RÉSEAU DE SANTÉ
Horizon
HEALTH NETWORK

Falls Prevention Strategy

June 2010

FALLS IN NEW BRUNSWICK

- Falls resulted in 2000 people admitted to hospital in the province.
- Almost half of these people had fractured hips
- 165 died in hospital as a result of this fall

Falls in Hospital

- Accounts for the highest number of reported sentinel events.
- Results in longer LOS (ALC)
- Nursing Home admissions

Public Health Approach

Strategy to Prevent Falls in Hospitals

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Falls are a significant cause for concern in health care institutions accounting for the highest single category of adverse events. The risk of falling in hospital is greatly influenced by acute illness that often impacts physical and cognitive function. This is compounded by care being provided in unfamiliar surroundings such that the biological, behavioral, and environmental risk factors combine to produce a period of heightened risk for patients.

The consequences of falling, especially in the elderly population can be devastating, resulting in fractures, disabilities, and death. Many of those who fall will never regain their independence and will require nursing home placement. In addition to the personal pain and suffering, one cannot ignore the burden to the health care institution. Fall related injuries result in delayed recovery, longer hospital stays, and increased bed utilization.

The Health & Aging Program, located in Saint John, New Brunswick, is one of Canada's most acclaimed senior's health programs. The Health & Aging Centre treats over 2000 patients every year and houses 183 inpatient beds. The program's primary goal is to provide optimal patient care in a culture where safety is a priority.

Initiative:

A multidisciplinary Falls Task Force was established in an effort to create a safe environment and reduce the incidence of patient falls in the Health & Aging Program. The team completed a retrospective review of fall incidents and documentation through chart review and analysis of risk management data. Staff were surveyed to determine perception of fall risk factors. A Falls Prevention Strategy was developed based on best practices. A post-fall assessment tool, an interdisciplinary falls prevention action plan, and an environmental audit were developed.

Key Lesson/Conclusion:

A successful falls prevention program requires multidisciplinary and multifaceted approaches, with a variety of interventions that targets multiple risk factors.

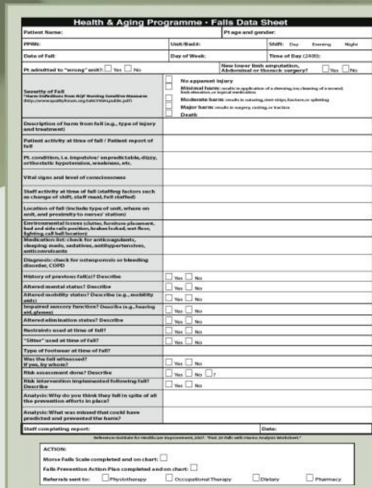
Future Directions :

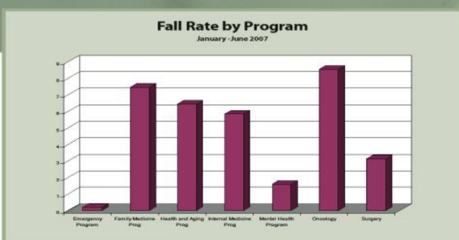
Analysis of data will allow us to continue monitoring the efficacy of the falls prevention program. Our intent is to share what we have learned with other programs within the acute care arena. Recognizing the need to address fall risk in the community, future initiatives will include community programming and advocacy.

Source: AHSC Risk Management 2006

Multifactorial Risk Factors Present

Location of Fall	Presence of Associated Risk Factors (Intrinsic and Extrinsic)		
	Cognitive/ Mental Status	Disease/Physical Condition	Environmental Factors
Fall from bed (83 cases)	62%	79.5%	36%
Fall in bathroom (50 cases)	22%	50%	46%
Fall from chair (42 cases)	31%	26%	43%
Fall in patient room (80 cases)	15%	45.2%	72.2%
Fall in hallway (72 cases)	9.7%	55%	77%
Total cases 327	93	179	188

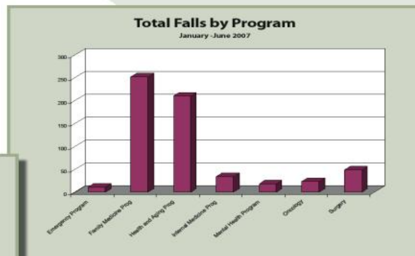


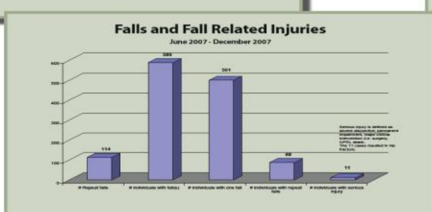


Fall-Related Risk Factors

Biological/Intrinsic	Behavioral	Environmental
Impaired Mobility Balance deficit Gait deficit Muscle weakness Advanced age Chronic illness/disability: Cognitive impairment Stroke Parkinson disease Diabetes Arthritis Heart disease Incontinence Foot disorders Visual impairment Acute illness	History of falls Fear of falling Multiple medication use: Antipsychotics Sedatives/hypnotics Narcotics Antidepressants Excessive alcohol Risk taking behaviors Lack of exercise Inappropriate footwear/clothing Inappropriate use of assistive devices Poor nutrition or hydration	Unfamiliar environment Poor room design Room clutter Inappropriate furniture Lack of: Handrails Grab bars Poor lighting or sharp color contrasts Slippery or uneven surfaces Obstacles and tripping hazards Defective equipment Lack of high/low beds for patients at risk

Table adapted from: ScottV, Dukeshire S., Gallagher E, Scanlan A (2001). A Best Practice Guide for Prevention of Falls Among Seniors Living in the Community.





RECOMMENDATIONS

The framework for the falls prevention program was built on four strategic pillars:

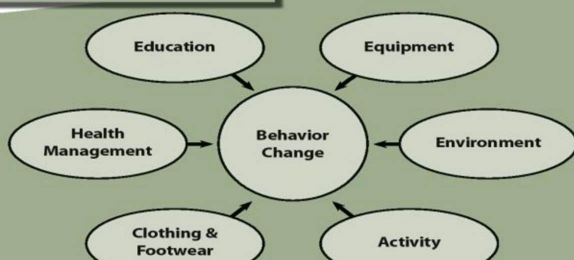
Leadership & Policy Development
- Falls Prevention Committee
- National Collaborative
- Resources
- Policies
- Equipment/Beds

Surveillance
- Definition of Fall
- Statistical Tool
- Post Fall Assessment
- Data Analysis
- Communication

Education & Awareness
- Orientation
- E-learning
- Staff Meetings
- Communication
- Patient booklets
- Community Education

Research
- Staff Survey
- Education Sessions
- Fall Data
- Analysis & Reporting
- Dissemination
- Research

The BEEEACH Model, a comprehensive falls prevention model with desired behavior change centered at the core, addresses both intrinsic and extrinsic risk factors.



Original Aim

Purpose: To decrease the number of patient falls by 20% by increasing staff awareness and providing education on fall risk through evidence based strategies.

Scope: 200 patients

Boundary: Awareness strategies initially limited to nursing staff but later will involve all disciplines.

FOUR STRATEGIC PILLARS FOR FALLS PREVENTION

Leadership & Policy

Falls Prevention Committee
National Curriculum
National Collaborative
Resources
Policies
Equipment/beds

Education & Awareness

Orientation
E-learning
Staff Meetings
Communication
Patient booklets
Community
National Curriculum

Surveillance

Definition of fall
Statistical tool
Post fall Assessment
Data Analysis
Communication

Evaluation & Research

Staff survey
Education sessions
Fall data
Analysis & reporting
Dissemination
Research

Leadership & Advocacy

- Establish a multidisciplinary Falls Prevention Committee
- Establish Master Trainers in the National Falls Prevention Program
- Support the need for additional or improved patient equipment
- Participate in National Collaborative for Falls Prevention
- Falls Prevention Policy & Least Restraint Policy.
- Develop necessary tools for surveillance (PFD, Environmental Audit)

Education & Awareness

- Educate staff on preventing patient falls.
- Identify and foster delegated best practice champions and improvement teams for each program/unit.
- Develop a Falls Prevention Education Package and distribute to all Programs within Zone.

Develop a mandatory e-learning program on falls prevention.

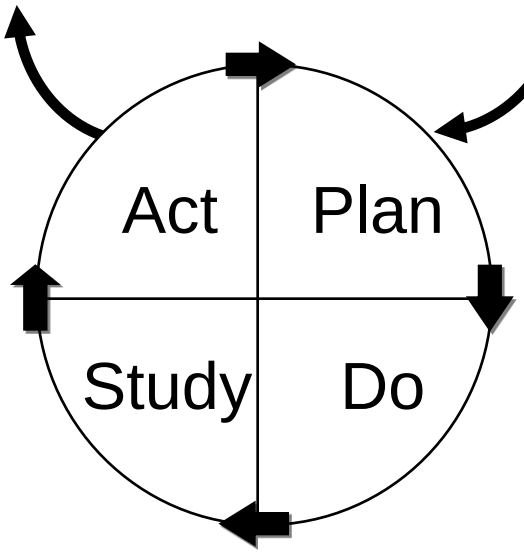
- Offer the National Falls Prevention Curriculum course three times per year for staff and community stakeholders.
- Education for patients and families.

Surveillance

- Adopt a Corporate definition of a fall.
- Choose appropriate reliable risk assessment tool.
- Ensure all falls, regardless of significance, are documented
- Capture comprehensive falls data

The Model for Improvement

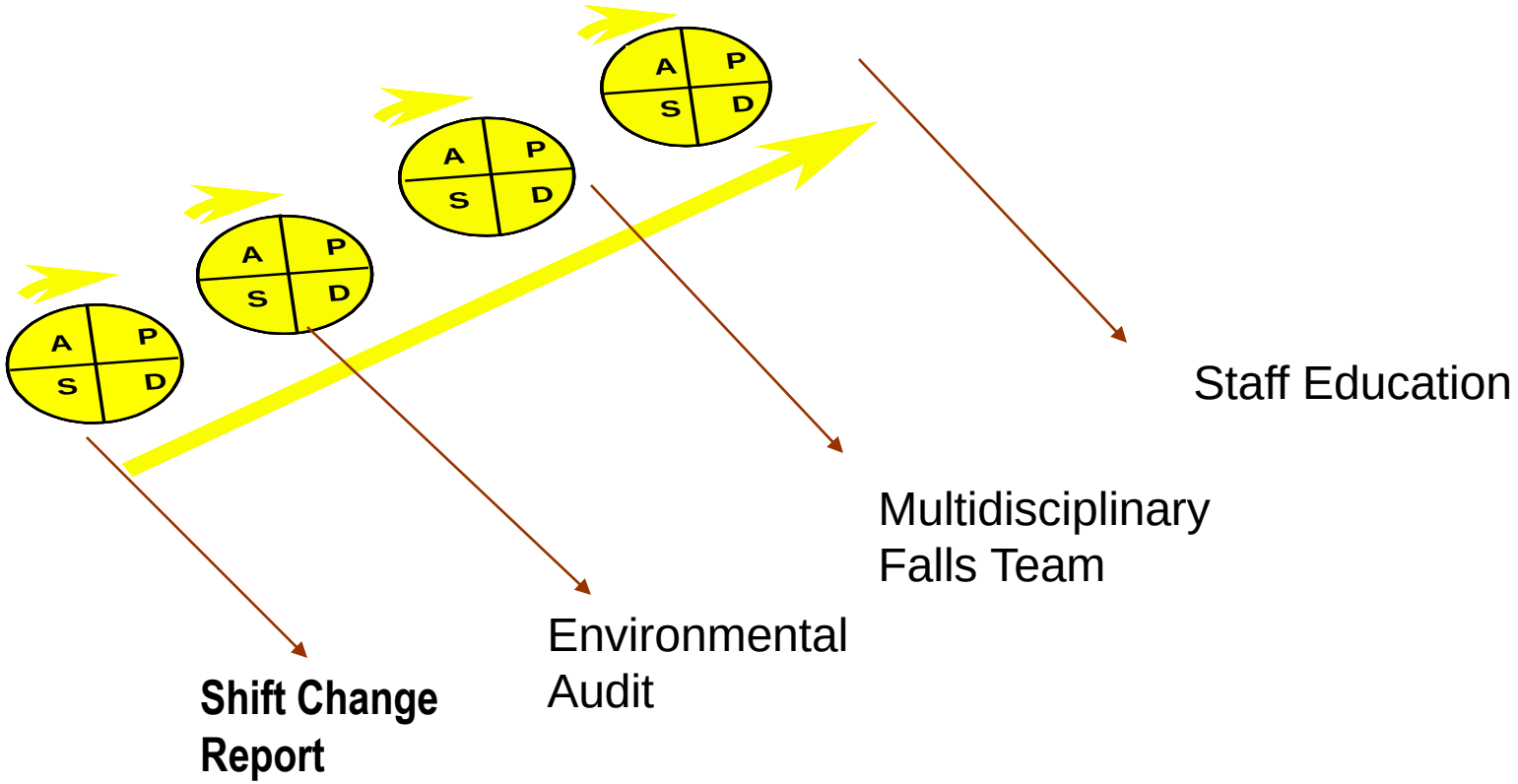
- **What are we trying to accomplish?**
- **How will we know that a change is an improvement?**
- **What changes can we make that will result in an improvement?**



Aim

IHI 2004

CHANGES NEEDED



Evaluation

- **Random Chart Audit**: A total of 140 charts were audited between the months of July 2009 and September 2009. The purpose of the audit was to determine staff compliance with the assessment tools. (98 % Compliance)

Environmental Audit

- A total of 84 **Environmental Audits** were completed on seven nursing units over a 12 month period.
- The changes that were made to eliminate fall risk were well documented and these changes were evaluated for effectiveness.

Change Cycle

Shift Report	Environmental Audit	Falls Committee	Education
• Falls awareness report adopted • Falls awareness report reviewed daily by all disciplines **RESULTS:** ➢95% compliance trend >	• Audit implemented • Staff educated and assigned **RESULTS:** ➢100% staff use audit tool ➢100% of room audits completed	• Awareness & education • Supporting champions • Implement ideas\barriers identified • **RESULTS:** ➢Ongoing changes	• General education on fall risk ongoing • Education on each PDSA cycle ongoing **RESULTS:** ➢94% of all staff received education

RESULTS

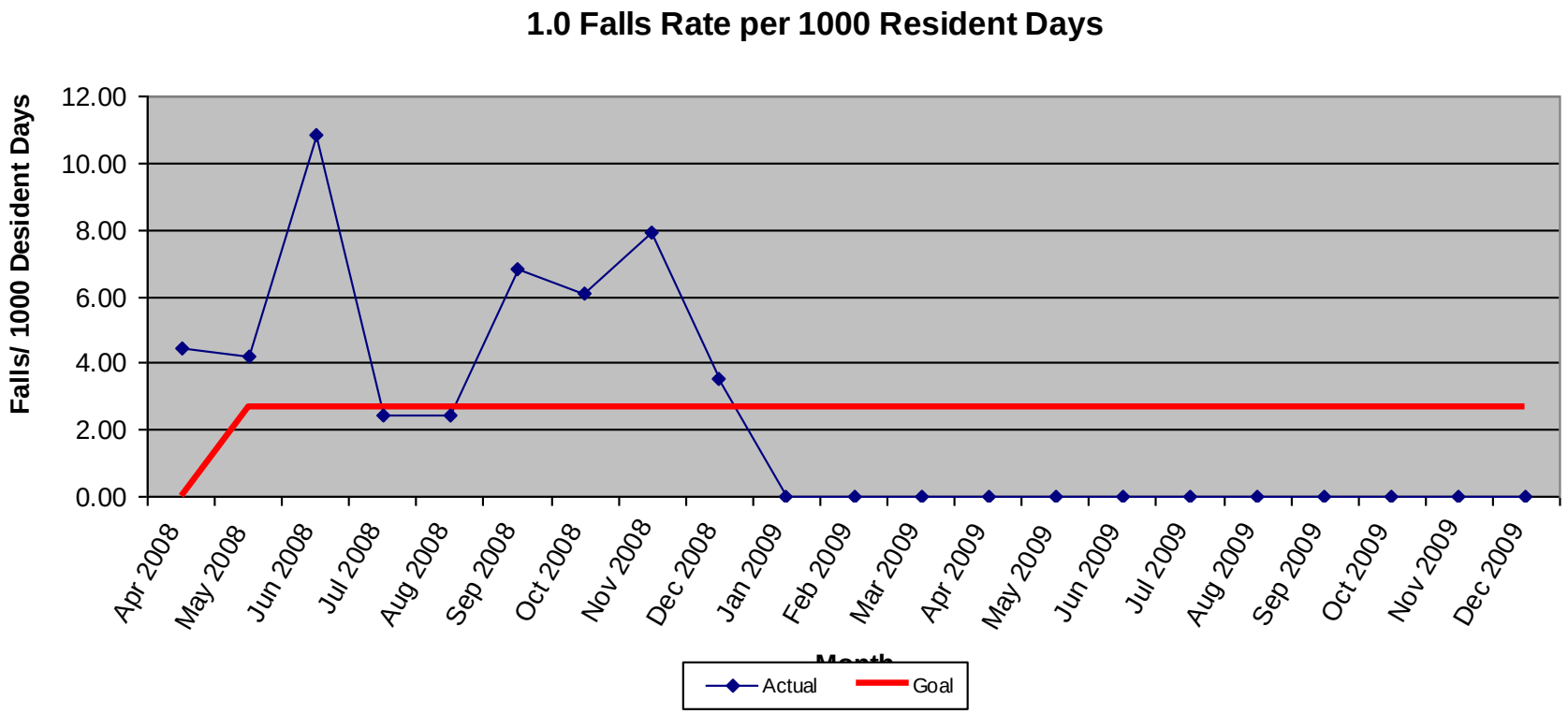
Shift Report	Environmental Room Audit	Falls Committee	Education Awareness
• Success hinged on creating the will to embrace change and the support provided. • Risk report evolved to include taped report • Staff 100% compliant since included in taped report • It was identified that all disciplines needed to participate	• Success resulted from staff “buy in”, education and support. • Successful in raising awareness of risk amongst all disciplines. • Room changes made to reduce risk	• Success resulted from staff “buy in”, education, support. • Terms of reference developed. • Learning: All of multidisciplinary team members have a part to play in falls prevention.	• All staff received falls prevention in service. • Staff certified in the Canadian Falls Prevention Curriculum. • Sessions created for staff input. • Evaluation ongoing

Evaluation

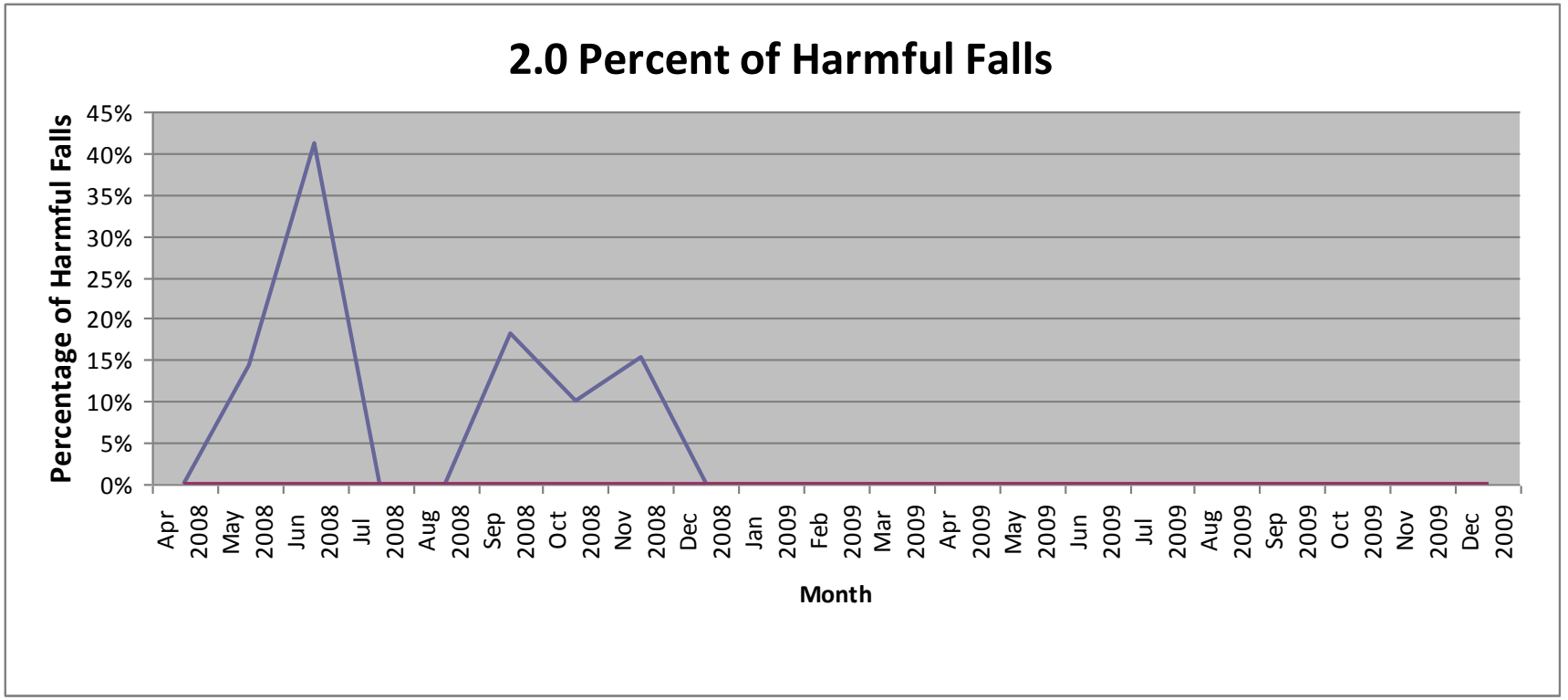
- The number of **Post Fall Data Collection sheets** were compared to the number of Incident Reports completed and submitted to Risk Management.

	2008-2009
Falls reported through Incident Report System in Risk Management	494
# of Post Fall Data Collection sheets completed	489

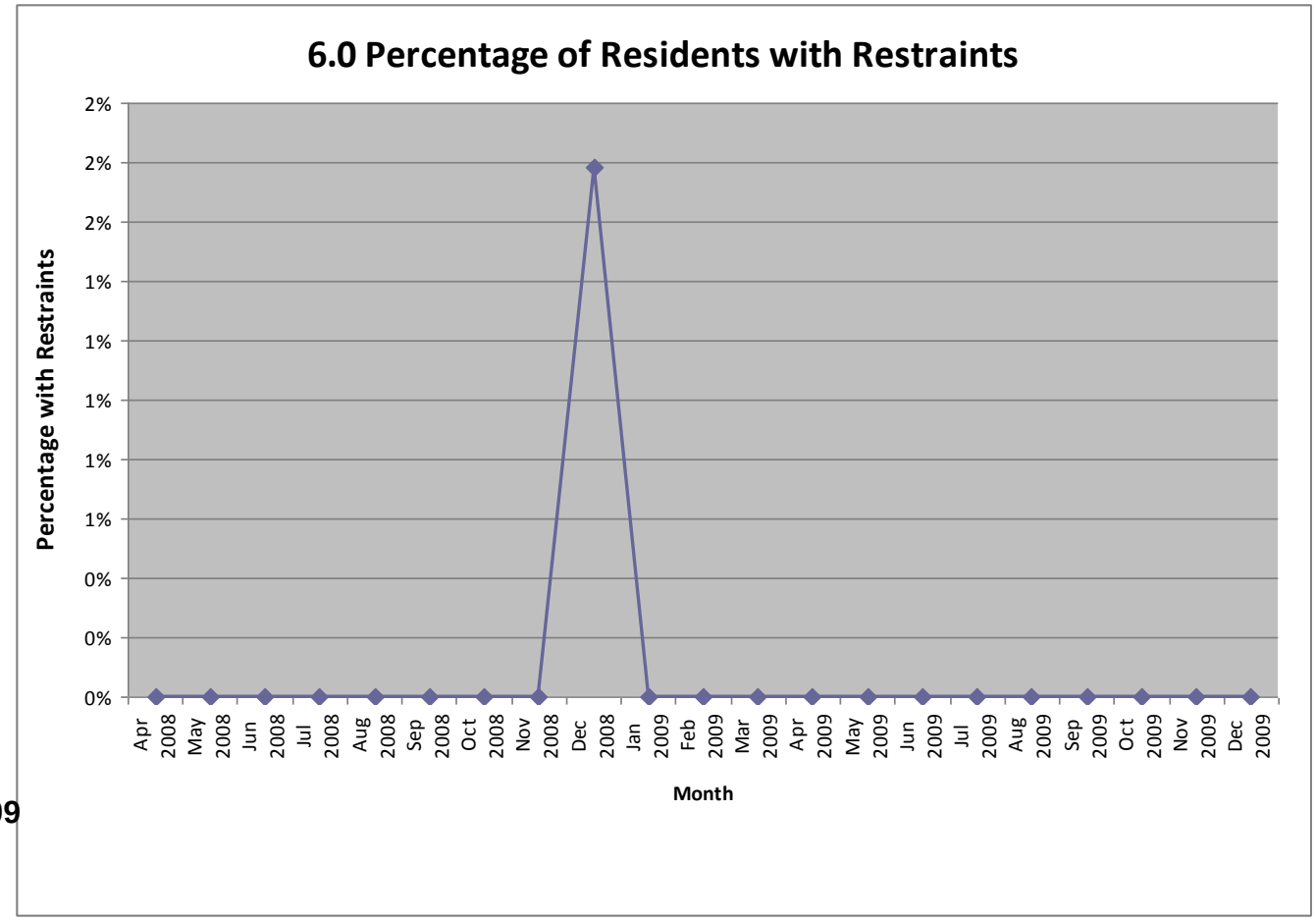
Fall Rate


1.0 Falls Rate per 1000 Resident Days
Falls/ 1000 Desident Days
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Apr 2008
May 2008
Jun 2008
Jul 2008
Aug 2008
Sep 2008
Oct 2008
Nov 2008
Dec 2008
Jan 2009
Feb 2009
Mar 2009
Apr 2009
May 2009
Jun 2009
Jul 2009
Aug 2009
Sep 2009
Oct 2009
Nov 2009
Dec 2009
Actual
Goal

Harmful Falls

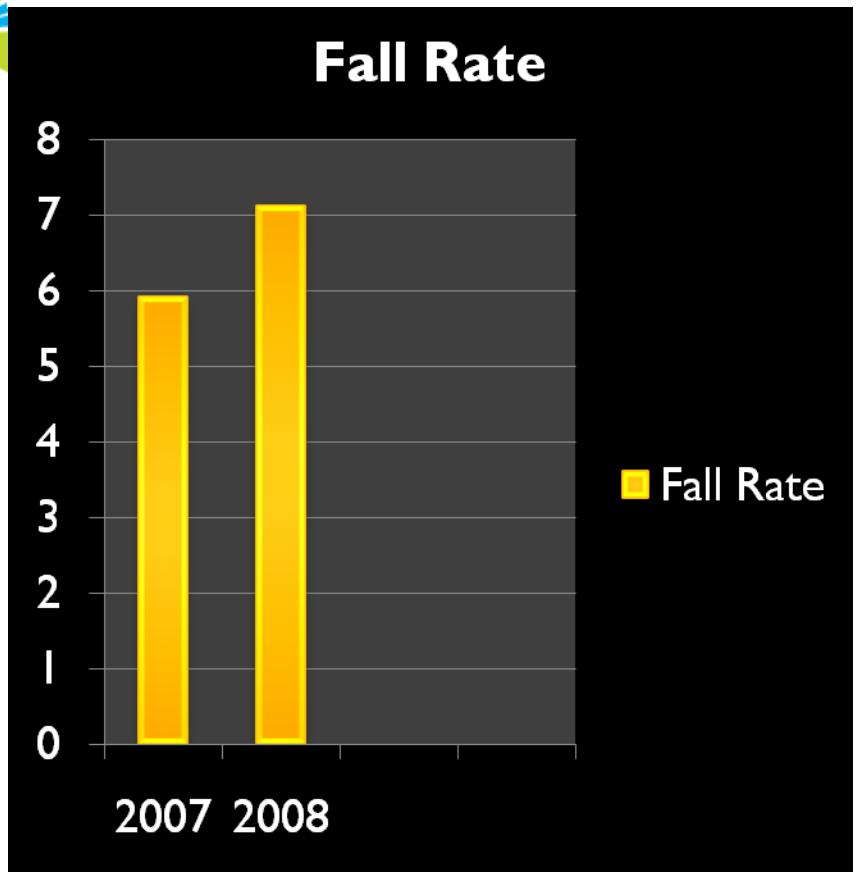


Residents with Restraints

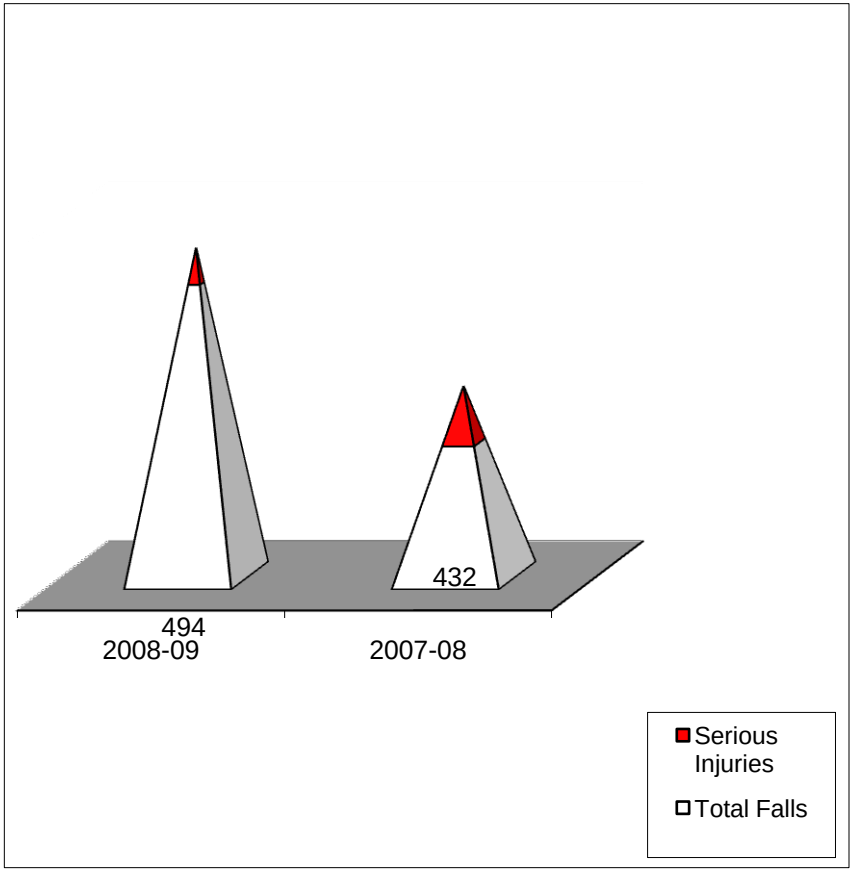


Feb. 6/09

Health & Aging Fall Rate



Health & Aging Serious Injuries



Fall Rates & Serious Injuries

$$\frac{\text{Number of Patient Falls}}{\text{Number of patient days}} \times 1000$$

SERIOUS INJURIES

Health & Aging Program	2007-2008	2008-2009
Reported Fall Incidents	432	494
Serious Injuries	22	14
% of total # falls resulting in serious injury	5.7%	2.8%

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Hospital Costs for Fall-Related Injury

Injury	Average Cost per Case
Hip fracture	$18,508
Upper limb	$11,517
Head	$14,425
Abdomen, lower back, lumbar spine and pelvis	$14,135

Source: 2001/02-2004/05 CIHI discharge abstract data base for B.C., acute and rehab case only.

With a 40% reduction in serious injuries, it is possible that the overall **savings of $150,000** was realized by this intervention in our program.

We believe our success in decreasing the numbers of serious injuries hinged on best practice and is dependant on four key components:

- A team approach to prevention that included all support staff.
- Continuous education to raise awareness of fall risk and need for prevention.
- Development of standard tools to measure outcomes.
- Regular monitoring and review of fall related incidents.

★ Falls Prevention Champions on each unit

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fallsafezone

Ask these 3 questions before leaving a patient's room:

1. **Do you need to use the toilet?**
2. **Do you have any pain or discomfort?**
3. **Do you need anything before I leave?**

Asking these simple questions will:

- **reduce the risk of patient falls**
- **decrease patients' use of call bell**
- **Increase patient satisfaction**

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fallsafezone **Prevent Falls** ***Reduce Injuries***!

Safe environment

- Bottom bed rails down unless assessed otherwise
- Pathways clear of clutter and tripping hazards
- Bed and chair brakes are "on"
- Lights are working and "on" as required

Assist with mobility

- **Mobilize** at least twice/day
- Safe and **regular** toileting
- Transfer / mobility assist **documented**
- Glasses, hearing and mobility aides within patient reach

Fall risk reduction

- Call bell in patients reach
- Bed lowered to **patient's knee height**
- Personal items reachable
- Proper fotwear available and in use

Engage patient and family

- Discuss risk factors with patient and family
- Mutual Falls/Injury Prevention plan developed

Developed by fraserhealth
Better health. Best in health care.

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EVALUATION AND LESSONS LEARNED

Lessons Learned
Health & Aging Program

- The number of reported fall related incidents and the fall rate increased during the year that the Fall Prevention Program was implemented.
- One factor contributing to this increase may be related to a heightened awareness of the necessity to report and to document “near miss” incidents..

Lessons Learned

- While it may be valuable to trend patient **fall rates**, care should be taken when comparing rates from year to year, unit to unit, unit to organization, or comparisons between institutions.
- Although the number of falls increased, the number of **serious fall related injuries** in the Health & Aging Program decreased by 40%.

Lessons Learned

- Only 58% of patients/families surveyed confirmed that they received patient safety information (verbal or written).

- There is a need to improve communication and provide further education for patients and their families on safety.

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New Brunswick Health Restructuring Opportunities

- Province population 800,000
- Horizon Health Network Houses 600,000
- Health Network Staff 12,500
- Accreditation 2010 (ROP Falls Prevention)

Goals of Horizon's Fall Prevention Committee

- Review and adoption of the Falls Prevention Strategy in all zones
- Common definition of a fall
- Common Risk Assessment Tool
- Policy
- Education
- Indicators
- E-Learning
- Patient Information
- CFPC

Falls Prevention
IT'S EVERYONE'S JOB!