

# Falls reduction following implementation of a falls prevention programme in a residential care setting



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## Introduction

In Ireland, the age profile of adults living in residential care settings is rising with the average age being 84 years (Drennan et al, 2012). Up to 50% of older people in residential care fall at least once a year and up to 40% will have a subsequent fall, while 8% will sustain a hip fracture (IHFD, 2016). Hip fractures have been identified as one of the most devastating injuries for older people who fall resulting in increased mortality and morbidity (DoH, HSE 2008, IHFD 2016).

## Aim

The aim of this project is to demonstrate how a falls prevention programme can raise awareness of and reduce the risk of falls in a residential care setting.

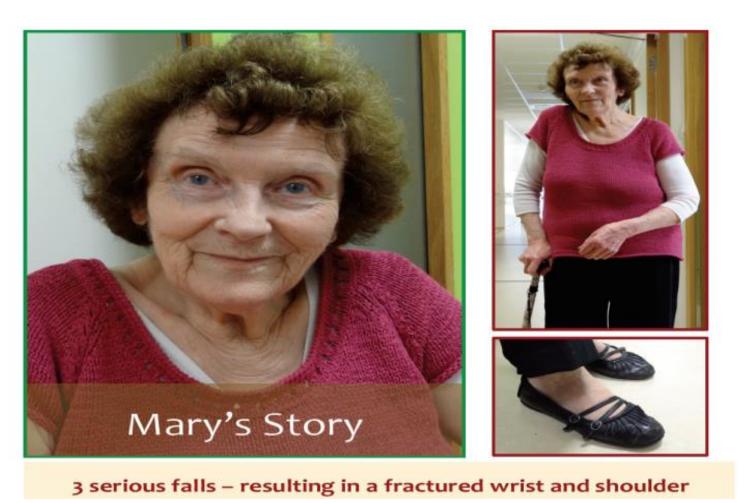
### Methodology

A falls prevention action research project was instigated in 2011. A project team was formed with representation from clinical and nonclinical staff groups - nursing, medical, physiotherapy, occupational therapy, speech and language therapy, dietetics, health care assistant, portering staff, clerical, household, cleaning and supplies staff. A new data measurement was introduced – collection of number of interventions. An intervention occurs when a staff member – clinical or non clinical looks in on a resident as a result of the leaf symbol outside the bedroom door, if the person appears to be unsafe and at risk of falling the staff member intervenes to make them safe thus preventing a potential fall. Forever Autumn falls prevention programme was piloted on one residential unit in autumn 2011 and implemented across the remainder of St Mary's in January 2012.

The elements of the programme include:



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Revision date November 2017	Deirdre Murphy Hospital Manager
Document developed by	1
Falls Prevention & Management Committee (appendix 1)	Frances McCarthy Consultant Gerlatrician
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Responsibility for implementation Heads of all Departments Frontline Managers	Interim Director of Nursing
Practice Development Falls Prevention & Management Committee	Aideen Lawlor Speech & Language Therapy Manager and
Responsibility for review and audit Falls Prevention & Management Committee	Health & Social Care Professionals Representative
Pages: 30	•



**1.** Poster and badge campaign to raise awareness of falls

**2.** *Revision of falls prevention & management policy* 

### 3. Use of patient stories

ddressograph or complete below				St. Mary's Hospital/Phoenix Park Community Nursing Units Falls Risk Assessment Tool					Ref no: 14 Approved 31/10/1 Vertion 1: 8/6/3
me:		_					essment Falls Preventio		009)
te of birth: dical Record no.: _				To be co	mpleted w	rithin <u>24 l</u>	<u>hours of</u> add degree of m	mission fo	·
erd:			·	Admissio	n Assessme	nt 🗆 Reas:	sessment, Date	e://	201
□ Yes □ No	Falls pri	or to ti	his admiss				ly/medical recon		
□ Yes □ No If yes, detailed Circumstance	Falls pri most rea	or to ti cent be	his admiss clow	ion (home ation obtai	or referring : ned from:	facility) <u>and</u>			
□ Yes □ No If yes, detailed	Falls pri most rea	or to ti cent be	his admiss clow	ion (home ation obtai	or referring	facility) <u>and</u>		rent stay	Comment
□ Yes □ No If yes, detailed Circumstance Date of Last 3 Falls Most Recent	Falls pri most rec s of rece	or to ti cent be sut fall	his admiss clow ls: Inform Lost	ion (home ation obtai <b>Reas</b>	or referring : ned from: n for Fall Leg's gave	facility) <u>and</u>	or during cur	rent stay	Comment
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ate of birth: (edical Record no.: (ard:		(Using SBAR Analysis)		<ul> <li>appropriate) to complete</li> <li>following questions</li> </ul>
				ULL
Situation				
Date of Fall 1	lime of Fall		the fall occur?	
Tisk its set at a set	t of each 2 m No			ed [Initiate Neuro Obs. Immediately] emote 🗆 Tissues 🗆 Meal tray
Waste basket      Assist				
What footwear did the per		zimmer trame u	Other: Nede Inten	
Was the Manual Handling		written? m NA m )	es 🗆 No If No: why	
How many carers did this				orrect?  NA  Yes  No
If No: why!				
Do they Have a Low-Low B	ed? 🗆 NA 🗆 Yes 🗆	No If yes; has th	is contributed to th	e fall? 🗆 Yes 🗆 No
Do they Have a roll out ma				
Trip Hazards?  Clothing C Other:	shoes 🗆 tubing 🗆	cord = obstruct	ed path to bathroo	m 🗆 None
Slippery Floor?  C Y  C N	Adequate	e lighting? 🗆 Y 🗆	N Equip	ment malfunction?   Y  N
reaching for somethin	is threaming on s	omething 🗆 usi	ng furniture to am	nbulate
Dother: (insert details)	vas last observed	d [use 24 hour clock]	What were they do	oing?
Dother: (insert details)	vas last observed	d [use 24 hour clock]	What were they do	
Dother: (insert details) Insert time the person v Ask the person (if possib	vas last observed	d [see it hour clock]	What were they do	oing?
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Risk Factor		Risl	c Score	
Recent Falls	None in the last 12 months		2	
	One or more between 3 & 12	4		
	One or more in the last three	months	6	
	One or more in last three mo	8		
Medications	Not taking any of these		1	
Sedatives, Antidepressants,	Taking one		2	
Anti-Parkinson's, Diwretics, Anti-Hypertensives,	Taking two	3		
Hypnotics)	Taking more then two		4	
Psychological	Does not appear to have any	of these	1	
(Analety, depression,	Appears to be mildly affecte	d by one or more	2	
decreased: cooperation, insight or judgment esp. re.	Appears to be moderately a	3		
mobility)	Appears to be severely affect	ted by one or more	4	
Cognitive Status	AMTS= 9 OR 10/10	Intact	1	
(Hodkinson Abbreviated Mental Test Score (AMTS))	AMTS=7-8	Mildly Impaired	2	
menua resi score (Amroj)	AMTS= 5-6	Moderately Impaired	3	
	AMTS=4 OR LESS	Severely Impaired	4	
-11 = Low risk 12-	-15= Medium Risk 16-	20 = High Risk   Part 1: Risk	Score	

4. Introduction of an alternate falls risk assessment tool

5. Introduction of signage to identify residents at risk

### 6. Introduction of post fall review



### **9.** Education resource to raise awareness of falls

Intervening record What was the person doing? **OR**= Over reaching; **AS**= Attempting to stand; **GT**= Going to the toilet; **WWS**= Walking without shoes; **WWA=** Walking without aid; **LF=** Leaning on

furniture; **UFA**= Using furniture to ambulate; **NN**= Narrative note written

Date	10/10/2017
Time	14.35
Code	LF
Initials	DR

**7.** Collection of intervention data

Key times throughout the day that residents require additional monitoring

11am – 1pm , 3pm – 5pm , 7pm – 9pm

Comfort checks take place hourly during these periods to address all of the resident's needs eg. toileting, pain management, positioning, social stimulation and environmental.

### 8. Comfort Checks

### Results

Pre programme falls data in 2011 was 567 falls and in 2012 post implementation was 345 falls demonstrating a reduction in falls by 35%. From 2013 – 2016 when a comparison is made to the pre programme data there is a sustained reduction in falls by over 30% each year. The number of intervention data collected each year ranged from 9032 – 11737. The programme has been adopted in many residential settings nationally and similar reductions in falls are being achieved.

# Conclusion

It has been demonstrated that this falls prevention programme reduces the risk of falls in residential care settings. However, further studies are required to establish what factors contribute to the sustained reduction. Research is ongoing using case study methodology with an aim to provide an in-depth understanding of the programme by exploring the differing elements. This will be achieved through carrying out focus group interviews with staff using the programme and examining the intervention data. It is anticipated this will support the evaluation of the above findings further.

### References

Department of Health and Children, Health Service Executive, National Council on Aging and Older People (2008) Strategy to Prevent Falls and Fractures in Irelands Ageing Population Drennan, J., Lafferty, A., Treacy, M.P., Fealy, G., Phelan, A., Lyons, I. Hall, P. (2012) Older People in Residential Care Settings: Results of a National Survey of Staff Resident Interactions and Conflicts. NCPOP, University College Dublin. National Office Clinical Audit Irish Hip Fracture Database National Report 2015 https://www.noca.ie/wp-content/uploads/2015/04/NOCA-IHFD-National-Report-2015-FINAL.pdf