



Nottingham
University Hospitals
NHS Trust

'Dinner & Dance' – for enhanced recovery following hip fracture surgery



Personalisation of Care

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What inspired us?

- Improving patient experience
- Knowledge that group work can often encourage people to engage more in exercise.
- Providing an increased service without needing additional staff – working smarter.
- Previous shortcomings when attempting groups classes



Why?

- 95% time during an inpatient stay patients are immobilised (McGowan et al., 2018)
- Hip #'s – 99% of the time immobile = 16mins/day of activity (Davenport, 2015)
- Average 600 steps/day – including therapy (Lim, 2018)
- 51% of patients admitted with a NOF # are classified with a 'frailty fracture' (Kistler et al. 2015)



What we know...

- Immobility causes harm!
- 10/7's bed rest in health older adults – lost 6% of total muscle mass, 15% leg strength (Kortbein, 2008)
- 10/7s bed rest promotes a reduction in ability to climb stairs and gait speed in health older adults (Coker, 2015).
- Healthy older adults take longer to recover from immobility than younger adults. (Kortebein, 2008)



What we did...

- 6-week Pilot ran from Feb – Mar 2020, Tues to Thursday inclusive
- Liaising with members of the MDT to move patients (pre-COVID)
- Auditing patient satisfaction and therapy contacts
- No exclusion criteria – open to all, including family members
- Fundraising monies from the wards to buy new equipment



Trauma Exercise Class: Chair Based Exercises

			
Through Range Quads	Seated Marching	Sit to Stand	Knee Bends
			
Bicep Curls	Chair Push	Overhead Press	Arm Raises
			
Overhead Extension	Bottom Clenches	Ankle Pumps	Chest Press

What we found?

Did you enjoy the group?	Yes	No		
	40 (100%)	0 (0%)		
Would you be interested in participating again?	Yes	No		
	39 (98%)	1 (2%)		
How would you like your Physiotherapy to be delivered?	One on One	Group Exercise	Both	
	0 (0%)	10 (25%)	30 (75%)	
What time would you like the class to run?	8am-10am	10am-12midday	12pm-2pm	2pm-4pm
	1 (2%)	12 (30%)	23 (58%)	4 (10%)



Feedback

Maybe walking
as an exercise!

More room – to
close together!

No changes!

Having lunch
together was
nice

Happy with
the class

Sweets at the
end!

Better Music,
volume up!

More arm and
shoulder
exercises!

Same – as the
class gets more
popular new ideas
will emerge!

Would rather
exercise before
lunch

Enjoyed how it
was



What's next?

- Activity Courses for HCA's
- Audits – any changes to LOS?
- Possible increase in staffing to provide over a weekend?
- Increasing provision – 5 or 7-day?
- Multidisciplinary approach to rehabilitation, engagement of patients
- Increased focus on what patients want from their rehab!
- Outcome measures



References

- Coker, R. H., Hays, N. P., Williams, R. H., Wolfe, R. R. & Evans, W. J., (2015) *'Bed Rest Promotes Reductions in Walking Speed, Functional Parameters, and Aerobic Fitness in Older, Healthy Adults'* Journal of Gerontology: Medical Sciences. 70(1): pgs 91–96
- Davenport, S. J., Arnold, M., Hua, C., Schenck, A., Batten, S., Taylor, N., (2014) *'Physical Activity Levels During Acute Inpatient Admission After Hip Fracture are Very Low'* Physiotherapy Research International 20(3): pgs 174-181
- Kortebein, P., Brock Symons, T., Ferrando, A., Paddon-Jones, D., Ronsen, O., Protas, E., Conger, S., Lombeida, J., Wolfe, R. & Evans, W., (2008) *'Functional Impact of 10 Days Bed Rest in Healthy Older Adults'* Journal of Gerontology: Medical Sciences 63(10): pgs 1076–1081
- Kistler, E. A., Nicholas, J. A., Kates, S. L. & Friedman, S. M., (2015) *'Frailty and Short-Term Outcomes in patients with Hip Fracture'* Geriatric Orthopaedic Surgery & Rehabilitation 6(3): pgs 209 - 214
- Lim, S. E. R., Dodds, R., Bacon, D., Sayer, A. A. & Roberts, H. C., (2018) *'Physical Activity among hospitalised older people: Insights from upper and lower limb accelerometry'* Aging Clinical & Experimental Research 30: pgs 1363 - 1369
- McGowan, T., Ong, T., Anand, V., Tan, W., Watson, A. & Sahota, O., (2016) *'Physical activity study of older people in hospital: a cross-sectional analysis using accelerometers'* European Geriatric Medicine 7: pgs 55–63

