The background features a light beige, textured surface. In the upper right, there is a faint illustration of a mountain range. On the right side, there is a detailed illustration of a willow tree with its characteristic drooping branches and small, dark, round leaves.

# *The Inpatient Falls Prevention Programme*

**Department Of Medicine For The  
Elderly, St. James Hospital.**

**A nurse led service\_**

# *Incidence of falls*

- ❖ 1/3 of >65 years fall once a year.
- ❖ 40% of >80 years will fall once a year.
- ❖ 1/2 of these are recurrent fallers hence increased likelihood of injury.
- ❖ falls are the leading cause of injury in older people and account for up to 45% of attendances to A&E

A light gray silhouette of a person falling backwards, with arms and legs outstretched, set against a dark gray background. The word "Injury" is written in blue cursive above the person's head.

# *Injury*

- ❖ 10% of falls resulting in injury (e.g. lacerations, haematomas, soft tissue, brain injury, fractures) and 1-3% resulting in hip fracture.

A light gray silhouette of a person lying on their back, with their arms raised and legs bent at the knees, set against a dark gray background. The silhouette is positioned behind the text.

# *Consequences of hip fractures*

- ❖ mortality rates of 20-25% within 6 months
- ❖ 50% sustaining a loss of independence
- ❖ less than 30% regaining their former level of mobility (Kenny and Richardson 2001).
- ❖ Five times more likely to require L.T.C.

## *Consequences Contd.*

- ❖ 1 in 10 Hip fracture is a second hip fracture
- ❖ Falls are also very expensive for the health service with a hip fracture costing approximately €14,300 and an acute falls related bed day costing €1,200 (Cotter et al 2006).

The background of the slide features several light-colored silhouettes of people with their arms raised, set against a dark grey background. The word "Service" is written in a blue, italicized serif font, centered in the upper half of the slide.

# *Service*

- ❖ A Falls, Osteoporosis and Blackout Service was established by the Medicine for the Elderly department in St. James Hospital in 2003.
- ❖ This was set up by under the stewardship of Dr. Conal Cunningham, Prof. J. Bernard Walsh and Dr. Miriam Casey, Consultant Geriatricians.
- ❖ The first of its kind in the country.




# *Service Contd*

- ❖ Nurse led Service
- ❖ Four Clinical Nurse Specialists

# *Designing the service*

- ❖ Cornerstone was education
  - Involving all staff
  - Weekly multi disciplinary lectures on all aspects of falls
- ❖ Changing of attitudes
  - Falls: a problem with a solution
  - No blame game
- ❖ Folder of relevant information on falls on each ward



## *Design Contd.*

- ❖ Education given on STRATIFY, assessment of risk factors
- ❖ Falls Diary
- ❖ Environmental Checklist

# STRATIFY

## *Transfer*

*0 = Unable to transfer. Patient has no sitting balance*

*1 = One or two people needed to aid transfer. Patient can sit.*

*2 = Minor help needed-verbal or physical*

*3 = Patient is independent*

## *Mobility*

*0 = Patient is immobile*

*1 = Patient is wheelchair independent (including corners)*

*2 = Patient can walk with the verbal or physical help of one person*

*3 = Independent (but may use aid such as a walking-stick).*

*Combined score =*

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# *STRATIFY Contd.*

❖ Did the patient present to hospital with a fall or has the patient fallen on the ward since admission?

(Yes = 1, No = 0)

**Do you think the patient is? (questions 2-5)**

Agitated?

(Yes = 1, No = 0)

Visually impaired to the extent that everyday function is affected

(Yes = 1, No = 0)

In need of especially frequent toileting?

(Yes = 1, No = 0)

Transfer + Mobility score of 3 or 4?

(Yes = 1, No = 0)

**If Total Score is 2 or above the patient is at high risk.**



# STRATIFY

- ❖ Oliver, D., Britton, M., Seed, P., Martin, F.C. and Hopper, A.H. (1997) Development and Evaluation of evidence based risk assessment tool (STRATIFY) to predict which elderly inpatients will fall: case-control and cohort studies, *British Medical Journal*, No. 315, pp.1049-1053.



# *Introducing the service*

- ❖ **Piloting**
  - Commenced September 2002
  - Acute rehabilitation ward over 6 weeks
  - All patients assessed for falls risk on admission using STRATIFY
- ❖ **Meeting post pilot**
- ❖ **Presentation of pilot study to all staff in directorate**
- ❖ **Roll out of service**

# *In-patient Falls Prevention program*

- Assessment on admission
  - STRATIFY
  - Falls prevention strategies
- Post falls assessment
  - CNS assessment
- Ongoing Education
  - Ward level
  - Individualised +/- Group
- Audit



# *Initial assessment*

- ❖ Ward nurse on admission
- ❖ Stratify



# *Falls Prevention Strategies*

- ❖ Hip Protectors
  - Controversial
- ❖ Signs
- ❖ Bracelet
- ❖ Electronic risk occurrence forms

# *External Hip Protectors*



# *Environmental checklist*

❖ *CAN YOU ANSWER YES TO ALL OF THESE QUESTIONS?*

- ❖ • **IS LIGHTING ADEQUATE?**
- ❖ • **IS FLOOR DRY?**
- ❖ • **IS FLOOR FREE OF TRAILING FLEXES?**
- ❖ • **ARE CORRIDORS FREE OF CHAIRS, TROLLEYS etc?**
- ❖ • **ARE CHAIRS STABLE?**
- ❖ • **IS BED LEFT IN LOW POSITION?**
- ❖

# *Environmental Checklist Contd.*

- ❖ • ARE BRAKES APPLIED TO BED?
- ❖ • ARE WALKING AIDS TO HAND?
- ❖ • ARE SPECTACLES CLEAN?
- ❖ • ARE PERSONAL EFFECTS LEFT WITHIN PATIENT'S REACH?
- ❖ • IS PATIENT WEARING NON-SLIP FOOTWEAR?
- ❖ • IS PATIENT'S CALL BELL TO HAND?

❖ *Falls & Osteoporosis Service, MedEL (2004)*

❖ *Based on Fall Risk Assessment For The Elderly (FRASE) Environmental Checklist (Cannard, 1996)*

# *Falls alert sign*



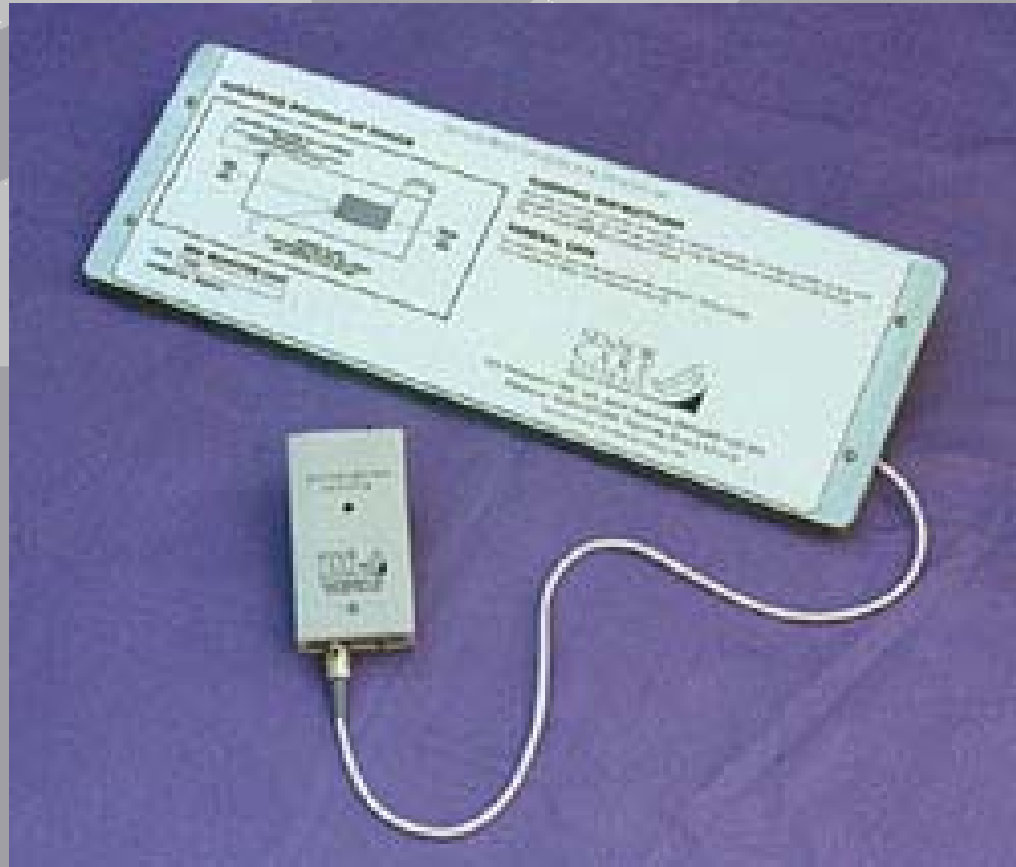
# *Faller Identification bracelet*



# Alarms



# *Alarms Contd*



# *C.N.S. Post Fall Assessment*

- ❖ Patient assessed using a PFA adapted from Multidisciplinary Falls Prediction Form (Carson and Cook, 2000). It includes

Assessment for intrinsic and extrinsic factors:

- ❖ Hx of event
- ❖ Cognitive status
- ❖ Visual acuity
- ❖ Balance and Gait
- ❖ Medication
- ❖ Postural hypertension

A light gray silhouette of a person lying on their back with their arms raised, set against a dark gray background. The person's legs are also raised and bent at the knees.

## *CNS PFA contd.*

Extrinsic factors include

- ❖ Feet and footwear
- ❖ Dietary intake
- ❖ Bed height and bed rails
- ❖ Clutter

Recommendations and referrals are made based on findings.

CLINICAL NURSE SPECIALIST POST FALL NEEDS ASSESSMENT

Patient:

Date assessed:

Injury:

MRN:

Date of fall:

Time of fall:

Recurrent faller:

Ward:

Name of Assessor:

PMedHx: CVA

PD

Hypertension

Cognitive impairment

Dehydration

PHx falls

Visual impairment

Postural hypotension

Walking aid

Impaired mobility

Neuroleptic drugs

Sedative drugs

Hx of blackouts

Other (relevant to falls) É ÉÉ É ÉÉ É ÉÉ É ÉÉ É

Patient's account of fall É ÉÉ É ÉÉ É ÉÉ É ÉÉ É É É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É..

Summary of fall É ÉÉ É ÉÉ É ÉÉ É ÉÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É ÉÉ É..

Question	Answer Yes	Answer No	Expanded Question	Action Plan	Action taken (including date)
1. Has there been previous falls?			Number of falls since admission:  Total in last 12 months:	Refer to Physio <input type="checkbox"/> Refer to OT (via PC) <input type="checkbox"/>	
2. Is the patient confused?			Acute/chronic (delete as appropriate)	Liaise with clinician as necessary	

Question	Yes	No	Expanded Question		Action Plan	Action taken (including date)
3. Is there a visual impairment?			<b>Snellen</b> Near (R ) / (L ) / Distant (R ) / (L ) /		Glasses worn? Distance <input type="checkbox"/> Reading <input type="checkbox"/> Bifocals <input type="checkbox"/>	Refer to clinician <input type="checkbox"/>
4. Is the patient on 4 or more medications?  <b>Total no. of meds=</b>		Name meds	Antidepressants _____ Sedatives _____ Sedating analgesia _____ Anti-hypertensives _____ Diuretics _____		Liaise with clinician	
5. Are there symptoms of dizziness?			Postural hypotension <b>Lying BP</b> /  <b>Standing BP</b> /		Liaise with Nursing Staff & Intern  Advise Intake & Output for 3 days	



Question	Yes	No	Expanded Question		Action Plan	Action taken (including date)
7. Activities of daily living: Is the patient able to ... Get up from bed without help?			<p>Please state:</p> <p><b>Transfer score</b>  <b>0=</b> Unable  <b>1=</b> Major help needed (one/two people, physical aids)  <b>2=</b> Minor help (physical/verbal)  <b>3=</b> Independent</p> <p><b>Mobility score</b>  <b>0=</b> Immobile  <b>1=</b> Independent with aid of wheelchair (or 2 people needed)  <b>2=</b> Walks with help of one person (or with aid/ with aid &amp; one person)  <b>3=</b> Independent</p> <p>Sit to stand without using arms x 5 times</p> <p>Stand in tandem with eyes open x 10 seconds</p> <p>Stand in tandem with eyes closed x 10 seconds</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>(Refer to Physio/OT)</p>	

Question	Yes	No	Expanded Question		Action Plan	Action taken (including date)
8. Environmental Hazards: (a) Poor Footwear  (b) Poor lighting  (c) Bed height  (d) Cotsides in situ	One <input type="checkbox"/> two <input type="checkbox"/>		Comment:		Provide advice:	
8 (e) Night sedation appropriate?						
9. Adjustments to Care Plan advised?			Comments			
10. Is dietary intake adequate?			Please state:		Liaise with Clinical Nutrition	
<b>In your opinion is this a mobility related fall?</b>					<b><u>PTO</u></b>	

Erect & Supine BP x 48hrs						
Podiatry						
Hip Protectors						
Posey alarm						
Bed alarm						
Fall diary						
Fall leaflet to patient /carer						
Faller identification card						
Calcium & Vit. D supplements						
Environmental checklist for ward area						

*Based on Carson and Cook, 2000*

**STRATIFY (1):**  
**STRATIFY(2):**  
**STRATIFY(3)**

**DATE:**  
**DATE:**  
**DATE:**

# *Recommendations*

- ❖ Fall alert sign & environmental checklist placed above patients bed.
- ❖ Each patient is given an orange wristband.
- ❖ Fallers nursed adjacent to nurses station.
- ❖ Falls Diary
- ❖ Chair/Bed Alarm
- ❖ Falls Leaflet
- ❖ Adjustments to Care Plan
- ❖ Calcium and Vitamin D Supplements



# *Education.*

- ❖ Education of staff at ward level carried out re falls prevention and EHP given to patient.
- ❖ Hospital Wide
- ❖ Individualised/Group
  - Depending on staffing level



# *Outcomes 1*

- ❖ From the statistics collected, the effects of the Inpatient Falls Prevention Service can be summarized as follows.
- ❖ In-patient falls documentation is now 100% accurate
- ❖ Compliance with falls prevention measures has increased by 161%

## *Outcomes 2*

	2004	2005	2006	2007 (Jan- June)
Falls	409	380	495	107
Fallers	145	129	161	41
Recurrent Fallers (%)	44.8	43.4	20	n/a
Injurious Falls (%)	20	23	18	n/a



# *Conclusion*

- ❖ A four year nurse led falls prevention service has been effective in
  - improving falls compliance measures
  - in reducing falls
    - Recurrent falls
    - injurious falls.

# *Challenges in setting up a service*

- ❖ Need for initial and ongoing involvement with ward staff
- ❖ Need for same day assessment of fallers
- ❖ Need for ongoing education
- ❖ Need for regular audit
- ❖ Need for IT support



# *Future challenges*

- ❖ Predicting initial falls
  - STRATIFY
- ❖ Reducing Injury
  - Hip protectors
  - Alternatives to hospital bed vs bed rails
- ❖ Ethics
  - Restraint
  - Consent