

PCL/18/05 - Derivation of a hospital episode frailty index from electronic patient records: understanding the role of frailty in health outcomes for older hospital patients in Scotland

A great success of modern healthcare is an ageing population. While many adults live their later years in good health, some lose the strength and physical reserves required to live independent, healthy lives. These individuals are living with frailty and benefit from specialist care by geriatric medicine teams when in hospital. This has been shown to improve the chance of retaining independence after discharge. However, identifying these patients in a busy hospital is difficult. Despite this, many markers of frailty are routinely recorded by doctors and nurses, for example difficulty managing tasks at home or memory problems. These markers are called 'health deficits', which tend to increase with age, although at different rates between individuals depending on general health.

A frailty index is a tool that summarises these health deficits into a score. In this research study, we plan to design and test a unique frailty index. This will use information already collected by hospital staff from patients who were admitted to three Scottish hospitals. This information will be anonymous and kept confidential. We will then compare these frailty scores to important outcomes, such as the chance of a patient being readmitted to hospital or dying after being discharged. We hope to show that such a frailty index could be used by hospitals to identify current patients at higher risk, in whom extra support and assessment may be beneficial. We also know that an increasing number of the frailest patients are admitted to hospital many times as they approach the end of their lives. By knowing their frailty index scores we may identify higher risk patients who deteriorate between hospital stays. This research will allow us to test whether data from hospital records could help target better care to frail older people in the future.