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Scaling up a proactive approach to frailty identification: the electronic frailty index

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The challenge

Frailty is the manifestation of ageing that is associated with poor outcomes, including increased risk of disability, hospital admission, institutional care or death[1].

The impact on a person's quality of life is considerable, as well as an increased use of primary care and unplanned secondary care services.

As frailty is progressive, it is difficult to identify people early when the potential for improving health and wellbeing is greatest.

In order to implement evidence-based interventions to improve outcomes, it was necessary to develop a consistent method to identify frailty that could be used by GP practices in a community setting throughout Scotland.

Our aim

To develop a consistent method for identifying people with frailty in the community.

To implement this throughout Scotland.

Methodology

Understand – We worked with health and social care professionals to appraise existing prediction tools that could meet the need identified. As a result, we selected the e-Frailty Index (eFI), a clinically-validated tool that uses primary care data to identify risk.

Test – We tested the practical application of the eFI with GP practices and connected professionals, including geriatricians and social workers, in three health and social care partnerships. Samples of the mild, moderate and severe frailty populations were checked for clinical accuracy and showed that the eFI can identify people with frailty using Scottish data *(Figure 1).* The results broadly matched the original study conducted by Clegg at al[2] *(Figure 2).* The testing highlighted where adaptations were required, as the total numbers of individuals identified were too high to act on.

Refine – We refined the tool to prioritise individuals experiencing the greatest change in their frailty status, in order to ensure that community teams were able to identify individuals with the greatest need for a frailty case review, and that the numbers identified aligned with their capacity to respond. The Scottish Clinical Information Management in Practice (SCIMP) GP group independently reviewed read codes used in Scotland and added these to the tool to improve the accuracy of the results.

Implement and spread – Following successful testing, we wanted to make this tool available at no cost, so that all GP practices in Scotland can identify people with frailty who could benefit from community-based support. We worked with Information Services Division to make the eFI available through the Scottish Primary Care Information Resource (SPIRE).

Lessons learnt

- Risk tools need to align with the capacity of teams who can provide support. Therefore, we focused on segmenting the population within each frailty group to identify people who experienced the greatest change.
- Although the eFI uses data from a GP practice, the response and support for those identified is best delivered through a multidisciplinary team.
- Utilising existing IT infrastructure allowed us to make the tool available at no cost.

Figure 1

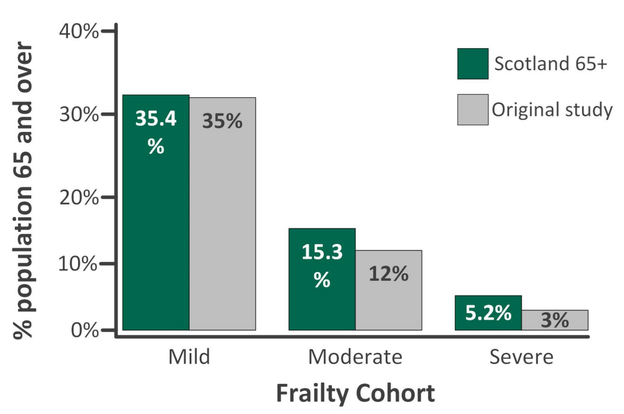

Figure 2

Results

We have developed a consistent method to identify people with frailty at population level that uses existing data. Working with Information Services Division, we have made this available at no cost on a national data portal.

The eFI can now be applied to over half the over-65 population in Scotland to focus preventative support on people who are likely to benefit the most. The reach of eFI will increase as SPIRE is implemented in all GP practices in Scotland.

GP practices can now identify their frail population and the following high priority individuals using existing data:

- people who escalate to being moderately frail during the previous six months
- people who are moderately frail and have experienced the greatest change during a six-month period, and
- people who escalate to being severely frail during a six-month period.

References:

1. British Geriatric Society. *Fit for Frailty: consensus best practice guidance for the care of older people living with frailty in community and outpatient settings.* 2014. Available from: www.bgs.org.uk/sites/default/files/content/resources/files/2018-05-23/fff_full.pdf [Accessed 7 January 2019]
2. Clegg, A. et al. Development and validation of an electronic frailty index using routine primary care electronic health record data. *Age and Ageing.* 2016;45:3 353-360