

Preventing Falls in Hospital

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Outline

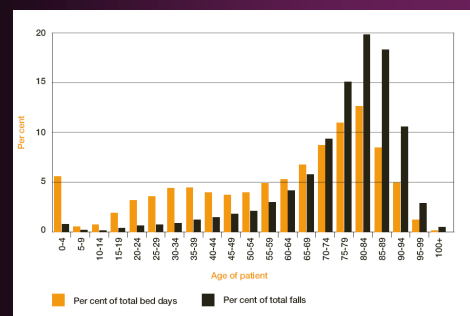
- Context
- Occurrence
- Impact & Cost
- Fall Prevention –The NUH Story
- The Distillate

The problem - Falls in Hospital

2010/2011 - For Nottingham University Hospitals NHS Trust
(1800 bed acute teaching hospital)

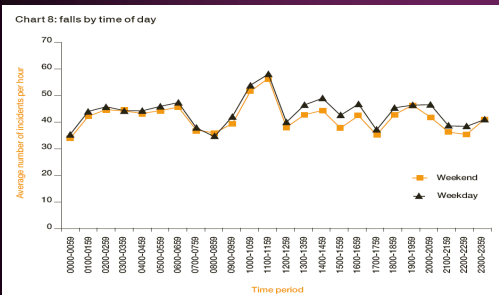
- Around 3500 falls are reported in NUH every year
- 1340 Harmful events every year
- 10 falls every day
- 50 Hip Fractures every year

Which age-group fall most?



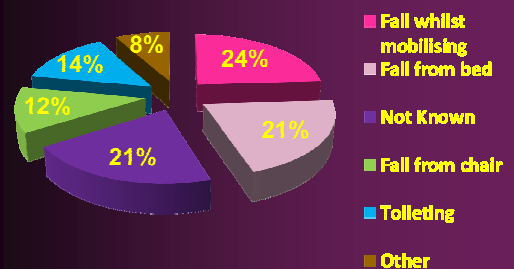
Source – NPSA/NLRS

When do patients fall?



Source – NPSA/NLRS

Circumstances when patients fall



Source – NPSA/NLRS



Impact

- Injuries include:
 - Cuts and lacerations,
 - Deep bruises,
 - Soft Tissue Injuries,
 - Dislocations,
 - Sprains
 - Increase in joint pain
- Fear of falling (>50%)
- Less than 5% of all falls result in a fracture

Impact

Patients

- Distress/Anxiety/Depression
- Fear of falling
- Loss of confidence
- Increased length of stay
- Increased likelihood of care being transferred to a residential or nursing home
- Physical Injury

Impact

Costs

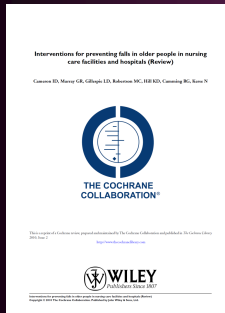
- A fall adds (on average) 3 – 14 days to length of stay
- The hospital costs of a hip fracture are around £15k
- 1340 harmful falls annually costs NUH 4,000 – 18,760 bed days (£1m - £4.7m pa)
- 3500 falls potentially costs NUH 10,000 – 50,000 bed days (£2.6 - £12.25m)
- 50 hip fractures cost £750k

Impact

Staff

- Dissatisfaction
- Guilt
- Fear of litigation
- Balance of Re-ablement vs Risk of falls

Evidence Base



Multifactorial interventions reduced the rate of:

Falls (4 trials 6478 subjects)

RR 0.72 (95%CI 0.55 – 0.95)

Risk of Falling (3 trials 4824 subjects)

RR 0.73 (95%CI 0.56 – 0.96)

BUT

Only 1 trial in acute hospital setting included

Single Interventions

Intervention	N	Effect on falls	Comment
Sitters or observers	3	NS	Possible increase in risk
Bed Chair Alarms	3	NS	
Medication Review	2	NS	Reduced prescription of psychotropic drugs
Exercise	1	Reduced	Effect best seen after 45 days
Vitamin D	1	NS	
Alert sign/wristbands	4	NS	
Comfort Rounds	2	?	Sustainability is difficult
Flooring	1	NS	

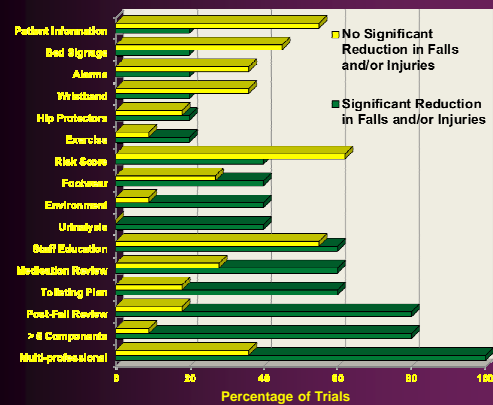
Healey FM PhD Thesis 2011

Multifactorial Interventions

Characteristics of "successful" Multifactorial Interventions

- Attitudes and Behaviours - Developing a culture of safety
- "Risk Assessments" that lead to targeted (individualised) interventions to prevent falls
- Detailed assessment and intervention **following** a fall
- Integration with technology/electronic medical records
- Interventions

Spoelstra S et al Fall Prevention in Hospitals: An Integrative Review Clin Nurs Res 2012 21: 92



Healey FM PhD Thesis 2011

The NUH Story

- Multifactorial Risk Assessment
- Multifactorial Intervention
 - Which Factors?
 - What Interventions?

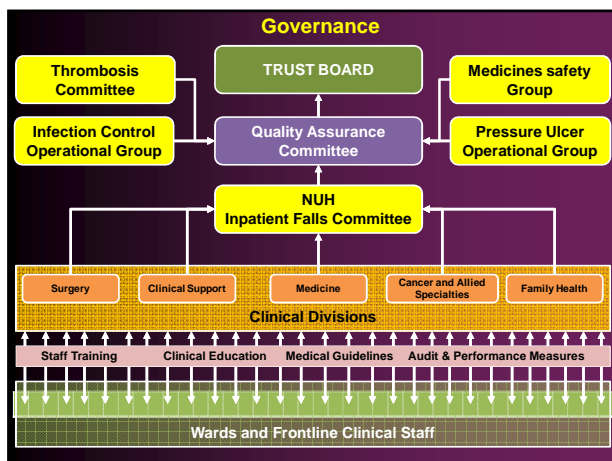
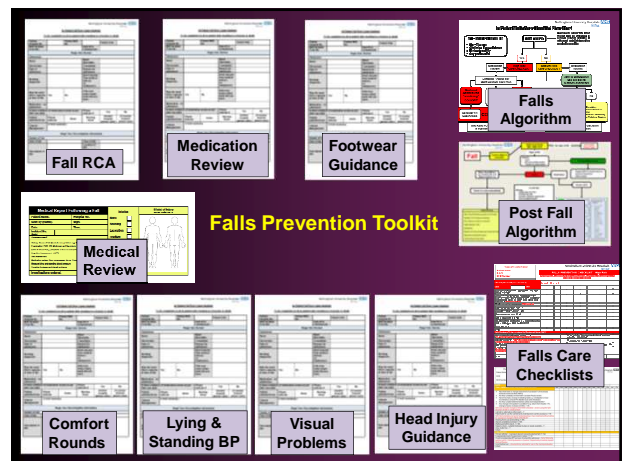
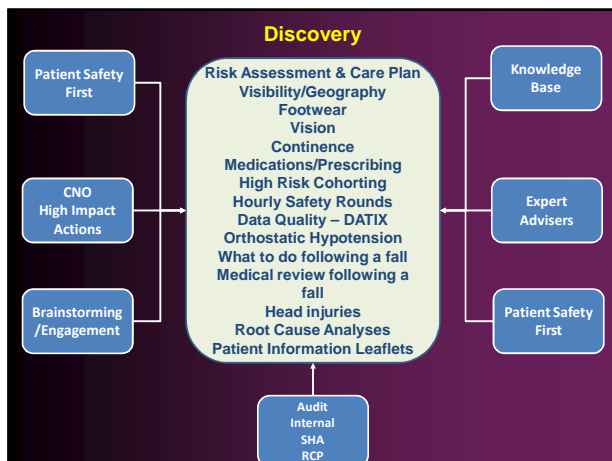
Better for You

- Front line staff
- No holds barred
- Designed around patients



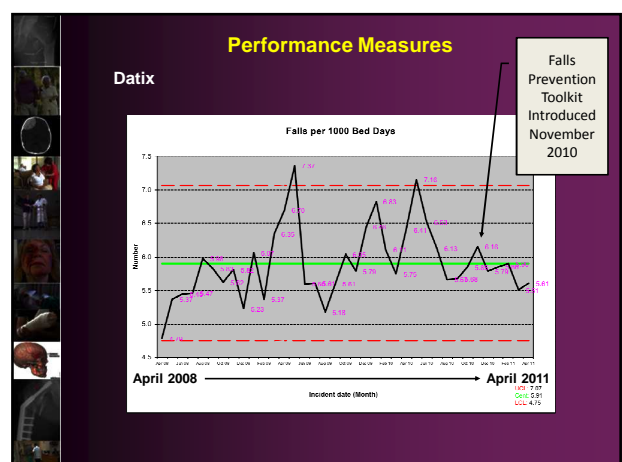
Better for you
caring • safe • thoughtful

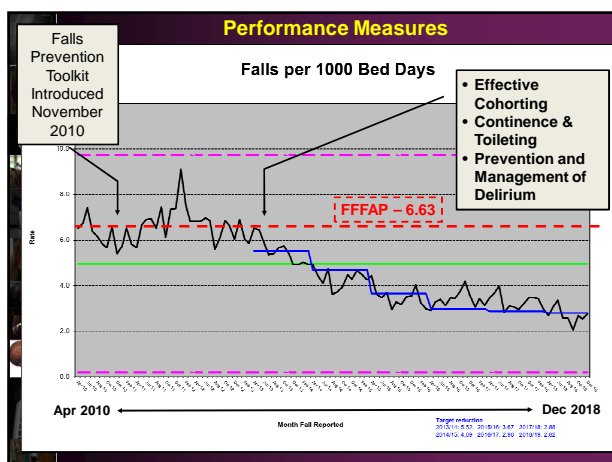
Nottingham University Hospitals NHS



Root Cause Analysis

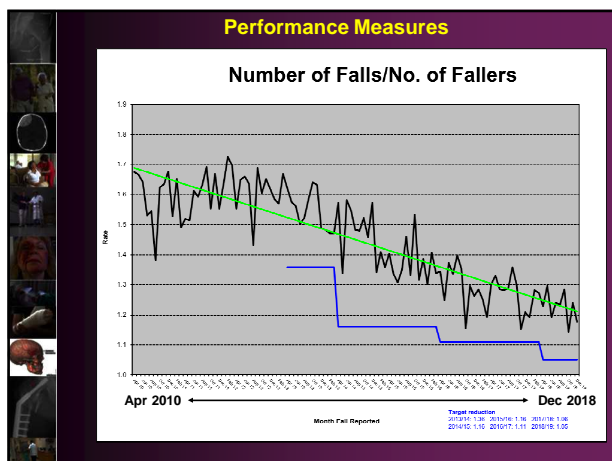
Keyword/Root Cause	% of RCAs citing keyword*
Supervision	44
Delirium	28
Toileting	25
Orthostatic Hypotension	14
Environment	11
Communication	8
Medication	6
Unavoidable	6
Workload	3
Manual handling error	3





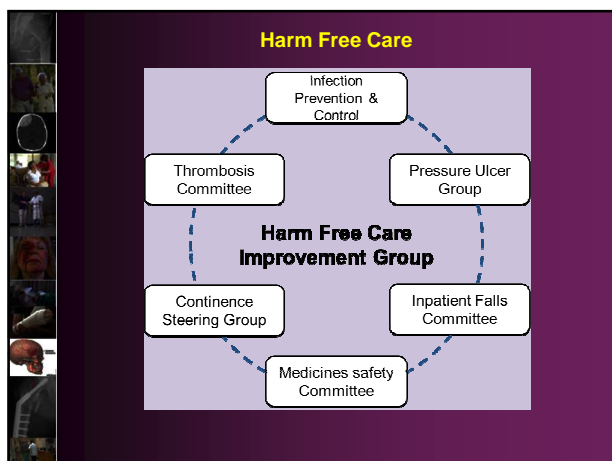
Performance Measures

YEAR (April –April)	n Falls (All)	Falls/1000 OBDs (Ave)	Hip #s	Other #s	Head Injuries	Deaths
2010/2011	3460	6.23	12	11	5	7
2011/2012	3652	7.04	51	29	12	22
2012/2013	3556	6.46	33	39	17	17
2013/2014	3110	5.52	18	26	14	6
2014/2015	2512	4.31	29	29	25	2
2015/2016*	1898	3.50	14	15	6	0
2016/2017	1807	3.39	16	12	5	3
2017/2018	1705	3.34	11	8	5	0
YTD (Dec 2018)	1134	2.71	4	10	6	1



Cross-cutting themes

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- ### Summary
- Falls are not accidents nor are they inevitable
 - Falls are preventable
 - Multifactorial risk identification and management most successful fall prevention strategies
 - Effective measurement and governance
 - “Board to Ward” engagement
 - Preventing falls is a team sport



Distillate

Three Key Themes

- Adequate Supervision
- Management of Delirium
- Toileting and Continence

The Future?

Harm Free care