



TARGETED SOLUTIONS TOOL®



NOW AVAILABLE FOR OUR INTERNATIONAL CUSTOMERS!

Joint Commission Center for Transforming Healthcare Targeted Solutions Tools®

- Hand Hygiene
- Hand-off Communications
- Safe Surgery
- Preventing Falls





TST®: A unique online application

Developed by the Joint Commission Center for Transforming Healthcare, the Targeted Solutions Tool® (TST)® is a unique online application that helps both domestic and international Joint Commission-accredited organizations solve some of the most persistent health care quality and safety problems.

Through a step-by-step process, the TST® guides organizations in accurately measuring their actual performance, identifying their barriers to excellent performance, and then directing them to proven solutions that are customized to address each organization's specific barriers.

The TSTs®...

- are confidential and separate from accreditation
- allow organizations to work at their own pace
- are accessible via centerfortransforminghealthcare.org

Targeted solutions: How they are identified

The Center uses Robust Process Improvement® (RPI®) methodology to solve complex issues in health care. RPI® is a fact-based, systematic, and data-driven problem-solving approach that incorporates the tools and concepts from Lean Six Sigma and Change Management methodologies, and is a key component to achieving high reliability. The Center participants, which include some of the nation's leading hospitals and health systems, have a great deal of experience using RPI® concepts and tools. The goal is to share the work of the Center through the Targeted Solutions Tool® (TST®). The TST® guides organizations through RPI® methodology to accurately measure their baseline performance, identify their root causes, and direct them to proven solutions that are customized to address each of their specific root causes without the user needing Lean Six Sigma or Change Management expertise.

Requesting access to a TST®

Both domestic and international staff at a Joint Commission-accredited organization can request access to the tool by going to the TST tab on the Center website (<http://www.centerfortransforminghealthcare.org/tst.aspx>) and clicking the 'Request Access' button.

TST®: How it works

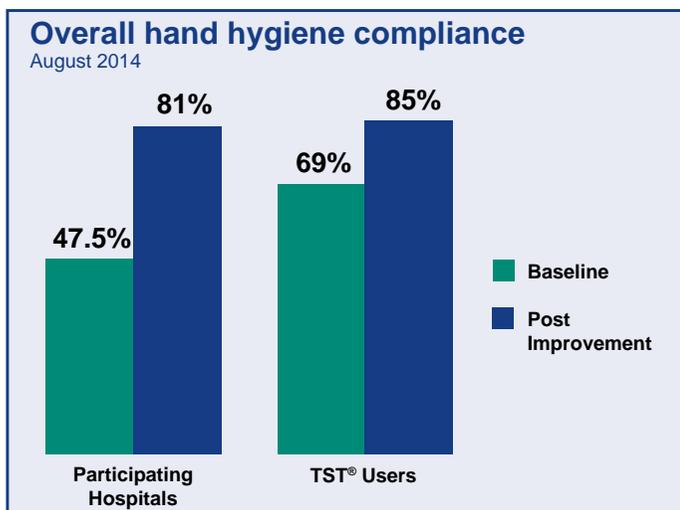
- Staff select a project and assemble a project team.
- Following the step-by-step processes outlined in the TST®, staff enter data on their current performance within the TST®.
- The TST® automatically generates charts and graphs to track performance and identify problem areas.
- After a short baseline data collection period, the project team implements proven solutions that are customized to address their specific barriers to performance excellence.
- After improvements are put in place, ongoing performance data is collected and entered into the TST® and the TST® creates new charts and graphs to highlight the improvement between their baseline and improved performances.
- Continuous improvement is measured and tracked through the TST® to help ensure sustainability.

An instructive video about using the TST® is available on the Center website at <http://www.centerfortransforminghealthcare.org/tst.aspx>.

TST®: Hand Hygiene

In the 1840s, Ignaz Semmelweis demonstrated a drastic reduction in mortality by infection through improvements in hand hygiene practices. And, since then, studies continue to show a reduction in HAI rates as hand hygiene compliance improves. Yet, compliance with hand hygiene continues to be a problem in health care organizations today. Thus the first set of targeted solutions was created by eight of the Center's participating hospitals and health care systems. These organizations worked closely with the Center using RPI® to identify barriers and develop solutions to hand hygiene compliance. These organizations were surprised to learn that their rate of hand hygiene compliance averaged 47.5 percent during their baseline data collection. After improvements were put in place, they reached an average compliance rate of 81 percent and those improvements were sustained for at least 11 months.

Many other hospitals across the country of various sizes collaborated with the Center to test the work of the original eight organizations and provided guidance on the development of the Hand Hygiene TST®. These hospitals experienced the same gains as the first eight organizations, on average, improving hand hygiene compliance by 23 percent and sustaining those improvements over time. Additionally, using the TST®, one health care system was able to show that they reduced their healthcare-associated infections by improving hand hygiene compliance. Since its launch in 2010, the TST® has collected over 1 million hand hygiene observations, and the data collected continues to demonstrate that health care organizations are significantly improving their hand hygiene compliance rates throughout the United States.



TST®: Hand Hygiene

The Hand Hygiene TST® has not only proven its effectiveness domestically, but has been successful at improving hand hygiene compliance internationally as well. In 2012, nine Joint Commission International (JCI)-accredited health care organizations from Asia-Pacific, the Middle East, and Europe successfully implemented the TST® in adult and pediatric care units. The group experienced a dramatic 72 percent improvement in hand hygiene practices based on thousands of direct observations. These clinicians found the TST® to be effective and easy to implement within their organizations. Each hospital faced distinctive challenges in hand hygiene practices which were addressed through the TST® process.

Hand hygiene: The foundation of infection prevention and control

- Hundreds of millions of patients worldwide are affected by healthcare-associated infections (HAIs) every year
- Thousands of deaths occur annually from HAIs
- HAIs result in huge financial losses, such as €7 billion in direct costs and 16 million in extra hospital days in Europe
- Improving hand hygiene among health professionals is one of the most effective ways to prevent HAIs
- Proper hand hygiene reduces HAIs, improves care, and saves billions in direct medical costs

“The TST® is easy to implement. Highly sophisticated, prompt analysis...helps to understand the source of variation and provide suitable and effective solutions.”

***King Faisal Specialist Hospital & Research Centre
Riyadh, Saudi Arabia***

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TST®: Safe Surgery

According to the best available estimate, there are approximately 40-60 wrong site surgeries per week in the United States. Research has shown that, often, there is usually no one root cause of failure. Rather, such events are frequently the result of a cascade of small errors that are able to penetrate organizational defenses. Because of this, the Center joined forces with the Lifespan system in Rhode Island to initiate the Safe Surgery project in July 2009. The goal was to improve the safeguards to prevent wrong site, wrong side and wrong patient surgical procedures by helping organizations identify, measure, and reduce risks across their surgical process areas, including scheduling, pre-operative, and operating room areas. Because the occurrence of wrong site surgery is rare, with most organizations going years without an occurrence, the TST® was designed to monitor surgical cases for weaknesses that could result in wrong site surgery, thus speeding up the ability to correct issues with the surgical process without the need to wait for a wrong site surgery to actually occur. In 2010, four additional hospitals and three ambulatory surgical centers joined the project. The original participating organizations were able to reduce the number of cases with risks by 46 percent in the scheduling area, 63 percent in the pre-op area, and 51 percent in the operating room area. The organizations that participated in the Center's project identified 29 main causes of wrong site surgeries that occurred during scheduling, in pre-op or pre-op holding, in the operating room, or which stemmed from the organizational culture.

Surgical cases with decreased risks

46% in scheduling



63% in pre-op



51% in the OR



TST[®]: Safe Surgery

The TST[®] for Safe Surgery:

- Allows an organization to take a critical look at its entire surgical care system, from the time a procedure is scheduled through the completion of the operation
- Identifies specific risk points in surgical booking, pre-op or pre-op holding, and the operating room that could potentially lead to a wrong site surgery event
- Standardizes practices and promotes consistency in perioperative processes across multiple providers within the same organization
- Promotes safe surgery practices that are critical to patient safety

Many other hospitals and ambulatory surgery centers across the country collaborated with the Center to test the work of the original organizations that participated in the project and provide guidance on the development of the Safe Surgery TST[®]. These organizations experienced gains similar to the original participating organizations.

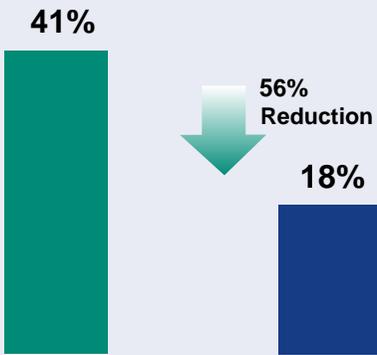


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TST[®]: Hand-off Communications

In many studies, ineffective hand-off communications have been a primary contributing factor in adverse events. This is why the Center launched the Hand-off Communications project in 2009. Ten of the Center's collaborating hospitals and health systems examined their hand-off communication issues, identified their specific causes for failures and barriers to improvement, and then identified, implemented, and validated solutions that improved their performance. Using the Hand-off Communications TST[®], health care organizations reported an increase in patient and family satisfaction; staff satisfaction; and successful transfers of patients. One health care organization reduced readmissions by 50 percent, while another organization reduced the time it took to move patients from the emergency department to an inpatient unit by 33 percent. Health care organizations were able to complete their hand-off communications project in approximately 4 months, using minimal resources. In fact, no staff were added and only minor changes were made to the roles and responsibilities of existing staff.

Percentage of Defective Hand-offs for the Receiver



This bar chart represents aggregated data from the participating hospitals (N=7) that have fully implemented solutions

TST®: Hand-off Communications

The Hand-off Communications project does not have to be limited to one hospital setting and can include looking at transitions of care to external facilities as well. One hospital focused on transitioning patients from their in-patient units to a nursing home and were able to reduce their inadequate hand-offs from 29 percent in baseline to <1 percent after improvements were put in place. This improvement in hand-off communications was attributed to reducing their 30-day readmission rates from 21 percent in baseline, to 10 percent after improvements.

The TST® for Hand-off Communications:

- Facilitates the examination of the current hand-off communication process
- Provides a measurement system that produces data that support the need for improving the current hand-off communication processes
- Identifies areas of focus, such as the specific information needed for the transition that is being measured
- Provides customizable forms for data collection
- Provides guidelines for most appropriate hand-off communication processes

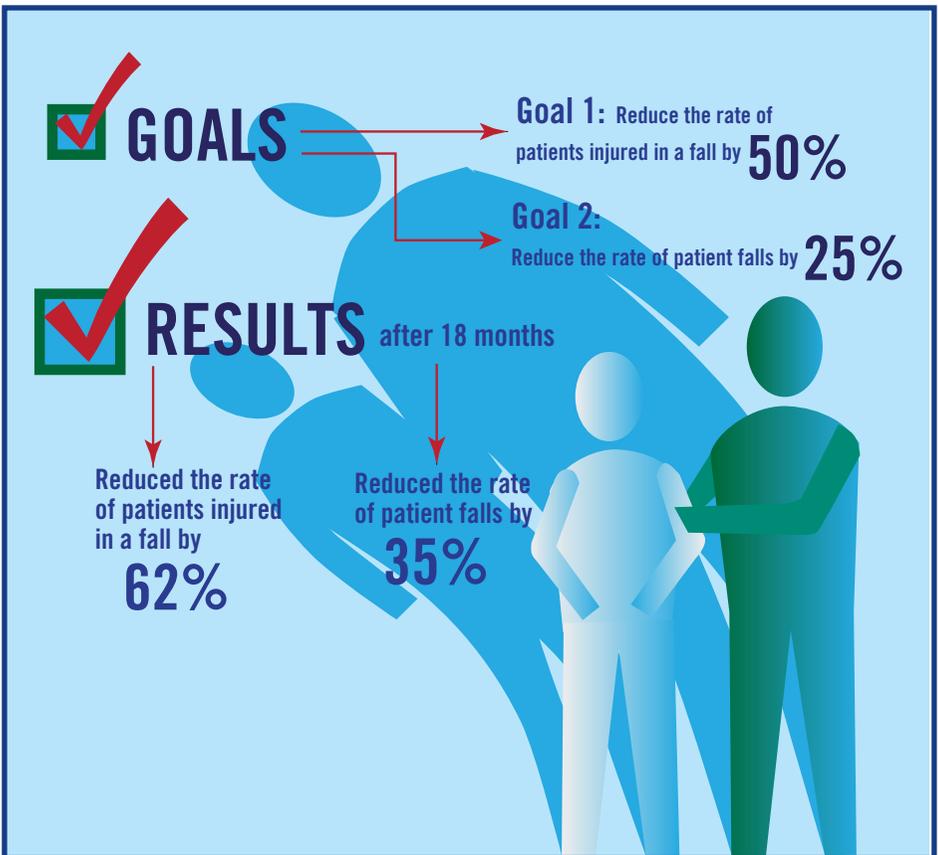
“Our work on the Hand-off Communications project has helped us improve safety by improving communications between emergency room physicians and admitting primary care physicians. With the help of the Joint Commission Center for Transforming Healthcare, we have identified and corrected communications barriers and hope to extend the lessons to other care providers throughout our hospitals.”

***Mignon Benjamin, MD
Bartlett Regional Hospital, Southeast Alaska Regional
Health Care Consortium***

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TST[®]: Preventing Falls

Despite long term and widespread attention to fall prevention within hospitals, patients continue to fall, and many of these falls result in injury. In response to this ongoing struggle, the Center launched its Preventing Falls with Injury project. Seven of the Center's participating hospitals and health systems, ranging from a 178-bed community hospital, to a 1,700-bed academic medical center, identified their specific causes for falls and falls with injury, and then identified, implemented, and validated solutions that reduced patient falls. Using the Center's Robust Process Improvement[®] (RPI)[®] methodology, the original project team was able to reduce the rate of patient falls by 35 percent and the rate of patients that were injured by falls by 62 percent.



TST[®]: Preventing Falls

Preventing falls, particularly falls with injury, can save health care organizations significant costs. For instance, if organizations using the TST[®] are able to get similar results to the original group, in a typical 200-bed hospital, the number of patients injured in a fall could be reduced from 117 to 45 and the organization can avoid approximately \$1 million annually. Similarly, a 400-bed hospital could reduce falls with injury by 133 and expect to avoid approximately \$1.9 million annually.

Number of Patient Beds	200	400
Each year, an organization can expect:	<ul style="list-style-type: none">• 358 falls/year• 117 injuries• \$1.7 million in costs	<ul style="list-style-type: none">• 659 falls/year• 216 injuries• \$3.1 million in costs
Annual impact:	<ul style="list-style-type: none">• 72 fewer injuries• \$1 million in avoided costs	<ul style="list-style-type: none">• 133 fewer injuries• \$1.9 million in avoided costs

“Kaiser Permanente San Diego Medical Center found partnering with the Joint Commission Center for Transforming Healthcare a very valuable experience in contributing to significant improvements in patient safety. The experience provided a structured framework around which to build our work around preventing patient falls and patient falls with injury.

In addition, the sharing of strategies and best practices with other organizations has been invaluable. This collaborative is an outstanding example of health care organizations truly collaborating to move forward the work of keeping our patients safe.”

*Sally Franz, Director, Medical/Surgical/Critical Care Nursing
Kaiser Permanente San Diego Medical Center*

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The Joint Commission Center for Transforming Healthcare

Created in 2008, the Joint Commission Center for Transforming Healthcare aims to solve health care's most critical safety and quality problems. In keeping with its objective to transform health care into a high reliability industry, The Joint Commission shares these proven effective solutions with the more than 20,500 health care organizations it accredits and certifies.

The Joint Commission Center for Transforming Healthcare is a 501(c)3 not-for-profit affiliate of The Joint Commission.

For more information

Call Joint Commission Customer Service at (630) 792-5800 or email to tst_support@centerfortransforminghealthcare.org.