Improving physical activity levels and reducing falls using Strength and Balance Programme in a care home setting



Pooja Gupta Care Home Collaborative, NHS Greater Glasgow and Clyde (NHSGGC)





Why is this needed?

An estimated 430,000 people live in UK care homes, with this figure expected to rise in line with an ageing population.

Care home residents (on average) spend 90% of their time sedentary.

Physical inactivity is associated with higher frailty and is a well-known health risk among care home residents.

Falls incidence in care homes is reported to be about three times that in the community

Who are we working with?

Paths for All is a Scottish charity with a vision to give everyone an opportunity to be active. The aim of their Active Health and Social Care programme is to collaborate with and support health and social care professionals to increase physical activity opportunities for people receiving care.

The NHSGGC Care Home Collaborative has been working with Paths for All since Feb 2023 to develop a strength and balance programme within care homes.

Aim

By March 2024, 10 residents at two care homes will increase their physical activity levels and reduce falls by 25%, in line with the health and social care standards and principles of Caring about Physical Activity (CAPA).

What did we do?

- Improvement team set up including staff from 2 care homes, Paths for All and the Care Home Collaborative
- Strength and Balance resources introduced in both care homes e.g. posters, cue cards and recording charts
- Workshop delivered by **Paths for All** to train staff on walking with Strength and Balance exercises that would be used in the sessions. This included practical examples of how to incorporate physical activity, particularly more walking, in residents' daily life
- Implementation of Strength and Balance classes 3 times per week for 20 weeks with support from the Care Home Collaborative team





- Regular support / check-in with staff to help embed the change in physical activity culture
- With funding from Paths for All, outdoor panels were installed to allow residents to exercise safely in the garden

What did we collect?

- Baseline data including the number of sit to stands in 30 secs and the part of Berg score gauging the quality of sit to stand and stand to sit were collected weekly for each participating resident. Increases in these two measures can indicate an improvement in functional mobility and a reduction in the risk of falls
- Focus groups were conducted and feedback collected to capture impact stories from residents, family and staff

Acknowledgements:

- Staff and residents of Braemount Care Home and Mosswood Care Home
- CHC staff Elaine Hamilton (Lead Nurse, CHC), Fiona Cowan (Quality Improvement Advisor), Sheeja Jacobs (RN), Lavinia Mclaughlin-Todd (Care Support Worker) and Stuart Wilson (Care Support Worker)

What did we find?

Chart 1 highlights an improvement in a resident's Berg score which was sustained between weeks 15 - 20.

Chart 1: Berg score

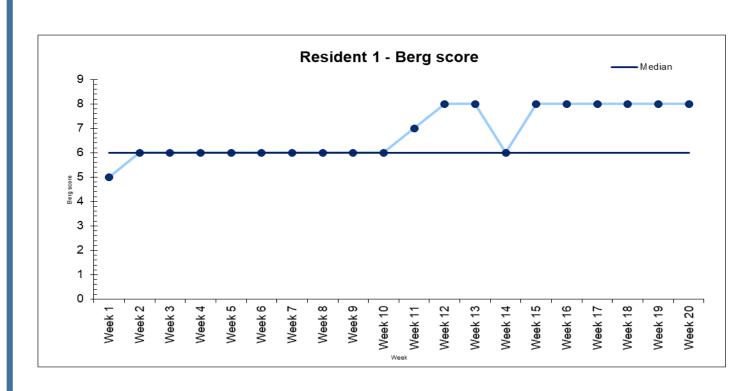


Chart 2: Number of sit to stands in 30 seconds

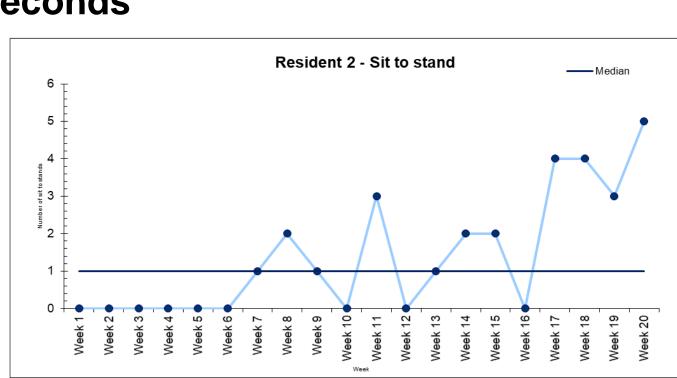
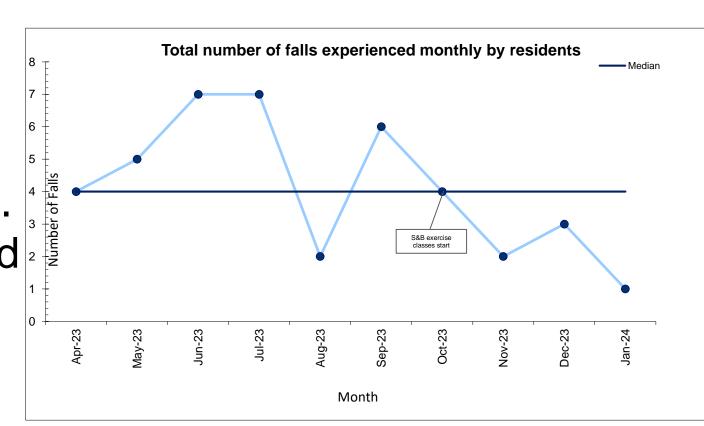


Chart 2 demonstrates that over a 20 week period, the number of sit - to - stands completed by one resident in 30 seconds increased from 0 - 5. There is a positive change from weeks 16 – 20, showing an improvement in the resident's functional ability.

Falls

Chart 3 highlights that prior to starting the project there were 22 falls recorded for the participating residents over a 4 month period. In the 4 months since the project commenced this has reduced to 10.

Chart 3: Monthly falls



Feedback

- Resident J's daughter noticed a significant improvement in her dad's mobility and mood.
- Staff reported a positive impact on the mood of the residents who attended regularly.
- Residents enjoyed the social aspect of the activity
- Staff reported seeing a difference in resident's mobility and strength
- Family members enjoyed participating in the classes with their relatives

Irene's story



Irene returned home after a 6 week admission to hospital following a stroke in Sept 2023. Her daughter stated "when she returned home she struggled to get up out of a chair and walk".

Mum loved going to the strength and balance classes three times per week. "She still walks with a zimmer but her balance is much better ... I believe she walks better now than she did before her stroke. Thank you for helping her get some independence back" (Alyson Craig, Irene's daughter)







What is next?

- Targeted workshops for interested care homes
- Support to care homes to implement strength and balance exercise classes
- Continue to measure impact and spread to more care homes in NHSGGC whilst scoping options to embed programme to ensure sustainability

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