A Statewide Approach to a Just Culture for Patient Safety: The Missouri Story

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The Missouri Just Culture Collaborative brought together health-care providers, regulators, and other key stakeholders to learn and implement the principles of Just Culture. A survey was used to determine baseline understanding of Just Culture. Under the leadership of the Missouri Center for Patient Safety, 67 health-care providers and regulatory agencies worked together to implement aspects of Just Culture. The collaborative led to an improved understanding between providers and regulators about barriers to implementing true Just Culture and how regulators can support provider efforts to improve the safety culture. Also, health-care leaders who more actively participated in the collaborative's interventions appeared to gain a better understanding of staff perceptions of their organization's safety culture. While implementation of Just Culture is a long journey, Missouri has set the stage for health-care providers and regulators to move together toward a true Just Culture to improve patient safety.

According to Lucian Leape, Professor of Health Policy at Harvard University, the single greatest impediment to error prevention in the medical industry is "that we punish people for making mistakes" (Leape, 1994).

Just Culture is a concept of a societal change in the perception and response to health-care errors that leads to improved risk management and increased reporting of near misses and errors—and subsequently, to learning and error prevention (Marx, 2001). This concept recognizes that although human beings make mistakes, individuals can manage their behavioral choices to improve the chance of achieving the desired outcome. Just Culture teaches us how to productively coach individuals about reliable behaviors while acknowledging the need for remedial and disciplinary actions to improve system safety.

In a Just Culture, a sense of shared accountability holds health-care organizations accountable for the systems they have designed and responds to the behaviors of staff members in a fair and just manner. It holds staff accountable for their behavioral choices and for reporting errors and system vulnerabilities. A Just Culture is an open, learning culture that encourages staff members to do everything possible to design a better system and make better behavioral choices to improve the safety of care.

Event reporting and investigation is integral to the task of managing patient safety risk; in event investigation, uncovering meaningful information to mitigate future risk is crucial. A common perception is that health-care and regulatory safety cultures do not support open and honest reporting or participation in event investigations. There are many reasons why health-care professionals might not come forward or honestly report their participation in an untoward event, including the threat of punitive action by an employer or state board, exposure to a lawsuit, or harm to their reputation.

Spectrum from a Blame-Free Policy to Punitive Discipline

Where an organization's disciplinary policy falls along the spectrum of "blame-free" to "punitive" is key to its ability to identify and mitigate risk. Unlike a punitive or blame-free culture, Just Culture reflects a higher level of development in our understanding of how to be effective health-care leaders—a major evolution in how to learn from mistakes (see Figure 1). Just Culture sits in contrast to both a highly punitive culture and a blame-free culture. It maintains a balance between open reporting and individual accountability to maximize safety (Marx, 2001).

Although focusing on the system, Just Culture does not lose sight of individuals in that system. At its heart is the process of identifying responsibility for events, to determine which stemmed from systemic factors and which stemmed from an individual's actions.

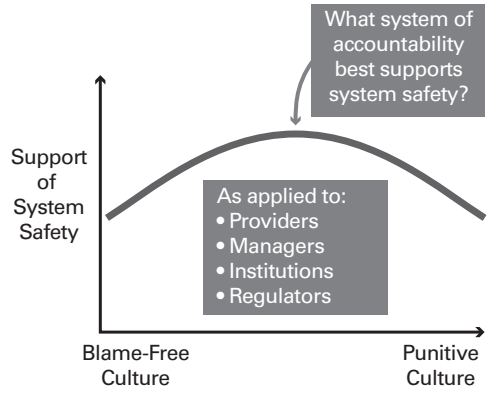
Today's health-care environment tends to hold individuals accountable for systemic success and to discipline individuals involved in errors, instead of analyzing the system for needed improvements. Just Culture, on the other hand, uses a systematic process to determine when the system itself needs to be adjusted and when disciplinary action needs to be taken against an individual to promote organizational safety. Ultimately, Just Culture allows better management of critical elements within our control, enabling us to design safer systems and help staff make safe behavioral choices.

Just Culture anticipates human error, captures errors before they become critical, and permits recovery when an error's consequences cause patient harm. Systems must be designed to help people make good decisions and to support them in doing their jobs safely and correctly the first time. Just Culture helps organ-

FIGURE 1

System Accountability Across the Spectrum

This graph shows the spectrum of system safety and accountability. A balanced approach to accountability is optimal, with the ideal located between the two extremes of a blame-free culture and a punitive culture. The balanced approach should apply to providers, managers, institutions, and regulators working under a common model of improvement.



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izations to deemphasize events, errors, and outcomes and to focus more on understanding risk, system design, and management of behavioral choices. It views errors and outcomes as outputs to be monitored while regarding system design and behavioral choices as inputs to be managed (see Figure 2).

Core Set of Beliefs in Just Culture

To implement Just Culture, an organization must begin with a core set of beliefs—simple truths about the predictable fallibility of human beings within social systems and the management of risk. The concepts discussed below make up the core set of beliefs in a Just Culture (Marx, 2001).

To Err Is Human

Regardless of their profession, training, and available tools, all human beings make mistakes. Yet in critical, high-risk jobs such as health care, we often expect them to be immune from human error.

To Drift Is Human

All human beings, including well-educated and dedicated professionals, sometimes drift away from the well-designed systems and procedures they are familiar with—and this behavior unknowingly creates risk. For example, when we learn to drive, we are taught to place our hands on the steering wheel at the 10 and 2 o'clock positions to help us stay alert and in control of the car. Yet few of us drive this way. By ignoring proper hand placement, we are unintentionally creating risk (although in this case the negative effects of widespread noncompliance are rare).

Risk Is Everywhere

Health-care systems are complex and risk-prone. In Just Culture, we must always look for the risks around us and be willing to raise our hands—not only when we make a mistake but when we see risk that needs to be addressed.

We Must Manage in Support of Our Values

When human behavior is assessed within Just Culture, the following question arises: Is the behavior consistent or inconsistent with the organization's values? In health care, many values exist besides safety; they include patient privacy and dignity, fiscal responsibility, and access to health care. Just Culture assesses how individuals make behavioral choices in alignment with the organization's shared values.

We Are All Accountable

A fundamental attribute of Just Culture is the balance of accountability between systems and human behavior. Health-care institutions are accountable for the systems they have designed and for supporting safe choices by patients, visitors, and staff. As components of the system, staff are accountable for the quality of the choices they make.

Three manageable behaviors

Just Culture defines three manageable behaviors—human error, at-risk behavior, and reckless behavior. For each behavior exists a recommended response to best support a safety culture.

Human Error

Human error occurs when a person does something other than what he or she intended—makes a slip, a lapse, a mistake. In some cases, the system may set up the individual to fail and then allow that person to fail; therefore, the system should be addressed.

Just Culture, in contrast, views human error as a product of system design and behavioral choices. It manages human error by consoling the individual involved, then adjusting system processes, procedures, and design; staff training; and the environment.

At-Risk Behavior

At-risk behavior is a behavioral choice that increases risk where risk is not recognized, or where it is mistakenly believed to be justified. Commonly, at-risk behavior results from subtle drifting, which can be challenging to manage. It is best managed by coaching the individual to become aware of the risk and by identifying and improving the system issues that may have contributed to the at-risk behavior.

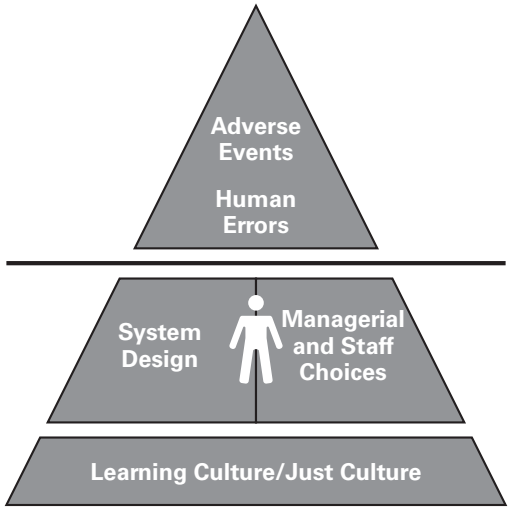
Reckless Behavior

Reckless behavior also is a behavioral choice. The individual recognizes the risk of his or her behavior but consciously disregards the substantial and unjustifiable risk of causing harm. Reckless behavior is best managed through disciplinary action based on the

FIGURE 2

The Just Culture Model: Managing Inputs to Produce Desired Outputs

Most adverse events and human errors (shown above the horizontal line in the triangle below) are inadvertent but directly manageable. By working "below the horizontal line," organizations can manage the "inputs" (system design and good managerial and staff choices) to get the desired "outputs" (fewer adverse events and human errors). Just Culture provides the foundation for accomplishing this.



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concept that human beings cannot control when they will make an error, but *can* control their behavioral choices. In Just Culture, conscious disregard of substantial and unjustifiable risk must be addressed, and punishment typically is a deterrent to future choices to engage in reckless behavior.

Shared Commitment—The Foundation of Just Culture

Shared commitment is the foundation of Just Culture. Executives, managers, and staff must mutually agree to align their behaviors with the values embraced by the organization. When these elements work together, Just Culture becomes the visible bond among individuals who believe in fairness, consistency, and continuous improvement. Just Culture can transform the way an organization manages risk—from reactively to proactively—while simultaneously maximizing both system reliability and human reliability (Marx, 2001).

Missouri Just Culture Collaborative

The Missouri Center for Patient Safety (MOCPS) engaged 67 organizations in the Missouri Just Culture Collaborative. The collaborative exemplifies how a statewide organization with appropriate funding can successfully engage diverse stakeholders to improve safe care processes. Represented in the collaborative were health-care systems, acute-care and critical-access hospitals, physician practices, regulators, nursing homes, professional schools, and nursing associations.

The collaborative brought education, training, and networking opportunities to more than 4,000 individuals, to help them integrate Just Culture concepts into their respective organizations. The goal was to improve the patient-safety culture through a proactive, open-learning approach among health-care providers and regulators. The project aim was to help participants more consistently identify and manage the system issues and behavioral choices of staff that can lead to adverse events and human errors.

The collaborative resulted in:

- integration of Just Culture concepts into provider and regulatory agency day-to-day activities
- commitments from some participants to fully integrate a Just Culture within their organizations
- improved understanding by health-care leaders of front-line staff members' perceptions of safety
- improved understanding among health-care providers and regulators of issues affecting their respective organizations and error prevention
- statewide interest in Just Culture and the potential for future activity.

Establishing Statewide Support and Involvement

The first educational session offered by MOCPS after its founding came in October 2006 with the educational session "Establishing a Just Culture for Patient Safety." This session featured David Marx, chief executive officer and founder of Outcome Engineering, a company that specializes in systems engineering and human factors. The 140 persons who attended this session (which exceeded attendance expectations) were enthusiastic and motivated; more than 85% expressed an interest in a statewide approach to implementing Just Culture (Outcomes Engineering, LLC, 2008).

MOCPS sought grant funding for a statewide project in response to interest by attendees and the Missouri State Board of Nursing (which sponsored the program and whose members had received training in Just Culture concepts). MOCPS obtained a grant of $254,000 to engage regulators, health-care providers, and other stakeholders across the state to collectively learn about the elements of Just Culture and to achieve the following goals:

- establish a forum for interaction and common learning among health-care regulators and providers to improve the culture for patient safety
- achieve consistency among health-care providers and regulators in their approach to managing human issues affecting patient safety
- improve appropriateness of referrals to state professional licensing boards
- improve collaborators' ability to proactively identify and manage the systems and human-competency issues that can result in errors.

The initial event of the collaborative was a statewide stakeholder meeting on September 17, 2007 to inform leaders of how Just Culture can improve the safety of care. The 38 leaders in attendance received an overview of the key concepts of Just Culture, an introduction to team members, and an overview of the collaborative's goals. This session resulted in representatives of the following organizations signing a statement of support for the project: Missouri Department of Health and Senior Services, Missouri State Board of Nursing, Missouri State Board of Healing Arts, Missouri Department of Mental Health, Missouri Nursing Association, Missouri State Medical Association, Missouri Hospital Association, Missouri Association for Healthcare Quality, Missouri Organization of Nurse Leaders, Healthcare Services Group, and Missouri's health-care systems (see Table 1).

After the statewide leadership meeting, 67 organizations applied for and were accepted into the collaborative. Participants included large and small hospitals, regulatory agencies, a nursing home, physician practices, home health agencies, a professional school, and a statewide nursing association. The participants were distributed geographically across the state.

Besides signing the statement of support, collaborating organizations signed a commitment form in which they agreed to:

- assign a champion for their organization
- identify team members, to include the chief executive officer, chief operating officer, chief financial officer, chief nursing officer, human resources director, selected clinical service directors and nurse managers, and patient safety officer/quality or risk manager
- complete the Just Culture for Managers™ online training program
- participate in the champion's training session
- take part in the regional team training sessions
- participate in pre- and post-collaborative assessments
- actively participate in collaborative activities
- implement learning achieved through the collaborative.

Before its launch, the project plan and survey tool were submitted for review by the institutional review board (IRB) and approved for exempted IRB status.

TABLE 1

Statement of Support

Supporters of and participants in the Missouri Just Culture Collaborative signed a statement of support to indicate they support the following principles of Just Culture:

- Medical errors and patient safety are a national concern to everyone involved in health-care delivery.
- Health-care providers and regulators are legally and/or ethically obligated to hold individuals accountable for their competency and behaviors that affect patient care.
- A punitive environment does not fully take into account systems issues, and a blame-free environment does not hold individuals appropriately accountable.

Organizations agree that:

- a culture that balances the need for a nonpunitive learning environment with the equally important need to hold persons accountable for their actions should be a goal.
- behavior, not outcomes, should be evaluated to differentiate human error, at-risk behavior, and reckless behavior.
- a learning environment should be established that encourages identification and review of all human errors, at-risk behaviors, near-misses, adverse events, and system weaknesses.
- a wide range of responses to safety-related events caused by lapses in human behavior should be considered, including coaching, education or training, demonstration of competency, additional supervision and oversight, and counseling/disciplinary action (when appropriate) to address performance issues.
- systems that enable safe behavior to prevent harm should be supported and implemented.
- organizations should collaborate to promote continuous improvement and establishment of a culture of learning, justice, and accountability to provide the safest possible environment for patients and staff.

Components of the Collaborative

The collaborative unfolded in five stages.

Stage 1: Precollaborative Assessment

A precollaborative assessment was done to establish a baseline of how well participating organizations understood and used Just Culture. Project researchers modified the Agency for Healthcare Research and Quality Hospital's Survey on Patient Safety Culture to incorporate Just Culture terminology and focus questions toward organizational leaders (Agency for Healthcare Research and Quality, 2004).

The survey was automated and administered online to champions and team members. Results were blinded and analyzed, and aggregate reports were provided to each champion for use within his or her organization. Modified survey questions were applicable only to health-care provider participants; therefore, a structured questionnaire was developed and given to participants from nonprovider organizations (see Table 2).

Stage 2: Champion Training

The first intervention component, champion training, was held on December 17, 2007. Sixty-seven champions were trained in Just Culture principles using case studies and the Just Culture Algorithm™ to guide decision making. Networking took place among champions and project team members to better understand champions' role in the collaborative.

Stage 3: Team Training

Team training was attended by 237 individuals. Regional training sessions were held with team members across the state to teach Just Culture concepts and provide instruction on using the Just Culture Algorithm, troubleshoot organizational barriers to Just

Culture implementation, work through case studies, and plan for implementation.

Stage 4: Additional Training Intervention

Additional funding was provided for 21 organizations to receive more intensive on-site education and training, to help them more deeply integrate Just Culture concepts into their organizations. Based on the respective organization's needs, on-site executive briefings, manager training, and/or staff training with Safe Choices™ resources from Outcome Engineering were provided.

The collaborative also included the following supportive activities:

- monthly teleconferences for champions and project teams that covered options and processes for implementation of Just Culture, implementation models by providers in other states, event investigation, Just Culture Algorithm use, coaching and mentoring, model human resource policies, and managerial accountabilities
- teleconferences with regulatory champions to address their unique needs
- in-person roundtable session with regulatory champions to discuss the unique issues and barriers facing regulatory implementation of Just Culture
- web network on which to post collaborative information, documentation, and frequently asked questions
- session of the Missouri Board of Nursing on event investigation.

Stage 5: Postcollaborative Assessment

After all interventions, participants responded to the same health-care provider survey tool and nonprovider questionnaire to identify changes in their understanding of Just Culture concepts and how to integrate these concepts within their organizations (attributable to the collaborative). Champions received a postcollaborative blinded report.

The MOCPS staff expanded education on Just Culture to statewide audiences by presenting to the Missouri Board of Healing Arts, Missouri Association of Rural Health, Peri-Operative Nurses Conference, and Missouri Board of Nursing Home Administrators. In addition, MOCPS published several articles in periodicals and newsletters for various health-care audiences.

TABLE 2

Examples of Survey and Questionnaire Topics

In precollaborative assessment (the first phase of the Missouri Just Culture Collaborative), health-care provider organizations were asked to answer questions on the following topics:

- How well people in the organization support one another
- Availability of staffing to support the workload
- Ability of staff members to work together as a team
- Whether staff members treat each other with respect
- Activities undertaken to improve patient safety
- Use of agency/temporary staff
- Staff members' belief that mistakes are held against them
- Mistakes that can lead to positive changes
- Evaluation of changes made to improve safety
- Proactive approaches to improving safety
- Supervisors' acknowledgement of suggestions and actions to improve safety
- How leaders individually support and acknowledge actions to improve safety
- Level of environmental support for freely reporting near misses and errors
- Types of event reports provided by the organization, including those in which no patient harm occurs
- Perception of the organization's overall safety of care
- Beliefs about staff being mindful of error and comfortable with reporting errors
- How leaders respond to errors reported to them
- Whether feedback is provided when errors occur

Nonprovider organizations were asked to answer questions on the following topics:

- Perception of patient safety within the organization
- Role of the organization in supporting an environment that promotes patient safety
- What Just Culture means
- How Just Culture principles can be implemented by health-care organizations
- How the organization can support implementation of Just Culture principles by providers

Findings from the Collaborative

The Missouri Just Culture Collaborative produced several important outcomes.

Perceptions of Patient Safety

After the collaborative, the majority of participants reported being intent on "creating a learning environment focused on improving systems" to reduce errors rather than a "punitive environment focused on blame" when an error occurs. Some indicated they now regard patient safety as more of a priority after participating in the collaborative. In particular, there was recognition of the regulator's role and its impact on a learning environment in health-care organizations.

Understanding of Just Culture

Most participants indicated they had a deeper and clearer understanding of Just Culture concepts and principles after the collaborative. A few said they had a better understanding of how to determine if a system problem exists or if disciplinary action is needed. Several reported having a better understanding of how to apply the Just Culture Algorithm and the overall Just Culture model for decision making when an event occurs, as well as a better understanding of the regulator's role in working with health-care organizations to apply Just Culture principles.

Regulators' Perspective

Regulators indicated the collaborative improved their understanding of the complexity and resources health-care organizations need to implement Just Culture. They saw their role as being less directive and more supportive by "actively encouraging health-care organizations to implement Just Culture principles." They also identified legislative and regulatory barriers to implementing Just Culture principles that limit their ability to change internal processes and procedures.

Regulators described their need to maintain the role of oversight agents. Some expressed concerns about public perception of the regulator's role in taking disciplinary actions against individuals involved in adverse events, as well as a need for better public understanding of a systems approach to safety improvement.

In addition, regulators expressed an understanding of the impact Just Culture can have on improving safety by learning from mistakes and uncovering the root cause of events. They indicated an interest in working together to establish consistent and equitable event-investigation processes and in developing cooperative relationships among regulators, agencies, and health-care organizations to create a stronger learning environment for all.

Champions' Feedback on the Collaborative

Providing feedback about the collaborative, champions identified the training sessions and the Just Culture Algorithm as its most useful components. Many organizations planned to seek additional resources outside the collaborative to further implement Just Culture. Other feedback involved these topics:

- barriers to internal implementation of Just Culture
  - limited resources
  - lack of evidence of return on investment
  - limited commitment of administration and department heads
  - organizational resistance to new concepts
  - staff turnover
  - "buy-in" and support from human resource directors and front-line managers
  - belief that punishment is the best corrective action
  - inconsistency among managers
  - concern that blame and finger-pointing will return.
- appreciation for the collaborative and the ability to work together to implement common safety improvement strategies.

Comments from champions included the following:

- "Without the collaborative, I don't know that we would be as far along with the change in our culture. . . . Physicians are even asking about the model and how to use it for peer review."
- "Thanks for getting Missouri on the right track!"

The Future of Just Culture

Outcome Engineering continues to lead a national movement to implement Just Culture not only in health care but in aviation and other high-risk industries. Discussions continue with federal and state legislators and regulators about how Just Culture principles can be incorporated into processes to improve the safety of care (including the need for regulatory investigations to address system issues) as well as individual competency issues. Additional work has been undertaken to help consumers understand Just Culture concepts and how health-care providers and employees in other high-risk industries manage events.

From the perspective of the MOCPS, the Missouri Just Culture Collaborative has set the stage for its work as a federally designated Patient Safety Organization (PSO). As a PSO, MOCPS will implement provisions of the Patient Safety and Quality Improvement Act of 2005 (Public Law 109-41) to establish a safe environment for health-care providers to report, analyze, and learn from adverse events.

"Just culture" is now common terminology among Missouri's health-care providers and regulators—and a key component of the statewide work of MOCPS. Many organizations have expressed an interest in establishing Just Culture, including hospitals that did not initially apply to participate in the collaborative, a nursing home that is taking part in a national Just Culture pilot, and collaborators that are pursuing full implementation of Just Culture. Regulators, for their part, are pursuing Just Culture activities within their investigative processes. We eagerly await the results of these additional activities in Missouri.

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