

Patient pathway proposal for Connected Yorkshire

Proposals should showcase the utility of healthcare data linkage, by using routinely collected healthcare datasets to improve care pathways. They should also be focused around key NHS priorities, be innovative and disruptive, and have potential for scalability to another Hub. Please email your proposals to Julian.ting@bthft.nhs.uk by 6 May 2016.

1. Title:

Using routine data to develop a new, innovative model of supported self-management care for older people with frailty

2. Organisations involved:

BTHFT;
Bradford City CCG;
Bradford Districts CCG;
BMDC
CLAHRC YH
YH AHSN Improvement Academy

3. Clinical lead(s) (primary / secondary care):

Dr Andy Clegg, Senior Lecturer & Consultant Geriatrician, BTHFT
Prof John Young, Professor of Elderly Care Medicine, University of Leeds
Dr Sara Humphrey, GP lead for older people, Bradford

4. Research/academic lead(s) and roles:

Dr Andy Clegg, Senior Lecturer & Consultant Geriatrician, BTHFT
Prof John Young, Professor of Elderly Care Medicine, University of Leeds

5. Technical/IT lead(s) and roles:

Dan Mason (Programme Manager, Research Analytics, Born in Bradford);
Alex Newsham (Senior Database Manager, Better Start Bradford)

6. Background & Need: (max 350 words)

UK population projections indicate that the number of people aged over 65 will increase from 10 million currently to around 15 million by 2030. Frailty affects one in ten people aged over 65 and between a quarter to a half of those aged over 85. The presence of frailty identifies a subgroup of older people with multimorbidity at especially high risk of adverse outcomes including falls, disability, hospitalisation, loneliness, care home admission and death. These outcomes have considerable impact on health and wellbeing of older people and their carers, and are of major importance for UK health and social care services.

The rapid growth in numbers of older people and increasing prevalence of multimorbidity and frailty is one of the biggest challenges to the NHS and UK adult social care. Older people with frailty are majority users for many health and social care services but modern healthcare systems are mostly reactive and organised

around single system illnesses. Health and social care systems need to move to a more proactive, goal-orientated, community-based approach in frailty management, built around new models of integrated care.

To help achieve this goal we have developed an electronic frailty index (eFI) to identify frailty as part of the National Institute for Leadership in Applied Health Research and Care Yorkshire & Humber (NIHR CLAHRC YH) Older People's theme, led by the clinical leads (JY and AC). The eFI is automatically populated with routine primary care electronic health record (EHR) data, and has been validated using data from 900,000 UK primary care patients. The eFI has been implemented into the SystemOne EHR, which is used by around 35% of UK GP practices, including 100% of practices in Bradford and around 70% of practices in Yorkshire & Humber. The eFI has now also been implemented into the EMISWeb EHR as part of the Yorkshire & Humber AHSN Improvement Academy Healthy Ageing Collaborative, enabling availability to the large majority of GPs across Yorkshire & Humber, and around 90% of GPs across the UK.

7. Aim and objectives: (max 300 words)

Our core aim is to use routine health and social care data to develop, implement and evaluate a supported self-management (SSM) intervention as a new, innovative model of proactive care for older people with frailty.

Our key objectives are

- 1) To use the eFI to link health, social care and research datasets to identify the target population for SSM in frailty.
- 2) To implement an SSM care pathway for people with frailty based on the NHS England Healthy Ageing Guide, targeted at those most likely to gain benefit, to improve quality of life in older age and enable more efficient use of primary care, secondary care and social services.

8. Brief outline of implementation plan providing (i) overall key steps (ii) technical/IT activities to include linkage plan (500 words)

Our SSM care pathway will be implemented by local voluntary sector organisations working in partnership with primary care.

Key steps include:

- Successful linkage of primary care, secondary care, social care and research data
- Identification of the target population using the linked dataset
- Piloting use of routine data to record identified outcomes
- Identification of local voluntary sector organisations to work in partnership with primary care to implement SSM
- Identification of the target population using primary care electronic health record systems
- Implementation of the SSM care pathway
- Use of routine data to record outcomes

Technical/IT activities include expertise to link routine primary care, secondary care, social care and research data, and use routinely available data to collect important outcome data for patients receiving SSM as a new model of care.

9. Target population:

Older people with frailty, identified using the eFI.

10. Data sources:

Routine primary care data; routine secondary care data; routine social care data; linked data from CARE 75+ cohort study

11. Statement of likely intervention/care pathway improvement in lay terms

We anticipate that our new care pathway will improve the health and wellbeing of older people living with frailty and reduce use of GP, hospital and social care services. We will measure the improvements by collecting data on important outcomes for older people, the NHS and social care. These include: the proportion of older people with frailty who continue to live at home after 12 months as a key indicator of health and wellbeing; use of GP and hospital services; and use of social care services.

12. Briefly describe how the project meets cYorkshire criteria (max 500 words)

- a. **Data link-ability is a pre-requisite (consent) in both the context of:**
 - i. **Research (de-identified)**
 - ii. **Improving care (identified)**
- b. **Addresses the NHS Priorities, as defined in the [Five Year Forward View](#)**
- c. **Citizen-centred**
- d. **Project is scalable to other sites**
- e. **Success would result in disruptive change, not an incremental one**
- f. **Builds on existing/early research or infrastructure**
- g. **Should connect at least two cYorkshire partners/sites**

This project builds on existing research based on the eFI. Data from primary care, secondary care and social services will be linked to identify the target population for supported self-management. De-identified linked data will be used at a population level at the baseline and to evaluate the impact of our interventions.

Older people with frailty are majority users in health and social services. The rapid increase in multi-morbidity and frailty in older people is one of the biggest challenges to health and social care delivery. This project will address NHS priorities as defined in the Five Year Forward View by working with two key Vanguards in the region. The West Yorkshire's Urgent Care Vanguard will identify new approaches to improve the coordination of services and reduce pressure on A&E departments and the Airedale and partners Enhanced Health In Care Homes Vanguard will offer older people better, joined up health, care and rehabilitation services.

This project is scalable to other sites in Yorkshire and Humber. The eFI is currently available on SystmOne and EMISWeb which are used by the large majority of GP practices in the region and nationally.

13. Intervention resulting – key steps to successful implementation

Supported self-management care pathway for people with frailty, targeted at those most likely to gain benefit, to improve quality of life in older age and enable more efficient use of primary care, secondary care and social services.

14. Main outcome measures:

Living at home at 12 months; primary care resource use; secondary care resource use; social care resource use; care home admission; mortality.

15. Principle evaluation criteria:

Increased proportion of older people with frailty living at home at 12 months.
Reduced use of health and social care resources at 12 months.

16. Opportunities for industry engagement:

We have strong industry links with TPP/SystemOne as a leading supplier of UK primary care electronic health record systems. We will work with TPP/SystemOne to develop the supporting tools needed to deliver SSM. We have developed links with other leading suppliers of UK EHR systems (EMISWeb and VISION) to enable wider roll-out of our new care pathway. We have also developed links with ACG systems as the leading international supplier of population risk profiling software. Our range of industry links that span the leading providers of primary care EHR systems means that we have clear potential for scalability to another connected cities Hub.

17. Indicative budget / resources required: