures, practices, policies and controls). This interplay of beliefs, attitudes and values on the one hand and structures, practices, policies and controls on the other raises the question of whether changing culture is best addressed by changing beliefs or by modifying structures and systems. Many organizations adhere to the "person model" of human error, which holds that adverse events arise solely from the unreliability of human nature. Such organizations often try to shift organizational values by naming, blaming and shaming perceived wrongdoers. Alternatively, organizations can modify behavior by changing organizational policies and practices, rather than directly attacking the collective attitudes, values, and beliefs of employees (which are in fact a product of the prevailing organizational environment).[17] That is, introducing policies and practices that are seen to effectively modify behavior have a tendency to bring actors' values further into line with them. Acting and doing, and seeing tangible results, can drive changes in thinking and believing, rather than the other way around.

Establishment of a *just* culture is the first vital step in engineering a safer culture. While employees will be disinclined to report errors and near misses in a wholly punitive culture, a totally blame-free culture is equally undesirable given that some unsafe acts warrant retribution. Importantly, leadership must strike a balance between the systems approach that emphasizes organizational learning, and the need to retain personal accountability and

discipline.[8,10,18-20] In the end, hospital leaders must hold individuals accountable for the safety environment while also providing them with the security of knowing they will not be blamed for system failures beyond their control.[7] In short, formation of a just culture requires the establishment of a zero tolerance policy for reckless conduct, counterbalanced by a widespread confidence that unintended unsafe acts will generally go unpunished.

Cultivation of a *reporting* culture is the next critical step in creating a safer organizational culture. Once a just culture is in place, the workforce should feel safer reporting errors and near misses. However, important psychological and organizational barriers to reporting are likely to remain. For example, people are naturally reluctant to confess mistakes and risk blame or the possibility that reports will be kept on permanent record and held against them in the future. Also, workers may be skeptical that reporting errors, particularly those that reveal system weaknesses, will actually spur managerial actions that lead to meaningful change. As a result, staff may come to believe that event reporting requires more time, effort, and risk than it is worth. Potential strategies to overcome these barriers and support a reporting culture include maintaining the confidentially of those who report adverse events; granting partial indemnity against disciplinary procedure; separating the report collection and analysis functions; and delivering timely feedback to the entire organization.[17]

Even with an effective incident and near miss reporting system in place, organizations must also work to develop a *learning* culture to truly reap the benefits of institutional memory that stem from the capacity to uncover and track safety risks.[17] Drawing on the social science literature on organizational learning,[21] Reason & Hobbs highlight the distinction between single-loop and double-loop learning.[17] Organizations that engage in single-loop learning review only the actions and take person-focused countermeasures such as naming, blaming, shaming, and retraining. [17] In such cases, the organizational learning process stops and solutions are restricted to disciplinary action and retroactive fixes. In contrast, organizations that engage in double-loop learning approach adverse events as organizational learning opportunities, challenging and transforming the basic assumptions that brought about the unsafe act. Double-loop learning is the manifestation of a systems approach to understanding human error, and can lead to systemic reforms rather than local repairs. Organizations that use double loop learning are less preoccupied with *who* blundered than with *how* and *why* the existing policies, practices, and safeguards failed to achieve the desired results.[17]

Is There Evidence that Safety Culture Affects Safety?

A growing body of research demonstrates a positive relationship between organizational culture and safety outcomes for both patients and employees. Mardon et al. found that hospitals with enhanced patient safety culture had lower AHRQ Patient Safety Indicator

(PSI) scores for in-hospital complications and adverse events.[22] Singer et al. and Rosen et al. report a negative relationship between hospital safety culture and the PSIs, finding that frontline employees' perceptions about safety climate were more predictive of adverse events than those of senior management, and individual psychological and interpersonal measures of safety climate were more predictive of safety events than more distal organizational and work unit factors.[23,24] Huang et al. found that intensive care unit employees' perceptions of management and safety climate were negatively, albeit moderately, associated with patient outcomes including mortality and length of stay.[25] Additionally, hospitals with higher levels of group culture have been shown to experience fewer patient falls resulting in injury[26] and ICUs that report positive organizational climates have lower rates of occupational injury and blood and body fluid exposures.[27] In contrast, hospitals with poorer organizational safety climate and higher workloads have demonstrated an increased likelihood of employee needle-stick injuries.[28]

Hansen et al. found that hospitals with poorer safety climates had higher readmission rates for acute myocardial infarction (AMI) and heart failure (HF).[29] Typically, staff perceptions of safety culture vary by management level and professional discipline, with senior managers perceiving better safety culture than frontline employees,[30-33] and physicians perceiving better safety culture than nurses.[31,34]

Patient Safety Culture Surveys

The use of safety culture surveys to diagnose problem areas and effectively target interventions to improve patient safety culture has been well documented. For example, Sexton et al.[35] report that a patient safety program designed to improve teamwork and safety culture in a large cohort of intensive care units resulted in significant improvements in overall mean safety climate scores, and McCarthy and Blumenthal highlight a hospital that reduced ventilator-associated pneumonia by 84 percent and device-associated bloodstream infections by 63 percent by using a range of strategies to strengthen its organizational culture of safety.[36]

The rationale behind safety culture surveys is that organizations cannot change what they do not measure. In order to achieve a culture of safety, hospitals and their employees must understand the prevailing values, beliefs, norms, attitudes and behaviors with regard to patient safety in their facility. As safety culture has become increasingly recognized as a central factor in hospital quality and safety improvement efforts, culture surveys have also gained prominence. While there are a number of patient safety culture measurement tools,[37,38] the AHRQ Culture Survey is among the most rigorously tested and well established of these instruments.[39] The survey has been psychometrically tested and validated in a number of settings[16,37,40,41] and is one of the only instruments that provides an

extensive comparative database that allows users to benchmark their organizational safety culture against other units or hospitals.[38]

By administering a culture survey, health care organizations can establish baseline measures of organizational safety culture, identify areas in need of improvement, and monitor the impact of patient safety initiatives over time.[9,42-44] They can also conduct internal and external benchmarking to satisfy health system directives or regulatory requirements.[9] Perhaps the greatest value of culture surveys is their ability to raise the profile of, and promote conversations around, patient safety within health care organizations.[45,46] In the end, the usefulness of cultural assessment data depends greatly on the involvement of key stakeholders, focused strategic planning, the use of effective data collection procedures, and a commitment to meaningful change.[9]

Methodological Concerns

A number of studies have questioned the construct validity, rigor, and potential unintended consequences of safety culture surveys.[13,14,39,47-51] Others warn that because staff, departmental, or hospital-level characteristics may account for differences in survey results, caution should be exercised when using results to design and enforce rules, sanctions, rewards and other organizational policies.[50] Scott et al. argue that culture change policies may yield a range of unintended and dysfunctional consequences.[51] For example, in addition to promoting constructive change, the emphasis on performance management may encourage a focus on some areas to the detriment of others (particularly those which defy quantification); complacency with quality improvement if the organization achieves a satisfactory ranking; misrepresentation of the data through creative accounting or fraud; or myopic concentration on short-term issues to the detriment of longer-term dynamics that only show up in survey or other data over time.

The AHRQ Hospital Survey on Patient Safety Culture

The Survey Instrument

Released in 2004, the AHRQ Culture Survey was developed to promote a culture of safety and quality improvement in U.S. hospitals.[16] The Culture Survey is a diagnostic tool, intended to be deployed in conjunction with targeted safety improvement strategies. Initial administration of the survey allows hospitals to establish baseline data with future reassessments facilitating measurement of changes in safety culture over time.

The Culture Survey examines the patient safety culture of an organization from the perspective of hospital staff. It is intended for a range of different employees, including frontline clinical and nonclinical staff, pharmacy and laboratory personnel, hospital-employed physicians, and hospital supervisors, managers, and administrators. The survey

and accompanying toolkit provide hospital officials with the basic knowledge and tools needed to conduct a safety culture assessment, as well as ideas for using the survey data.

The Culture Survey contains 42 items that measure 12 dimensions or composites of patient safety culture, as well as two single-item outcomes questions that ask respondents to provide an overall grade on patient safety for their work area and the number of adverse events they have reported in the past year. Most items use 5-point Likert scales of agreement ("Strongly disagree" to "Strongly agree") or frequency ("Never" to "Always") to measure staff perceptions and attitudes. Respondents are also asked to provide limited background demographic information about their work area, staff position, and whether they directly interact with patients.[41] The twelve composite measures include communication openness; feedback and communication about error; frequency of events reported; handoffs and transitions; management support for patient safety; non-punitive response to error; organizational learning- continuous improvement; overall perceptions of patient safety; staffing; supervisor/manager expectations and actions promoting safety; teamwork across units; and teamwork within units.[16]

While the Culture Survey was designed to be used in different types of hospitals, the survey form and feedback report templates are available as modifiable electronic files to allow further customization of the survey. However, developers recommend making only those changes that are absolutely necessary, as any modifications may affect the reliability and validity of results and make comparisons with other hospitals difficult. The survey emphasizes measurement at the unit level because staff members are typically most familiar with the safety culture in their immediate work area. Small hospitals that do not have highly differentiated units are advised to modify survey instructions or items that focus on the "unit" to focus on the hospital as a whole.

Conducting the Survey

How the Culture Survey is administered is critical, both in terms of the resources needed and the validity and reliability of the results. Careful planning is vital to ensure that hospitals have the appropriate resources for administering the survey and analyzing and disseminating the results. To ensure effective deployment of the Culture Survey, hospitals should engage in a thorough planning process that takes into consideration available human and financial resources, the desired scope and schedule of the project, and the in-house technical capacities of the hospital. While rural hospitals in particular must carefully weigh resource availability, they should also keep in mind that surveying a greater number of staff members will increase the likelihood of achieving a representative sample of respondents.

Though it may add considerable expense to the project, the use of an outside vendor to perform data collection and/or analysis can offer advantages. Vendors with expertise in survey research can help hospitals obtain better quality results in a timelier manner, and ensure the neutrality and credibility of the survey process. Importantly, staff may feel their responses will be treated with greater confidentiality when reporting to an outside vendor. Alternatively, hospitals that belong to a system may seek to involve their corporate headquarters in a system-wide survey effort to lessen the human and financial resource burden on their facility and impart a greater degree of confidentiality to the process. Either way, hospitals will need to establish a project team whose responsibilities include selecting a sample; establishing department-level contact persons; preparing survey materials; distributing and receiving the survey; tracking responses and response rates; handling data entry, analysis, and report preparation; and, where applicable, coordinating with and monitoring an outside vendor. For hospitals that choose to administer the survey themselves, Sorra and Nieva offer extensive guidance on coding, cleaning, and analyzing survey data as well as producing summary reports.[16]

Notably, a member of our expert panel cautioned against outsourcing the survey process to a third party, as hospitals may be less likely to "own" the intervention. That is, given the survey's potential to stimulate conversation and drive the quality improvement process, the more hospital staff actively engages with the tool, the better. Panel members also acknowledged the importance of having an experienced analyst helping to interpret results. For example, staff members often think that they and their co-workers practice good teamwork, scoring their work area highly during the baseline assessment. However, following training people realize they didn't understand the concepts as well as they thought and, as a result, report lower perceptions of safety culture upon reassessment. Without an analyst capable of explicating this dynamic, declining survey results may discourage administrators from continuing what is actually an effective patient safety program.

Although the Culture Survey can be administered on-line, evidence suggests that web-based surveys typically have lower response rates than paper-based surveys.[52] Potential advantages of a web-based approach includes simpler logistics vis-à-vis survey dissemination; minimal need for data entry or cleaning; and the potential for faster data collection. Disadvantages include the time needed to develop and test the web-based survey; limited internet or email access among members of the sample group; and individual differences in computer literacy.

Comparing Results

AHRQ created the Hospital Survey on Patient Safety Culture User Comparative Database to allow hospitals to compare survey results with those of other facilities; to support internal assessment and learning during patient safety interventions; to help users identify areas of

strength and weakness vis-à-vis patient safety culture; and to provide a database that tracks changes in patient safety culture over time. The 2012 report includes results from 1,128 hospitals and 567,703 hospital staff respondents, with trending data available for 650 hospitals that have administered the survey and submitted data on multiple occasions. The database provides a "rolling" indicator by retaining data for up to 3.5 prior years and replacing it as more recent data becomes available. The full report contains detailed information on a range of hospital characteristics (e.g., bed size, teaching status, ownership and control, geographic region) as well as respondent characteristics (e.g., work area, staff position, and level of interaction with patients).[53]

Overall, characteristics of the hospitals included in the 2012 database are consistent with the distribution of American Hospital Association-registered hospitals. Notably, the smallest hospitals (6-24 beds) had the highest percent positive scores across all patient safety culture composites (68%) while larger hospitals (400 beds or more) had the lowest (60%); hospitals with 49 beds or less had the highest percentage of respondents who gave their work area a patient safety grade of "excellent" or "very good" (80%) while larger hospitals again scored the lowest (71%).

The four composites with the highest percent of positive responses in 2012 were teamwork within units (80%), supervisor/manager expectations and actions promoting patient safety (75%), organizational learning-continuous improvement (72%), and management support for patient safety (72%). According to respondents, the areas with the most potential for improvement were non-punitive response to error (44%), handoffs and transitions (45%), and staffing levels (56%). For more on the 2012 User Comparative Database Report, visit: http://www.ahrq.gov/qual/hospsurvey12/

Promoting a Culture of Safety in Rural Hospitals

To develop a culture of safety, hospitals must acknowledge the high-risk nature of their work; establish a blame-free environment that supports reporting of adverse events and near misses; encourage cross-discipline and cross-rank collaboration in seeking solutions to patient safety problems; and allocate human and financial resources to address patient safety concerns.[54]

Wakefield notes that senior leadership in rural facilities must demonstrate a strong commitment to patient safety as shown in their business and strategic plans and, in addition to allocating financial resources, they must help drive a fundamental cultural reorientation to create an environment in which employees feel safe to report errors.[3] This is especially challenging in rural facilities given the typically small staff size and resultant lack of anonymity.

While patient safety culture surveys are an important tool for promoting a culture of safety, it is important that CAHs pursue a diversified strategy for improving patient safety. Coburn et al. recommend that rural hospitals adopt a comprehensive patient safety program that "sets measurable objectives, provides patient safety educational initiatives for employees, and includes a system for reporting and responding to errors." They advise hospitals to develop protocols for root cause analyses (RCA); generate annual reports on errors; document organizational response to errors; and highlight the safety programs implemented to prevent similar adverse events in the future. In doing so, CAHs must adopt patient safety initiatives that fit with the environmental context and needs of their facilities.[55]

Because many popular patient safety interventions are developed in large urban or teaching hospitals, rural hospitals may face technological, staffing, financial and other organizational constraints that inhibit their implementation.[3,55,56] For example, many CAHs lack sophisticated health information technology, a formal and structured quality improvement process, or the level of financial and human resources needed to administer and analyze a survey.[57] Moreover, ensuring the anonymity of those who report adverse events can be a challenge in the small professional communities typical of CAHs and other rural hospitals. Finally, the lower census and limited service mix of rural hospitals often results in a low volume of measurable events, making it difficult to reliably assess the safety environment prior to and following patient safety interventions.[45,58]

Use of the AHRQ Culture Survey in Critical Access Hospitals

Despite the previously noted resource constraints on rural hospitals, the Culture Survey has demonstrated its value to patient safety initiatives in CAHs. For example, the Tennessee Rural Hospital Patient Safety Demonstration project used the Culture Survey in tandem with two other patient safety interventions (use of personal digital assistants and the sharing of emergency room protocols to facilitate the standardization of care) as part of a multi-organizational effort to strengthen patient safety in eight small rural hospitals. The research team coached participating hospitals on event reporting, the survey process, data management and culture change, and administered the survey to all hospital employees (including non-clinical staff) on three occasions during the two year study period.[45,58]

Following each round of surveys, participating hospitals were provided with both an individualized hospital report and an aggregate report, allowing for internal and external benchmarking and the identification of areas in need of improvement. In response to preliminary results, all participating hospitals sought to develop non-blame, anonymous error reporting systems and adopted a variety of continuous quality improvement techniques including RCA, forced function, and surgical pause.[45] Hospitals also began using control charts to better understand system processes and monitor organizational process change;

increased board involvement in patient safety issues; encouraged greater collaboration and communication among hospital staff; and began monitoring patient safety through walk-arounds, medication counts and reporting, and evaluation of inventory discrepancies. [45] Upon redeployment of the survey, composite hospital results improved in nine of the survey's twelve dimensions, with the largest improvements in communication openness, feedback and communication about errors, teamwork within areas, frequency of events reported, and non-punitive response to errors.[45,58]

Rural Modifications to the Culture Survey

Jones and colleagues also demonstrate the effectiveness of the AHRQ Culture Survey in planning, executing and evaluating targeted patient safety interventions in CAHs.[59] The authors conducted a rural-adapted Culture Survey in 24 CAHs to obtain baseline assessments of their cultures of safety and stimulate dialogue about safety culture. The rural-adapted version of the Culture Survey was modified to better fit the CAH environment and ensure the anonymity of survey respondents. These demographic changes were also incorporated into a customized data tool for entering and analyzing small hospital survey results. The rural-adapted version of the Culture Survey is available from the Nebraska Center for Rural Health Research website (http://www.unmc.edu/rural/patient-safety/culture%20survey/culture-survey.htm).

The results were used to develop benchmarks and plan safety culture educational interventions to address areas in need of improvement. In order to develop the hospitals' organizational infrastructure for voluntarily reporting and analyzing medication errors, use of the survey was coupled with training in MEDMARX®, an internet-based, anonymous medication error-reporting program. Twenty-one of the CAHs participated in a second round of surveys to evaluate the effectiveness of the MEDMARX® training, and 17 of these hospitals engaged in a variety of other safety culture educational activities. In addition to developing their reporting cultures, these hospitals established protocols for determining the blameworthiness of unsafe acts (just culture); carried out teamwork training emphasizing knowledge, skills and beliefs that support coordination within and across work areas (flexible culture); and adopted a range of approaches to communicate about and learn from errors, including Leadership WalkRounds™, unit/departmental safety briefings, aggregate RCA of non-harmful events, and individual RCA of harmful errors (learning culture).[59]

Upon reassessment, the average scores on the 12 dimensions of the Culture Survey increased for the 17 CAHs that participated in follow-up safety culture educational activities; conversely, scores decreased among the four CAHs that chose not to participate (except for the frequency of events reported dimension). The authors' findings are consistent with other research showing that perceptions of safety culture vary by work area and

position, with non-clinician management reporting more positive assessments than nurses and providers actively engaged in patient care. Also, surgery and lab personnel reported more positive perceptions of safety culture than acute/skilled care personnel in the same organization, signifying the importance of microcultures within a single organization and the impact of differences in safety culture training within health care professions.[59]

Once survey results have been obtained, organizations should perform internal and external benchmarking; "drill down" on high and low scores to celebrate successes and prioritize areas in need of improvement; share the findings to encourage dialogue about safety culture; and explore participatory action plans that engage staff in system wide improvement strategies.

Strategies to Develop a Culture of Safety

To develop a culture of safety, rural hospitals must acknowledge the high-risk nature of their work; establish a *just* environment conducive to *reporting* adverse events; encourage cross-discipline and cross-rank *learning* and collaboration; and allocate the necessary human and financial resources to carry out patient safety initiatives.[3,54]

Leadership is pivotal in creating an organizational culture that values transparency, communication, and mutual respect.[60,61] Effective leadership is characterized by the ability to project clear expectations for employee behavior and adapt to situational demands.[62] Indeed, Sammer and colleagues note that "leaders must view linkages between organizational culture, a rapidly changing workforce, and financial and quality success."[10] Leaders that promote workforce education and embed simple rules and behaviors can improve attitudes around teamwork and safety climate, boost employee satisfaction, and reduce turnover among staff.[5]

Other strategies to improve patient safety include implementation of situational briefing models, pre- and post-surgical briefings, team huddles, critical event trainings and simulations, standardized communication processes, conflict resolution, and leadership walkrounds.[5,60] Direct support from senior management, the board of directors, and physician and nursing leadership can ease the burden on busy front line workers, provide a broader organizational perspective on quality improvement efforts, and convey the status and authority required to resolve problems that cross organizational boundaries.[63]

Similarly, State Flex Programs and Flex Coordinators can play a critical role in providing the leadership and assistance needed by CAHs interested in the Culture Survey. In addition to providing financial support, State Flex Programs can encourage the use of evidence-based

patient safety programs; offer technical assistance and training; facilitate administration and analysis of the Culture Survey; assist with external benchmarking; and share findings across CAHs.

Additional Resources and Tools to Enhance Patient Safety Culture

The following resources from the Agency for Healthcare Research and Quality (AHRQ), the Institute for Healthcare Improvement (IHI), the Joint Commission and others can be used to enhance hospital patient safety culture and improve the quality and safety of care.

- **2012 Hospital Survey on Patient Safety Culture User Comparative Database Report.** http://www.ahrq.gov/qual/hospsurvey12/

- **AHRQ Health Care Innovations Exchange.** http://www.innovations.ahrq.gov/index.aspx

- **AHRQ Hospital Survey on Patient Safety Culture Adapted for Critical Access Hospitals.** http://www.unmc.edu/rural/patient-safety/culture%20survey/AHRQ%20HSOPSC%20Rural%201107.pdf

- **AHRQ Quality Indicators Toolkit for Hospitals.** http://www.ahrq.gov/qual/qitoolkit

- **Improving Patient Safety in Hospitals- A Resource List for Users of the AHRQ Hospital Survey on Patient Safety Culture.** http://www.ahrq.gov/qual/patientsafetyculture/hospimpptsaf.htm

- **IHI Knowledge Center**. http://www.ihi.org/knowledge/Pages/default.aspx
  Patient Safety direct link: http://www.ihi.org/explore/PatientSafety/Pages/default.aspx
  Developing a Culture of Safety direct link: http://www.ihi.org/knowledge/Pages/Changes/DevelopaCultureofSafety.aspx

- **Joint Commission Resources, The Essential Guide for Patient Safety Officers.** http://www.jcrinc.com/Books-and-E-books/patient-safety-officers-handbook/447/

- **Nebraska Center for Rural Health Research.** http://www.unmc.edu/rural/default.htm and/or: http://www.unmc.edu/rural/patient-safety/default.htm

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