



## **Allied Health Professional case studies: wider determinants**

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Physical activity engagement with 'easy to ignore' communities

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## Physical activity engagement with 'easy to ignore' communities

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### Description

We are a close team of nurses, physiotherapists, occupational therapists and rehabilitation assistants. We see patients who are over 60 years of age from the central Manchester area (or who have a central Manchester GP) with a history of falls or at risk of falling. Our referrals come from a wide range of medical and social central Manchester services and also from patients self-referring.

A full multi-disciplinary falls assessment is completed on referral which includes looking at the home environment, checking blood pressure, requesting medication reviews etc. One of the biggest focuses is a patient's ability and willingness to take part in a home exercise programme.

These measures are in line with the National Institute for Health and Care Excellence (NICE) guidelines.

*"Strength and balance training is recommended. Those most likely to benefit are [older people living in the community](#) with a history of recurrent falls and/or balance and gait deficit. A muscle-strengthening and balance programme should be offered." (NICE guidelines, 2013)*

### Context

One of the main responsibilities for the rehabilitation assistant (R/A) is the delivery of Otago, a 6-month, evidence based tailored home exercise programme. The way this is delivered can vary depending on the patients' physical and cognitive abilities. The R/A will take into consideration previous experience of exercise, level of activity, sedentary behaviour etc. These factors can make some patients quite 'easy to ignore'.

It is discussed at the initial assessment what the patient goals are; What is it they want to achieve, what have they stopped doing, what are the barriers?

A set of outcome measures are taken at the initial assessment and recorded on the Falls Team outcome database. The same measures will be taken again on completion of the programme and similarly recorded.

Patients are taught Otago over a 6-month period that suits their capabilities. In this period the R/A will make approximately 6 home visits. An Otago exercise booklet is provided for the patient to use 3 times per week in between visits.

*The recommended 'prescription' for the modification of risk factors and potential reduction of falls and injuries is to aim for a programme of 3 times a week of specific types, sites and intensities of exercise that is tailored to individual health and motivational needs. (OTAGO, Campbell 1998)*

The R/A gives further instruction and feedback at each visit. The patient is asked to demonstrate the exercises from the previous visit. The R/A will always make sure the patient can read, understand and can follow the instruction from the booklet. These patients may well need a more supportive approach.

## Method

For 'easy to ignore' patients the following methods may be used:

For patients whose first language isn't English, interpreter services can be used. The R/A may ask the interpreter to write notes on the booklet in the patients' first language.

For patients whose cognition and/or motivation may be a barrier, the R/A may ask a family member or friend for support with the programme. Having that support can be the difference to making any improvements.

If problems with sight are a barrier, an audio version of the Otago (issued by the publisher) can be used. With consent, I often record myself whilst instructing the patient during the session. I will do this on the patients' own smart device for them to use in between visits.

Sometimes an A4 booklet with limited text and large print may be used.

Pain is a huge barrier for some patients and this can make them afraid of engaging in the programme for fear of increased pain.

In such cases the patient can score and record their pain in a pain diary. The R/A may eliminate certain exercises during the programme. These can be re-introduced as and when confidence and tolerance improves.

Also an exercise diary can be used for patients to record their programme to help with motivation. This approach is taken for patients who may find adhering to the programme 3-times per week difficult

## Outcomes

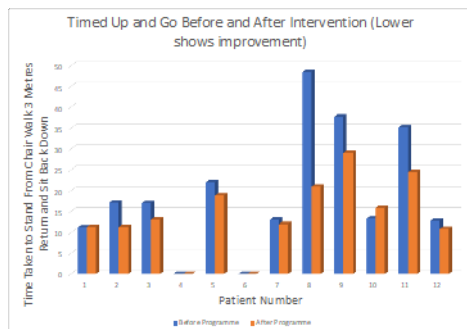
Some of the Outcome Measures used are:

**Timed up and go (TUAG):** Assesses mobility, balance, walking ability and falls risk in older adults.

Equipment used: A standard arm chair, a tape measure to measure a 3m distance from the chair and a stopwatch.

Method: Instruct patient to stand from chair, walk to the end of the marked 3m line, turn around and walk back to chair and sit down. Time will start when patient stands from chair and stops when patient sits back down.

Data Collected: A total of 8 from 10 patient results showed improvement over the duration of the programme. This can be seen on the accompanying graph.

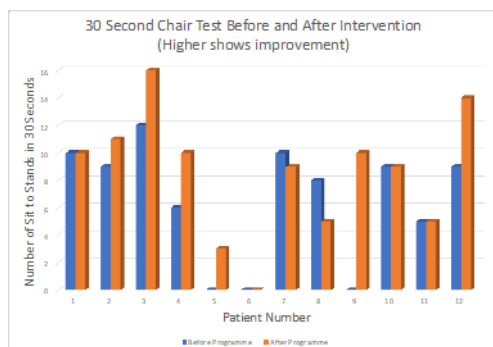


**30 Second chair test:** Tests leg strength and endurance.

Equipment used: Armless chair and a stop watch.

Method: Stand up and down from the chair without using their arms continuously for 30 seconds. Record the number of rises.

Data Collected: A total of 6 from 11 patient results showed improvement over the duration of the programme. 2 patients regressed and 3 maintained. This can be seen on the accompanying graph.

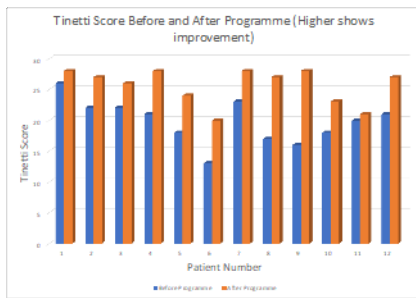


**Tinetti:** To assess gait and balance.

Equipment needed: Armless chair, stopwatch and a clear walk way of 15 feet.

Method: 16 various measures are used to score the patients' balance ability. Attempts to rise, step length & height, step symmetry plus others.

Data Collected: All 12 patient results show improvement over the duration of the programme. This can be seen on the accompanying graph.

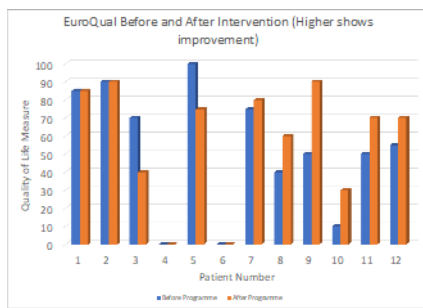


**EuroQual:** A quality of life measure.

Equipment needed: n/a

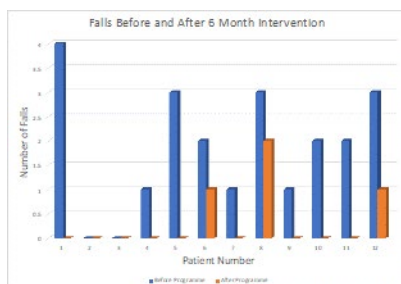
**Method:** A patient questionnaire with 5 health questions is provided. Also a scale of 0 to 100 is asked of the patient to assess their health on that particular day.

**Data Collected:** A total of 6 from 10 patient results showed improvement over the duration of the programme. 2 patients regressed and 2 maintained. This can be seen on the accompanying graph.



**Falls before and after 6-month intervention measure:**

As can be seen on the accompanying graph, all 10 of the patients showed a reduction in falls over the duration of the programme.



## Key learning points

My own enthusiasm for health and wellbeing has helped motivate patients who want to make a difference to their current situation. I feel the R/A should give the patient confidence to make behavioural changes and to believe that these changes are achievable. Also to give appropriate support if and when a patient regresses which is quite normal in older patients. If regression does happen, new and smaller goals can be set with a view to working back up to the bigger goals, celebrating those little steps.

It is important for the R/A to recognise that for some of our patients with chronic pain, who have not been active for many years, the smallest of exercise can cause pain and the patient may want to

stop. Tools such as the pain and exercise diaries have helped many patients but equally as important is demonstrating the confidence, assertiveness and being supportive with hard-to-reach patients.

Once the 6-month programme is completed, it is important for the patient to continue with their programme. One way to encourage this is to signpost a patient to other community (FaME / OTAGO) exercise programmes. Some patients work so hard to reach their goals and if exercise isn't continued, they can quickly lose confidence, strength and balance. This can result in them being referred back into the service to start all over again. If you don't use it, you will lose it.

*Community-dwelling older adults who joined an exercise intervention (FaME) aimed at increasing MVPA did not fall more during the intervention period, fell less and had fewer injurious falls in the 12 months after cessation of the intervention. However, 24 months after cessation of exercise, the beneficial effects of FaME on falls reduction ceased, except in those who maintained higher levels of MVPA. (S Gawler, DA Skelton et al: 2016)*

Patients often say "I'm 80, why would I want to exercise at my age?"

I'll say .. "do you want to stay independent and be able to get on and off the toilet... get in and out of the shower... get up and down from the chair... get on and off the bus" and so on.

On a final note, one of the best ways, I have found to change patients' attitude towards Otago, is to look at the programme in a different light. Not viewed as solely an exercise programme but as a tool to maintain independence, improve mobility and keep dignity.

## References

### References:

NICE Guidance (2013): *Falls in older people: assessing risk and prevention Clinical guideline [CG161]*  
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Later Life Training: Manual2 The Practice – 3<sup>rd</sup> edition. 3.5.1 *The principles of exercise programming*  
– F.I.T.T.A (OTAGO, Campbell 1998)

S Gawler, DA Skelton et al. (2016) *Archives of Gerontology and Geriatrics* [Volume 67](#), November–December 2016, Pages 46-54. *Reducing falls among older people in general practice: The ProAct65+ exercise intervention trial.*

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