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## Routinely Identifying frailty: Implementing the electronic Frailty Index in the Secure Anonymised Information Linkage Databank

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### Background

Aging populations with increasing frailty have major implications for health services, and evidence-based treatment becomes increasingly important. The development of the electronic Frailty Index (eFI) using routine primary care data facilitates the implementation of evidence-based interventions and care.

### Method

Our implementation of the eFI in the Secure Anonymised Information Linkage (SAIL) databank identifies frailty based on 1574 Read codes, which are mapped amongst 36 categories known as deficits. The eFI is based on a cumulative deficit model, and each deficit contributes equally to the eFI value.

### Findings

Although each deficit is equally weighted, only one is currently time dependent. We therefore analysed the cumulative prevalence of each deficit on a year-by-year basis. This led to the identification of time bounds for particular deficits, which will help to refine future implementations of the eFI. We also further validated the eFI using data from over 400,000 individuals held in SAIL.

### Conclusion

The eFI is particularly useful as it uses existing data to identify frailty, meaning no additional resources are required. Furthermore, our implementation is readily available, meaning that future research related to frailty is easily achievable by others.

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