



Analogue to digital

The Electronic Frailty Index (eFI & eFI2): Transforming Frailty Care Through Data

ARC Yorkshire and Humber in collaboration with ARC North Thames (eFI2)

The challenge

Frailty in older people is associated with falls, hospital admissions, medication complications and loss of independence, costing the NHS approximately £6 billion each year. National guidelines recommend routine frailty identification, but traditional approaches such as walking speed tests or questionnaires are time-consuming and difficult to implement at scale. The NHS needed a systematic, efficient way to identify frailty early using data already collected in primary care.

The approach

ARC Yorkshire and Humber led the development of the Electronic Frailty Index (eFI) - a world-first tool that automatically identifies frailty using routine GP electronic health records. By embedding frailty assessment into existing systems, the eFI removed the need for additional clinical assessments and enabled population-wide screening.

In its first year, the eFI assessed 2.5 million older people and prevented an estimated 2,300 falls. It fundamentally changed how frailty is identified and managed in UK primary care. Building on this success, ARC Yorkshire and Humber worked in collaboration with ARC North Thames to develop eFI2, an enhanced and more accurate version.

The eFI2 incorporates data on 36 health deficits, including dementia, fractures, weight loss and prescribing patterns. Developed using 750,000 linked records across health and social care datasets, it strengthens clinical precision while remaining practical for routine use.

The outcomes and impact

The original eFI is now available in 100% of general practices in England and 95% across the UK, and is embedded in national clinical guidelines and NHS policy.

The enhanced eFI2 is available to 60% of England's GPs and is being implemented into SystmOne, extending its reach to nearly all practices. Together, these tools exemplify the NHS's shift from analogue to digital care.

By enabling earlier identification and targeted intervention, eFI and eFI2 are helping prevent falls, reduce unnecessary prescribing and hospital admissions, and support older people to maintain independence, demonstrating ARC Yorkshire and Humber's national leadership in data-driven innovation for ageing populations.

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