

CONFERENCE ABSTRACT

Inter-Relationship Between Frailty & Multimorbidity in East Berkshire, UK.

18th International Conference on Integrated Care, Utrecht, 23-25 May 2018

Alan Thompson¹, Stephen Sutch¹, Sangeeta Saran²

1: Johns Hopkins HealthCare Solutions, United States of America;

2: NHS Slough Clinical Commissioning Group, United Kingdom

Introduction: In 2015, Slough Clinical Commissioning Group (CCG) undertook an analysis of their population which confirmed that multimorbidity more than any other variable is the key driver of healthcare resource use and future risk amongst their population. As a result of this intelligence, a new service was established to provide support to a segment of this population with comorbidity combinations that GPs felt they could manage more effectively in primary care with some additional funding.

Following on from the success of this Complex Case Management programme, Slough CCG and its two neighbouring CCGs applied the same analytical approaches to:

Gain a greater understanding of how frailty is distributed across the 3 CCGs in East Berkshire

Quantify resource use by people in the different frailty categories

Understand the inter-relationship between frailty and multimorbidity

Understand the relationship between degrees of frailty and risk of adverse outcomes such as risk of emergency admission and risk of future high cost

Method: An anonymised data set combining data from the GP record and hospital activity was used to profile the entire population of around 450,000 people. The data set contained data relating to all diagnoses, degree of morbidity burden (as measured by the Johns Hopkins ACG System), risk of future adverse events (e.g. hospitalisation, high cost), prior cost and the degree of frailty the person had (as measured by the Electronic Frailty Index).

The analysis focused on relationships and correlations between variables such as age, multimorbidity, degree of frailty and prior cost.

Results: Results will be shared that illustrate new understanding and insights about the inter-relationship between frailty and multimorbidity. These results include:

As the degree of frailty increases so do costs and resource use. However, it is multimorbidity more than frailty that drives cost and resource use, especially in relation to emergency admissions

There is 1.5% of the population with both high levels of frailty and multimorbidity who it makes sense to target for intervention but over 50% of patients most at risk of high cost and emergency admission are not moderately or severely frail

Between 47% and 55% of patients who are moderately or severely frail are not amongst the patients most at risk of being high cost or having an emergency admission

Discussion: There is a great deal of focus on the issue of frailty in the English National Health Service. Whilst it is true that resource use increases with an increasing degree of frailty, this analysis has demonstrated that not all frail patients are high cost and not all high cost patients are frail. The importance of this study is that it highlights the need to:

Undertake robust population health analyses to gain a thorough understanding of the different segments of the population, to identify the characteristics of those segments and to understand the inter-relationships between them.

Choose the right algorithm or case finding technique to identify the segment of the population that you want to make an impact upon

Keywords: multimorbidity; frailty; segmentation; population health; acg system
