



Facts about the Preventing Falls Project

The Joint Commission Center for Transforming Healthcare's seventh project aims to prevent falls that occur in health care facilities and result in injury to patients. Hundreds of thousands of patients fall in hospitals every year. Between 30 to 35 percent of patients who fall sustain an injury.¹⁻⁵ Each of these injuries, on average, add 6.3 days to the hospital stay.⁶ Cost for a fall with injury is about \$14,056.^{7,8}

Falls have been identified by the Centers for Medicare & Medicaid Services (CMS) as an event that is preventable and should never occur. CMS has also identified "falls and trauma" on its list of Hospital Acquired Conditions (HAC) for which reimbursement will be limited, specifically for falls that result in fractures, dislocations and intracranial injuries. Hundreds of thousands of patients fall in hospitals every year.

The Preventing Falls TST®

In the Preventing Falls Targeted Solutions Tool® (TST®), new measurement systems and solutions from the Joint Commission Center for Transforming Healthcare were able to reduce the rate of patient falls by 35 percent and the rate of patients injured in a fall by 62 percent. If the approach is translated to a typical 200-bed hospital, the number of patients injured in a fall could be reduced from 117 to 45 and avoid approximately \$1 million in costs annually through falls prevention efforts. Similarly, a 400-bed hospital could reduce falls with injury by 133 and expect to avoid \$1.9 million in costs annually.

How targeted solutions are identified

The hospitals that worked on this project ranged from a 178-bed community hospital to a 1,700-bed academic medical center. All of the organizations used Robust Process Improvement® (RPI®) to identify causes and develop solutions to prevent patient falls. RPI® is a fact-based, systematic, and data-driven problem-solving methodology that incorporates tools and concepts from Lean, Six Sigma and change management.

The original participating organizations used RPI® to identify the contributing factors as to why patients fall, developed specific solutions that were targeted to each contributing factor, and thoroughly tested the solutions in real life situations.

The reasons that patients fall are varied and can differ from facility to facility and from unit to unit within a facility. An important component of the methodology is that through the data analysis the top contributing factors causing falls are identified for each project. This results in identifying targeted solutions for each contributing factor, thereby enabling the implementation of solutions tailored to address those factors in an efficient manner.

The Preventing Falls TST® is an online resource that provides a step-by-step process to assist Joint Commission accredited health care organizations in measuring performance, identifying barriers to excellent performance, and implementing the Center's proven solutions that are customized to address specific barriers. TST® modules are now available for improving hand hygiene, hand-off communications, preventing falls, and safe surgery. Joint Commission accredited organizations can access the TST® and solutions free of charge on their secure Joint Commission Connect extranet. Staff at Joint Commission accredited organizations can request access via the [website](#).

Project team

Barnes-Jewish Hospital, Missouri
Baylor Health System, Texas
Fairview Health Services, Minnesota
Kaiser Permanente, California
Memorial Hermann Healthcare System, Texas
Wake Forest Baptist Medical Center, North Carolina
Wentworth-Douglass Hospital, New Hampshire

For more information, visit the Center [website](#) at http://www.centerfortransforminghealthcare.org/tst_pfi.aspx.

- ¹ Ash, K., MacLeod, P., & Clark, L. (1998). Case control study of falls in the hospital setting. *Journal of Gerontological Nursing*, Vol. 24, 7-15. doi: 10.1111/j.1525-1497.2004.30387.x
- ² Fischer, I., Krauss, M., Dunagan, W., Birge, S., Hitcho, E., Johnson, S., Fraser, V. (2005). Patterns and predictors of inpatient falls and fall-related injuries in a large academic hospital. *Infection Control & Hospital Epidemiology*, 26(10), 822-827
- ³ Healey, F., Scobie, S., Oliver, D., Pryce, A., Thomson, R., & Glampson, B. (2008). Falls in English and Welsh hospitals: a national observational study based on retrospective analysis of 12 months of patient safety incident reports. *Quality & Safety In Health Care*, 17(6), 424-430
- ⁴ Hitcho, E., Krauss, M., Birge, S., Dunagan, W., Fischer, I., Johnson, S., Nast, P., Costantinou, E., & Fraser, V. (2004). Characteristics and circumstances of falls in a hospital setting. *Journal of General Internal Medicine*, Vol. 19 Issue 7, 732-739. doi: 10.1111/j.1525-1497.2004.30387.x
- ⁵ Schwendimann, R., Buhler, H., De Geest, S., & Milisen, K. (2006). Falls and consequent injuries in hospitalized patients: effects of an interdisciplinary falls prevention program. *BMC Health Services Research*, 669-7. doi:10.1186/1472-6963-6-69
- ⁶ Wong, C., Recktenwald, A., Jones, M., Waterman, B., Bollini, M. & Dunagen, W. The Cost of Serious Fall-Related Injuries at Three Midwestern Hospitals. *The Joint Commission Journal on Quality and Patient Safety*. Volume 37, Number 2, February 2011
- ⁷ Galbraith, J., Butler, J., Memon, A., Dolan, M., & Harty, J. (2011). Cost analysis of a falls-prevention program in an orthopaedic setting. *Clinical Orthopaedics and Related Research*, 469(12), 3462-3468. doi:10.1007/s11999-011-1932-9
- ⁸ Haines, T., Hill, A-M., Hill, K., Brauer, S., Hoffmann, T., Etherton-Ber, C., McPhail, S. (2013). Cost effectiveness of patient education for the prevention of fall in hospital: economic evaluation from a randomized controlled trial. *BMC Medicine*. doi:10.1186/1741-7015-11-135