

PATIENT SAFETY SERVICES FROM JURAN HEALTHCARE



JURAN
HEALTHCARE

TRANSFORMING THE BUSINESS OF HEALTH CARE

Patient Safety Services

The purpose of the Juran Institute patient safety model is to provide a scientific approach to reducing serious safety events due to human error and system process breakdowns.

Serious safety events occur as a result of a timely combination of high-risk actions (human error because of the lack of compensatory actions) and high-risk conditions (high likelihood or probability of error). By reducing human error and strengthening process barriers, health care organizations have been shown to reduce serious safety events by as much as 80 percent to 90 percent in two years. The variation in results seen among health care organizations depends heavily on the current state of the patient safety culture of the organization. The culture of an organization can be described by the mission, vision, values, physician and leadership commitment, accountability, and behaviors of the members of that organization.

The Juran model for patient safety is based on the Juran Trilogy™. This was originally developed by Dr. Joseph M. Juran for quality management. Now it is used as a scientific approach for safety. It includes safety planning, compliance, and improvement and is designed to create a strong culture of safety, as well as improve human performance, process reliability, and serious safety events.

Each Institution Must Create a Patient Safety Culture

Conduct Patient Safety Culture Assessments

1. ***Patient Safety Culture Survey:*** Juran recommends a comprehensive assessment of the patient safety culture of the organization by using tools such as the survey created by the Association for Healthcare Research and Quality (AHRQ). The purpose of the survey is to provide leadership with the understanding of the behaviors and beliefs of the members of the organization in regards to certain patient safety culture aspects. These aspects include communication, empowerment and accountability, senior leader and management commitment to safety, the organization's ability to detect and learn from mistakes, disclosure, and overall patient safety grading. The results and comments that are captured in the survey can provide a platform for identifying opportunities for improvement in human performance and process improvement.
2. ***Behavior-Based Observations:*** This phase entails an observational assessment based on known patient safety standards set by the organization and regulatory agencies. Observations capture the true essence of culture by capturing the real behaviors of caregivers at the bedside. Although behavior-based observations are a powerful assessment tool, they also provide the cornerstone of human performance improvement and sustainability through the implementation of leadership rounding and peer coaching programs.
3. ***Executive and Staff Interviews:*** Interviews provide a platform for key members of the organization to provide feedback and elevate important issues of safety. These interviews also provide a useful avenue for generating and extracting ideas for improving key patient safety processes.
4. ***Incident Reporting System Analysis:*** The purpose of this phase is to identify key system issues and process breakdowns that are the potential root causes of serious safety events for the organization. High-

risk departments such as Emergency and Surgical Services should report at least 25 variances for every serious safety event. This ratio indicates a culture capable of detecting error precursors and potential root causes of serious safety events before they happen. Healthy variance reporting provides the capability of the organization to proactively reduce errors and the likelihood of events rather than relying just on reactive root cause analysis when serious safety events occur. Juran offers strategies to improve incident reporting and management follow-up, such as the Incident Reporting Index Severity Score (IRISS).

Juran Works to Develop Leadership, Nursing and Physician Commitment

1. **Organization Structure** is extremely important to ensuring the breadth and depth of performance improvement and patient safety activities. The proper organization structure can also provide a stable platform for chain of command and accountability systems.
2. **Strategic Deployment** provides the framework for prioritization of resources for the organization. Strategic deployment translates the corporate priorities into projects that can be impacted by front-line staff. Juran recommends that health care organizations devote at least 20 percent of the strategic priorities around quality improvement and patient safety. A strong correlation exists between a 20 percent devotion of strategic priority and transformational breakthrough improvements in quality and patient safety. Taking this leap also sends a strong message to front-line clinical staff that senior and physician leadership is committed to patient care.
3. **Quality and Patient Safety Infrastructure** (resources, policies, procedures, taxonomy, and data base development) is important to ensure oversight, accountability, and sustainability of quality improvement and patient safety initiatives. All quality and patient safety projects should have the appropriate executive champion. The individual project champions should report up through the oversight committee comprised of senior executives, physician champions, and board members. The oversight committee is accountable for the success of all patient safety initiatives in regards to project progression, program and data integrity, action plan completion, and meeting the strategic priorities and goals for the organization.
4. **Physician and Nursing** governance and performance improvement infrastructure provides the appropriate mechanism for accountability and sustainability of quality and patient safety initiatives. The success of projects and programs can only occur when the grassroots staff can understand and drive these initiatives. Governance committees provide the infrastructure for oversight and guidance of improvement projects, professional bylaws and standards, peer review, and multidisciplinary activities. Physician and nurse governance committees should independently govern bylaws and standards, but should always collaborate when dealing with multidisciplinary issues. Peer review cases that are found to be below the standard of care should report up through the quality and patient safety oversight committee for guidance.

Together We Create a Culture of Accountability

1. **Chain of Command Procedures for Physician Rule Violations** should be clear, concise, and communicated to all levels of the organization. When patient safety practices are compromised by any member of the staff, a feedback loop must be in place in order to return the system to a safe environment for patients. The variance reporting system should provide an anonymous way of reporting non-compliance, in addition to prompt accountability to ensure the empowerment of front-line staff. Once the chain of command is in place and enforced over time, the culture of the organization will mature to

enable a more focused approach to system issues rather than individual compliance issues. If physicians and staff are not held accountable to upholding quality and patient safety practices, then improvement projects will fail to provide any effective or sustainable results needed to reduce serious safety events and human error.

2. **Accountability System to Reduce Non-Compliance** should be developed and utilized as part of the overall performance management system. In health care, very few human resource performance management systems provide a healthy mechanism for dealing with human error, especially those involved in serious safety events. Accountability systems should be fair, just, consistent, and equally applicable to all levels and professional groups of the organization. A non-punitive culture must be established to ensure healthy incident reporting so that corrective action and improvement activities can occur.
3. **Team Leader Rounding** is vital to the sustainability of all patient safety initiatives. The mantra behind this concept is “you get what you inspect, not what you expect.” Rounding should always be purposeful and structured around the patient safety and behavior-based expectations defined for the organization. The purpose of rounding is to display management commitment to patient safety, uncover error precursors and chronic problems, obtain feedback from staff, and satisfy the 5:1 ratio of positive to negative feedback to staff. The 5:1 ratio of positive to negative feedback is a core competency for Team Leaders to ensure accountability to patient safety processes and behaviors.
4. **Peer Coaching Programs** (Safety Coach) are the cornerstone for patient safety culture transformation that occurs at the grassroots level by providing real-time coaching for continuous improvement. Safety coach programs provide real-time behavior-based monitoring, feedback, and data collection. Real-time behavior-based monitoring reduces both error precursors and serious safety events by transforming technique-based error prevention practices into patterns of behavior. The programs also provide data that can be used to track behavioral trends and human performance improvement.

Achieve Breakthroughs in Human Performance Improvement

1. **System-Wide Data Analysis** of serious safety events and incident reports allows the organization to identify and prioritize areas for improvement. Common cause requires a comprehensive data base that will allow stratification of event data using Pareto analysis. This type of analysis is also used to identify the high-risk conditions and high-risk actions that contribute to the causes of serious safety events. With the appropriate data, common cause analysis provides the basis for behavior-based expectations and error prevention techniques, red rules and project selection. Common cause analysis should be performed at least once per year for system-wide data and as needed for departmental or service line data.
2. **Establish Behavior-Based Expectations and Error Prevention Techniques** based on common cause analysis data, designed specifically to address the high-risk conditions and actions. The error prevention techniques provide the toolbox that enable staff to meet the behavior-based expectations. Behavior-based expectations and subsequent error prevention toolbox should be few in number and only relevant to specific improvement opportunities.
3. **Implement Red Rules**, which are a set of minimum standards associated with certain patient safety processes that MUST be met and require verbatim compliance (e.g. patient identification, proper hand hygiene, universal protocol, high-risk medication administration, and tag-out procedures). Red rules

should focus on the highest-risk activities at both the system and departmental levels, and always be placed ahead of productivity, revenue, and personal desire. They should be few in number in order not to dilute the significance of the red rules.

Achieve Breakthroughs in Patient Safety

1. ***Design for Six Sigma (DMADV) and Lean Design (LDMADV)*** provide a methodical approach to developing and launching patient safety programs and initiatives. When new services or processes are put in place, design methodologies enable safety barriers and error-proofing mechanisms to be built in to the processes. Most root causes in health care safety events are lack of standard processes, or that the processes in place lack the necessary barriers to prevent human error from reaching the patient. Examples include medication reconciliation, any processes where technology is being implemented, SBAR communication, new regulatory requirements, etc.
2. ***Lean Transformation and Six Sigma (DMAIC)*** should be utilized when current processes do not meet specific patient safety requirements. Lean Six Sigma design and improvement methodologies enable a proactive approach to error reduction. In most cases Lean and Six Sigma can be integrated to attack variation and inefficiencies and rework in processes. A common high-risk condition in health care is hand-offs. Hand-offs occur because there is waste and rework associated with variation in clinical practice and a lack of flow in clinical processes. Examples include medication delivery systems, patient identification processes, acute care flow, and clinical operations, financial and accounting operations, etc.
3. ***Root Cause Analysis (RCA) and Special Cause Analysis*** for error reduction are used when error precursors are identified or near miss/serious safety events occur. Root cause analysis is a 30-day-to-45-day process that identifies true root causes of events. Root causes must meet certain criteria and must provide correction actions to prevent recurrence. Because of resource constraints, root cause analysis teams are convened only under certain criteria and chartered by a senior executive champion. Special Cause Analysis (SCA) is a tool that can be used by anyone to help identify apparent cause and subsequent remedial actions. SCA reports are generated in great numbers and are normally used for minor events and error precursors. Both root cause analysis and SCA reports should generate data used for data analysis purposes.
4. ***Mistake Proofing*** is a tool that uses process and equipment design to significantly reduce or eliminate human error. Level I mistake proofing design makes it impossible to make an error (gas fittings that will not connect) and Level II mistake proofing significantly reduces the probability of making an error (bar coding medication administration).
5. ***PDSA*** is a rapid-cycle change tool used only when root causes are already known. PDSA can be used to implement small tests of change when dealing with evidence-based protocols at the local level.

About Juran

Juran Institute and Juran Healthcare

Juran was founded by Dr. J.M. Juran to provide innovative tools, techniques, and principles for attaining breakthroughs in quality. His mission was to help organizations around the world respond to the emerging needs of businesses and society. Juran Institute is a benchmarking, consulting, and training services firm that helps hospital systems implement your safety and performance excellence programs. We continually research best practice tools, methods, and technology to deliver the right training, at the right time, in the right way.

Juran Institute's services and products are delivered at your designated location – when you need them. Our areas of specialization include improving the quality of goods, services, and processes. We have provided our services to multiple for-profit organizations, not-for-profit government agencies, and health care systems for over 30 years. All of our services are customized to your culture, your language, and your needs. Our aim is to effectively transfer our knowledge to you, providing the self-sustaining know-how to achieve continuous, breakthrough business results long after we are gone.

Juran. The Right Safety Partner for Your System.

Juran wants to be your safety partner. Our services and training, publications, software, and support materials are unparalleled. We are adept at preparing your leaders, managers, and all levels of employees with the practical skills and in-depth knowledge they need to achieve tangible results on the job. The learning experience offered through our mentoring, training, and certifications is designed to enable our clients to accelerate their performance improvement efforts, deliver enhanced value to internal and external customers, and increase their organization's profitability.

We look forward to helping your organization improve processes, achieve efficiency in all endeavors, and increase customer satisfaction, so that your organization as a whole can earn a great return on its Juran Institute consulting and training investments.

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