

## **Changing the Incidence of Falls**

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Changing the Incidence of Falls

Falls are a massive problem in the medical setting, especially in hospitals. Falls can cause broken bones, fractures, head injuries, and internal bleeding. Each year nearly 3 million older adults are treated in the emergency departments all over the United States from fall-related injuries (Important Facts about Falls, 2017). Injuries after a fall make it harder for individuals after the event takes place, which typically occurs to older adults. Fear for falling again or a fall taking place places many people at a chance for immobility because they don't want to ask for help, nor do they want to move around for fear of falling. Many conditions put someone at risk for falling. Conditions include overall body weakness, vitamin D deficiency, trouble walking or balance, foot pain, footwear problems, a decrease in vision, and home hazards such as cords or rugs (Important Facts about Falls, 2017). Falls pose a problem in the hospital setting because when we get a patient admitted, we don't always know their health history right away. We don't know if they need to be a bed rest turn, a two-assist, one assist, a standby, or an adlib patient. When a patient gets admitted, we typically try to place them on a bed alarm until we can assess how well they can walk, even if they are adamant that they can walk alone. On admission, an assessment for risk of falling is done—also, assessment on change in mental status.

There are still multiple falls a year inside the hospital settings despite using bed alarms and assessing the patient as a fall risk. Multiple falls can result in broken bones, head injuries, and internal bleeding, as well as a lawsuit because it happened on the hospital's watch. As healthcare professionals, we must help patients, not hurt them. Focusing on the decrease in falls, lowering the number of falls that occur in the hospital setting was the focus. On admission or after a transfer, the nurse should be assessing the client's risk of falling. The following obtain a fall risk assessment: If the client has a prior fall within the past three months, they get a score of 25 in that category. If the client has a secondary diagnosis other than a fall, they get a score

of 15 in that category. Next, if the patient needs any assistance, they get a zero in the type of ambulatory aid. If they need crutches or a walker, they get a 15 in that category. If they are a complete bed rest with no weight-bearing, the client receives a 30 in that category. Also, if the client has an IV, they receive a 20 in that category. Next, does the patient has a normal gait, is the patient on bed rest, or does the patient use a wheelchair? If the answer was yes to any of the following, the patient is to receive a zero in the category for gait.

Next assessment, assess if the patient is weak; weakness present in the patient would receive a score of 10 in that category. If they are impaired, they receive a 20 in that category. If the patient is oriented to their ability, they receive a zero in the category for mental status. If they are impaired and not adapted to their knowledge, they receive a 15 in that category. All of these add up anywhere from zero to 125 (Ciorncius, 2016).

Information regarding falls led us to determine what is required to decrease the number of falls (Eliopoulos, 2017). Falls are the leading cause of fatal and non-fatal injuries in the older population. Studies show that 30 - 45% of persons older than 65 experience a fall each year. Unfortunately, some factors increase the risk of falls, including age, health conditions, and functional impairment, which cannot contribute to the change theory (Eliopoulos, 2017). However, there are many risk factors associated with the high incidence of falls that can be changed. Environmental risk factors, including the absence of railings/grab bars, poor environmental design, clutter, inadequate environmental lighting, highly polished floors, and an unfamiliar environment, contributed to a high percentage of falls and needed to change (Eliopoulos, 2017). Research showed that rules and regulations made to inhibit the decrease in environmental factors. However, despite the differences in interdisciplinary team strategies towards the environmental factors, a high percentage of falls were still occurring, leading to the identification that behavior change needed to happen from an organizational-wide standpoint (Hoke, 2018).

The information obtained led us to the selection and application of the change theory fall model. The evolution of the fall model, invented by Kotter and Cohen, and served as a promotion of evidence-based behavior changes in clinical practice (Cherlie et al., 2016). The two inventors of CTFM went to many facilities, speaking with managers and individuals, gathering information on how each of them changed their organization. The information obtained was crucial because it decreases the percentage of falls, leading to quality improvement in the elder (Cherlie et al., 2016).

The data collection obtained provided us with the requirements to be successful while using this model. The change theory fall model serves as a guide for organizations seeking effective changes. The move was more likely to occur when the people showed empowerment of their thinking. Accomplishment had happened when employees achievement the eight steps. These steps included creating a feeling of urgency, building a team to guide the change, creating a clear vision, and realistic strategies, communicating these strategies with persuasive and emotional messages from real-life instances (Cherlie et al., 2016). Furthermore, empowering behavior change and removing noted barriers, creating success on a short-term basis, continuing to be persistent in turn, and nourishing the new culture and behavior of ongoing growth (Cherlie et al., 2016).

The change process begins with an assessment of needs, set goals, and preparation for change (Preventing Fall in Hospitals, 2020). After collecting the data, the information needs to be assessed, compared, and analyzed; then, the needs addressed. The essential part of planning is to set reasonable goals that meet all the requirements as much as possible. The main goal here is the reduction of the fall rate of 50% by the end of 2020. The targeted system will be the whole Med-Surg floor, as well as the staff who are working on the floor, including physicians, RN, LPN, CNA, PT, OT, Case management, etc. The leader can utilize the SWOT analysis as a framework analyzing for strength, weakness, opportunities, and threats. The goals

are to maximize the power and opportunities and minimize the gap and risks (ATI, 2017). The examples of strength and opportunities, including the actions, the activities are done right or successfully in the past. Also, providing positive resources, atmospheres, and the environment. The weakness and threats, including negative habits and patterns, resistance or less motivation to changes, the missing factors, and other emotional anxiety and concerns.

When considering the resources in the hospital, there are three types of support available—the physical resources, including, such as equipment, spaces. The human resources, for example, hiring extra CNA, assistive personnel, and the funding resources such as the financial availability for changes. Communication of the transformation occurs by a post in the staff lunchroom, the office, weekly or monthly meetings, and electronic messages. The progress of the change can be monitored and evaluated by accident reports submitted to the charge nurse and risk management every month. The fall rate will then be calculated and posted to the nurse's office and lunchroom board.

The implementation consists of three phases, preparation, managing, and reinforcement (Change Management Process, 2020). Addressing the training includes education to the staff before implementing change, providing Evidence-Based information to convince the team of the importance of the change. Collect feedback and opinions from the staff about the change, review them, and return with an appropriate response. The managing phase is a time to implement the details according to the plan. If the goal is to reduce the fall rate of 50% by the end of 2020, the implementation includes early assessment, "Fall alert" sign at the head of the bed, education patient with fall risk, bed/chair alarm, bed at the lowest position, and toileting regime, etc. Finally, reinforcement involves collecting feedback, auditing the compliance, as well as identifying the gaps or benchmark. The purpose of this step is to address how the change impacts the staff members and quality patient care. Reassessment is an ongoing process.

To stabilize the change, the staff needs to make sure that the nurse documents the patient's fall risk accurately. The nurses also have to make sure that they do everything to make sure that the patient does not fall. One way this could they can do this is by using a fall prevention checklist. On the list, there are 14 interventions that the nurse checks off if the patient is a fall risk. There are 14 interventions. The responses are fall risk assessment, patient education, family education, RN aware, nurse assistant aware, a sign posted in the room, and a sign posted in the hallway. The other interventions are wristband, bed in the low position, bed alarm, yellow socks, gait belt, call light within reach, and personal items within reach (Johnston & Magnan, 2019). There are four columns for four different patients on the sheet. Four patients being on one sheet helps the nurse organize everything better. The checklist has to be complete at every change-of-shift. The list is to be finished at every change-of-shift to make sure that the nurse does everything before the next nurse takes care of the patient. The use of this checklist has the potential to reduce falls by standardizing the steps to be followed to prevent a fall.

The group worked together to pick the topic of change. Falls are one of the most common reasons why patients get injuries in the hospital. The group believes that this is something that needs to change. The interventions need to be implemented in every hospital to improve the occurrence of falls. The work is complete by the members equally. Each student had two topics to write about in the paper. Each student worked hard and dedicated their time appropriately to the assignment. Due to COVID-19, the group could not communicate in person towards the due date. Communicating through text messages was how the group would keep in touch. Even though there is a pandemic going on and the group members' lives are extra busy, the group continues to dedicate their time to finish the paper on time. The outcome of this change is to reduce the risk of falls. By making sure there is enough staff on the floor, creating a fall prevention checklist, and keeping a close eye on patients, the outcome is achievable. This

paper is an excellent way to show students how to create a change in a hospital or medical setting. Implementing the change and recognizing that something needs to change is how doing this paper is going to make the group excellent nurses.

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## Appendix:

### Box 1. The 6-PACK Program

The 9 item fall-risk is updated for each patient each shift by their treating nurse. Patients identified as a high fall risk receive:

- A 'falls alert' sign positioned above their bed, and one or more of the following interventions:
- Supervision of the patients in the bathroom
- Ensuring patients' walking aid are within reach
- A toileting regime
- A low-low bed
- A bed/chair alarm

(Ayton, D. R., Barker, A. L., Morello, R. T., Brand, C. A., Talevski, J., Landgren, F. S., ... Botti, M., 2017)

### Strategies to optimise successful implementation of the 6-PACK program

<b>COM-B domain</b>	<b>Rationale</b>	<b>Implementation strategy</b>
Capability	<ul style="list-style-type: none"> <li>• Improve knowledge and skills</li> <li>• Support attitudinal change</li> <li>• Model new behaviours</li> </ul>	<ul style="list-style-type: none"> <li>• Regular practical face-to-face education and training for nurses (ward walk arounds, small interactive group sessions)</li> </ul>
Opportunity	<ul style="list-style-type: none"> <li>• Provide and discuss data</li> <li>• Inform about progress</li> </ul>	<ul style="list-style-type: none"> <li>• Provision of falls data</li> <li>• Leadership and champions (ward champions, Nurse Unit Managers)</li> <li>• Provision of equipment</li> <li>• Newsletters and posters communicating progress,</li> </ul>

## achievements and stories

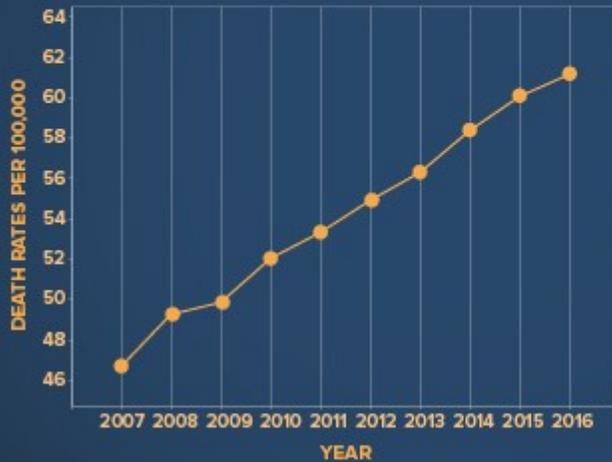
- Motivatio  
n
- Reinforce key strategies for falls prevention
  - Troubleshoot and provide support
  - Demonstrate commitment to project

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(Ayton, D. R., Barker, A. L., Morello, R. T., Brand, C. A., Talevski, J., Landgren, F. S., ... Botti, M., 2017)

# Fall Death Rates in the U.S. **INCREASED 30%**

FROM 2007 TO 2016 FOR OLDER ADULTS



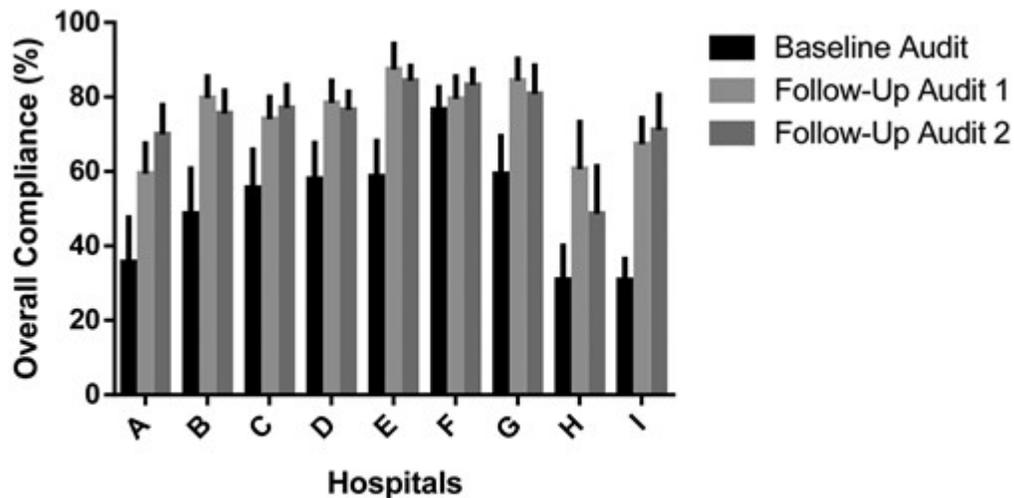
If rates continue to rise,  
we can anticipate

**7 FALL  
DEATHS**  
EVERY HOUR  
BY 2030

Learn more at [www.cdc.gov/HomeandRecreationalSafety](http://www.cdc.gov/HomeandRecreationalSafety).

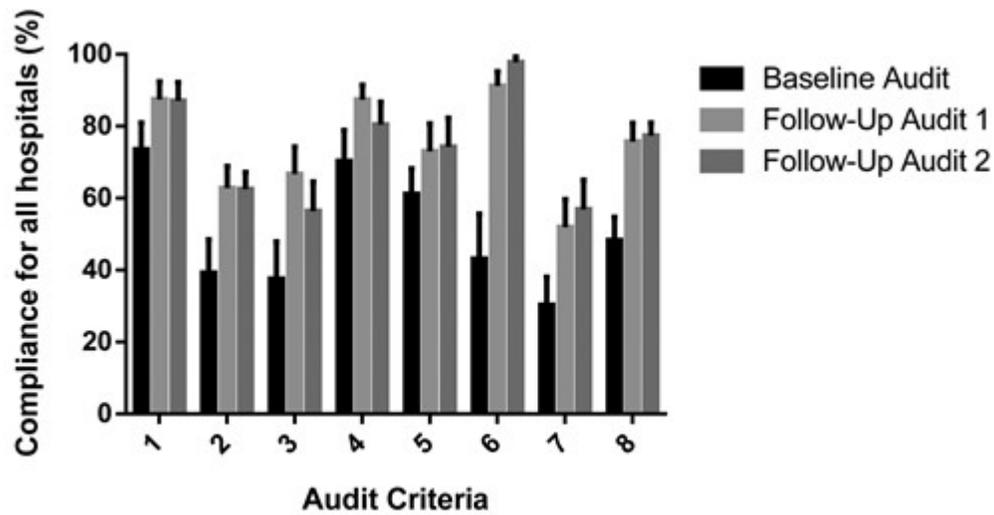


(Important Facts about Falls, 2017).



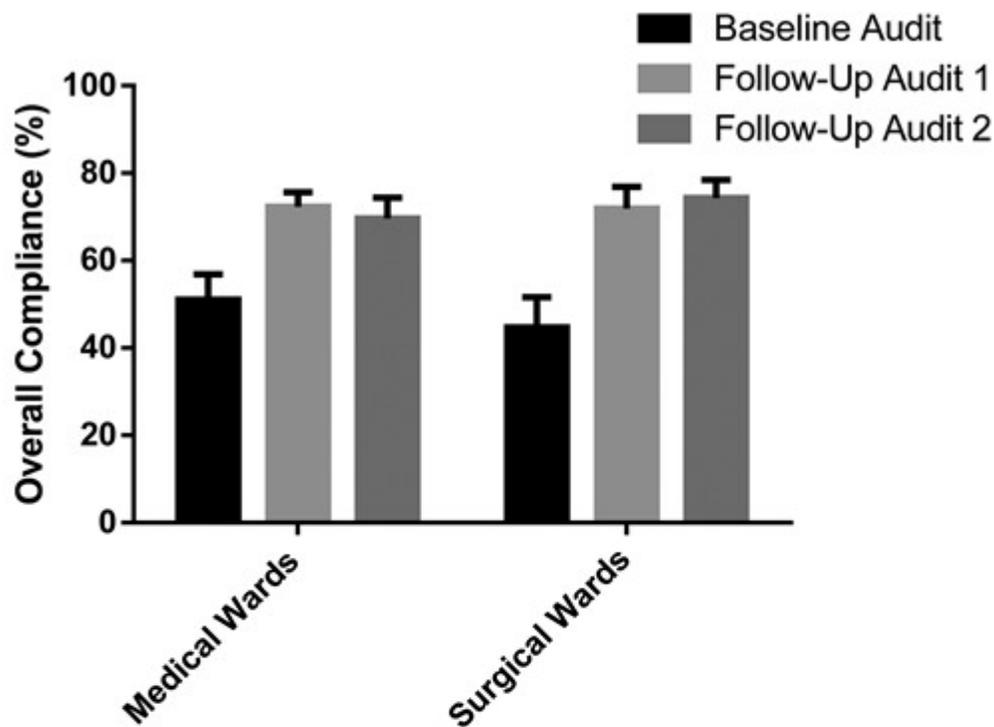
Hospital	Comparison	Mean Diff.	95% CI of diff.	Significance
A	Follow-Up Audit 1 vs. Baseline Audit	23.75	-1.990 to 49.49	ns
	Follow-Up Audit 2 vs. Baseline Audit	34.37	8.626 to 60.10	**
B	Follow-Up Audit 1 vs. Baseline Audit	31.12	5.376 to 56.85	*
	Follow-Up Audit 2 vs. Baseline Audit	26.92	1.176 to 52.65	*
C	Follow-Up Audit 1 vs. Baseline Audit	18.54	-7.197 to 44.28	ns
	Follow-Up Audit 2 vs. Baseline Audit	21.54	-4.199 to 47.28	ns
D	Follow-Up Audit 1 vs. Baseline Audit	20.46	-5.280 to 46.20	ns
	Follow-Up Audit 2 vs. Baseline Audit	18.55	-7.188 to 44.29	ns
E	Follow-Up Audit 1 vs. Baseline Audit	28.83	3.086 to 54.56	*
	Follow-Up Audit 2 vs. Baseline Audit	25.78	-0.8614 to 52.42	ns
F	Follow-Up Audit 1 vs. Baseline Audit	2.858	-22.88 to 28.60	ns
	Follow-Up Audit 2 vs. Baseline Audit	6.615	-19.12 to 32.35	ns
G	Follow-Up Audit 1 vs. Baseline Audit	25.12	-0.6205 to 50.86	ns
	Follow-Up Audit 2 vs. Baseline Audit	21.58	-4.162 to 47.32	ns
H	Follow-Up Audit 1 vs. Baseline Audit	29.74	4.005 to 55.48	*
	Follow-Up Audit 2 vs. Baseline Audit	17.69	-8.049 to 43.43	ns
I	Follow-Up Audit 1 vs. Baseline Audit	36.47	10.73 to 62.21	**
	Follow-Up Audit 2 vs. Baseline Audit	40.33	14.59 to 66.07	**

(Stephenson, Matthew, Mcarthur, Alexa, Giles, Kristy, ... Alan., 2015).



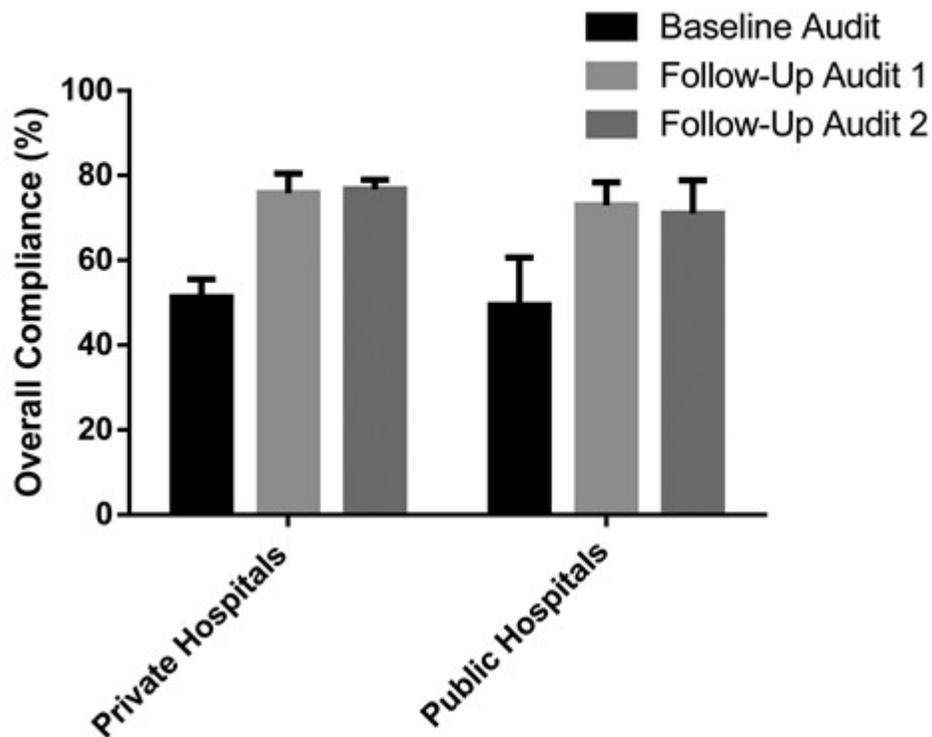
Criteria	Comparison	Mean Diff.	95% CI of diff.	Significance
1	Follow-Up Audit 1 vs. Baseline Audit	13.91	-8.567 to 36.39	ns
	Follow-Up Audit 2 vs. Baseline Audit	13.51	-8.967 to 35.99	ns
2	Follow-Up Audit 1 vs. Baseline Audit	23.61	1.133 to 46.09	*
	Follow-Up Audit 2 vs. Baseline Audit	23.33	0.8551 to 45.81	*
3	Follow-Up Audit 1 vs. Baseline Audit	29.16	6.677 to 51.63	**
	Follow-Up Audit 2 vs. Baseline Audit	18.78	-3.700 to 41.26	ns
4	Follow-Up Audit 1 vs. Baseline Audit	17.06	-5.423 to 39.53	ns
	Follow-Up Audit 2 vs. Baseline Audit	10.14	-13.03 to 33.31	ns
5	Follow-Up Audit 1 vs. Baseline Audit	11.94	-10.53 to 34.42	ns
	Follow-Up Audit 2 vs. Baseline Audit	13.19	-9.289 to 35.67	ns
6	Follow-Up Audit 1 vs. Baseline Audit	48.07	25.59 to 70.54	****
	Follow-Up Audit 2 vs. Baseline Audit	54.63	32.16 to 77.11	****
7	Follow-Up Audit 1 vs. Baseline Audit	21.67	-0.8115 to 44.14	ns
	Follow-Up Audit 2 vs. Baseline Audit	26.61	4.133 to 49.09	*
8	Follow-Up Audit 1 vs. Baseline Audit	27.37	4.888 to 49.84	*
	Follow-Up Audit 2 vs. Baseline Audit	29.03	6.555 to 51.51	**

(Stephenson, Matthew, McArthur, Alexa, Giles, Kristy, ... Alan., 2015).



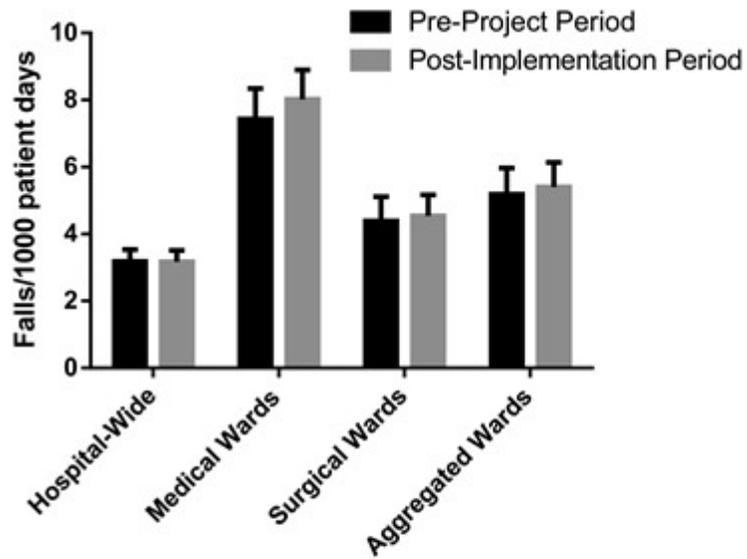
Comparison	Mean Diff.	95% CI of diff.	Significance
Medical Wards			
Follow-Up Audit 1 vs. Baseline Audit	21.19	4.507 to 37.88	*
Follow-Up Audit 2 vs. Baseline Audit	18.55	1.862 to 35.23	*
Surgical Wards			
Follow-Up Audit 1 vs. Baseline Audit	27.17	10.48 to 43.85	**
Follow-Up Audit 2 vs. Baseline Audit	29.52	12.83 to 46.20	***
Surgical Wards - Medical Wards			
Baseline Audit	-6.34	-24.49 to 11.81	ns
Follow-Up Audit 1	-0.3668	-18.52 to 17.78	ns
Follow-Up Audit 2	4.63	-13.52 to 22.78	ns

(Stephenson, Matthew, McArthur, Alexa, Giles, Kristy, ... Alan., 2015).



Comparison	Mean Diff.	95% CI of diff.	Significance
Private Hospitals			
Follow-Up Audit 1 vs. Baseline Audit	24.54	5.097 to 43.98	*
Follow-Up Audit 2 vs. Baseline Audit	25.43	5.990 to 44.87	*
Public Hospitals			
Follow-Up Audit 1 vs. Baseline Audit	23.55	1.812 to 45.28	*
Follow-Up Audit 2 vs. Baseline Audit	21.55	-0.1815 to 43.29	ns
Public Hospitals - Private Hospitals			
Baseline Audit	-1.867	-24.43 to 20.69	ns
Follow-Up Audit 1	-2.857	-25.42 to 19.70	ns
Follow-Up Audit 2	-5.744	-28.31 to 16.82	ns

(Stephenson, Matthew, McArthur, Alexa, Giles, Kristy, ... Alan., 2015).



Comparison	Mean Diff.	95% CI of diff.	Significance
Post-Implementation Period - Pre-Project Period			
Hospital-Wide	-0.00625	-2.335 to 2.322	ns
Medical Wards	0.5917	-2.097 to 3.281	ns
Surgical Wards	0.15	-2.539 to 2.839	ns
Aggregated Wards	0.2125	-2.116 to 2.541	ns

(Stephenson, Matthew, McArthur, Alexa, Giles, Kristy, ... Alan., 2015).

