

East Lancashire Hospitals NHS Trust

Reducing acute falls admissions: A targeted multicomponent intervention

Introduction					
Service Redesign		CSP Framework			
 Improve quality, efficiency and patient care (Locock, 2003) Organizational culture: Patients-Place-People framework (Gale et al., Community engagement and citizen involvement: Consultation and feed of the second s	2014) eedback on influence (Munoz & Bradley, 2021; Hammer & Champy, 1993) ^f clinical transformation (Backhouse & Ogunlayi, 2020) pable to work with others to improve their part of the service (NHS, 2005 t performance (Williams et al., 2019	 Ensuring quality Improving & developing services Researching & evaluating practice Using evidence to lead practice (CSP, 2020) HCPC Reflect on, review and inform practice (HCPC, 2018) 			
	Background				
Financial cost There were 216, 075 falls-related emergency hospital admissions in patients aged 65 and over. Around 67% of these were patients 	Human cost - Fear of falling - Unwillingness to move	Causes and contributory factors - Muscle weakness - Impaired balance			
aged 80 and over (OHID, 2021)	- Social isolation - Depression	- Impaired cognition			

- A falls hospital admission costs approximately £2,600 per patient (NHS, 2019)

- The hospital, community and social services costs in the 12-months following a fall are four times that of the initial admission (Kingsfund, 2013)

- Hip fractures: 5-8-fold increased risk of all-cause mortality within 3 months following hip fracture (Haentjens, 2010) - Increased falls risk - Higher morbidity rates

(Stenhagen et al., 2014; Nazir et al., 2012)

LOSS OF SIGNL

- Multimorbidity
- Polypharmacy
- Low socioeconomic area
- Care home resident

(NHS, 2013; Hekman et al., 2013; Rubenstein, 2006)



Problem

Blackburn with Darwen Borough Council

- Second highest rate of permanent admissions to care homes in people aged 65 and over in England

- This population is three times as likely to fall and has ten times more hip fractures than community residents
- Borough is relatively deprived compared to other areas in England
- Deprived areas of BwD have higher falls-rates and ambulance call-outs due to falls
- One third of the annual 1,500 ambulance call-outs for falls, at a cost of £235 per call, are not conveyed to A+E
- BwD had 723 falls-related hip fractures in patients aged 65 and over at a cost of £25,000 per patient. The highest in England.
- One third of acute falls admissions in BwD come directly from care homes
- 1:5 care home falls result in a hip fracture
- Falls pathways and programs are typically community based

(Directorate of Public Health, 2015) (OHID, 2021)



Intervention

Making Every Contact Count (MECC) - Identify people at risk of falling Support patients in making positive changes to their physical and mental health and Overview - Multifactorial assessment wellbeing (Public Health England, NHS, 2016) - Multifactorial intervention Upskilling clinicians and encouraging staff leadership at all levels to deliver MECC models increases signposting and referrals to lifestyle services (CSP, 2018; Brace et al., 2022) (NICE, 2017) Evidence Success stories Multifaceted interventions in care homes yield significant reductions in falls, fallers Guide to Action for Falls Prevention Tool –



NICE Guidelines

and fractures (Oliver et al., 2006; Neyens et al., 2011) especially when combined with exercise intervention (Cheng et al., 2018)

Intervention

- 1-month pilot scheme

- ITT consisting of PT x 1, OT x 1, TA x 1 - Multifactorial intervention initially delivery by ITT to train care home staff followed by an exercise class with residents - Ongoing sessions delivered by TAs and care home staff

Exercise Program

care nomes (other). Largest care nome	
RCT conducted in UK. Effective systematic	
falls prevention program (Logan, 2022)	

Care Homes (GtACH) Largest care home

STEADY On!: Community program in East Lancs. Self-referral only program

Multicomponent interventions that are not tailored to individually assessed risk factors are as effective at reducing both the number of people that fall and the fall rate (Goodwin et al., 2014)

Integrated Exercise Interventions can prevent falls-related fractures and significantly reduce falls (Wang et al., 2020; Sun et al., 2021)

Coordination times: Older people have difficulty countering the tendency of the body to fall laterally after losing balance forward/backwards, and in controlling the swing leg from hitting the stance leg. (McIlroy & Maki, 1999)

- Regular delivery of a 30 min class x6 per week (Sherrington et al., 2020) - Functional exercises - Strength and balance exercises - Proprioception and coordination exercises

Barriers to implementing this intervention?

Care homes: belief that falls cannot be prevented, lack of falls prevention knowledge, lack of resources, lack of ownership (Ayton et al., 2017)

Residents: lacking physical ability, impaired mobility, psychological capability (fear of falling), lack of knowledge (inevitable not preventable), underestimation of risk (Fernandes et al., 2021)

resident dynamic and less falls

incidents

Strategy for change							
Quality Improvement Tool	- Reduce care home falls	Diagnosis - Document current states	Implementation			Evaluation (NHS, 2005) Service delivery: reduce care home	
of the population - Improves quality of care	 Reduce falls acute admissions Reduce mortality rate especially from hip fractures Reduce public sponding 	 Identify problems Adapt to unexpected changes 	Step 1: Pilot with existing staff Step 2: Collect data Step 3: Submit a business case and apply for	Act	Plan	falls, acute falls admissions and related costs	
(The Kings Fund, 2017)	 - Reduce public spending - Educate and empower care home staff - Improve resident cognitive function - Improve resident social interaction 	Changes - Target care homes rather than community - Multicomponent rather than single intervention - General rather than tailor-made - Education of care home staff	 funding from Integrated Care Board Delivery of high-quality care demands reliable teamwork and collaboration across organisations and disciplines (Rosen et al., 2018) Interprofessional practices of physiotherapists improves overall treatment and outcome (Perreault et al., 2014) 	Study	Do	Clinical outcomes: Care home residents comprise 30% falls admissions therefore reducing these will improve quality of care and ease the burden on acute wards	
Aim statement and baseline data Launch CI team formation / Communication plan Diagnosis Document current state / identify problems Implementation PDSA / standard work / future state	Step 1: Secure an Executive Sponsor Step 2: Secure a Director of Operations Step 3: Identify the Working Program Group: ITT Step 4: Data Team					Patient experience: increased confidence, social interaction, cognitive function and improved QoL Benefits for staff: improved interprofessional relationships, staff-	

Evaluation Measure change / share learning

Measurement of Improvement

	Fear of falling increased activity avoidance and negatively impacts intervention adherence (Hamed et al., 2021; Tai et al., 2020; Bunn et al., 2008)	 Short FES-I: Excellent validity and reliability (Kempen et al., 2007) Care home falls Acute falls admissions Cost-effectiveness 	ty			
Effects of change						
- Improve quality of care	- Improve service efficiency	- Reduce service costs	- Build stronger cross-sector working relationships			
Lessons learned and message for others						
Atkins & Murphy Mode (Atkins & Murphy, 1993; Ward & Gracey, 2006)						
 Identifying a service redesign is challenging as problems are often complex in nature It may be necessary to modify or even abandon our initial designs The willingness and process of letting go of ideas may be uncomfortable: we must not be precious about our ideas as patients and optimising quality of care must always be our primary focus Our preferred modes of practice, chosen discipline or even profession may not be the sole solution to the perceived problem. We may need to look to and recruit assistance from other sectors 		 Knowledge gained through our research is valuated discoveries and solutions Multifaceted assessments may be largely redund Multicomponent interventions yield most signific General interventions are more time and cost efficients Falls reduction rel heavily on regular exercise processful service redesign involves an in-depth 	 Knowledge gained through our research is valuable, especially that which runs contrary to our expectations, as it may lead us to new discoveries and solutions Multifaceted assessments may be largely redundant in a care home setting Multicomponent interventions yield most significant outcomes General interventions are more time and cost efficient and equally as effective as tailor-made interventions Falls reduction rel heavily on regular exercise programs Successful service redesign involves an in-depth knowledge of the targeted population as well as strong interprofessional collaboration 			
	CHARTERED SOCIETY OF PHYSIOTHERAPY	University of Central Lancashire UCLan	c Health nd			

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