

## The Electronic Frailty Index Guidance Notes

- The electronic frailty index (eFI) helps identify and predict adverse outcomes for older patients in primary care
- It is therefore useful to plan at an individual and whole systems level
- Information for the eFI is collected using existing electronic health record information at no extra cost
- The eFI uses a 'cumulative deficit' model, which measures frailty on the basis of the accumulation of a range of deficits, which can be clinical signs (e.g. tremor), symptoms (e.g. vision problems), diseases, disabilities and abnormal test values
- The eFI is made up of 36 deficits comprising around 2,000 Read codes (see map and table 1 in appendix for list of 36 deficits).
- The score is strongly predictive of adverse outcomes and has been validated in large international studies
- The eFI is presented as a score (e.g. if 9 deficits are present out of a possible total of 36 the FI score = 0.25) - higher scores indicate increasing frailty
- Higher scores indicate increasing frailty and greater risk of adverse outcomes (e.g. on average, those with an eFI > 0.36 have a six-fold increased risk of admission to a care home in the next 12 months and a five-fold increased mortality risk, compared to fit older people).

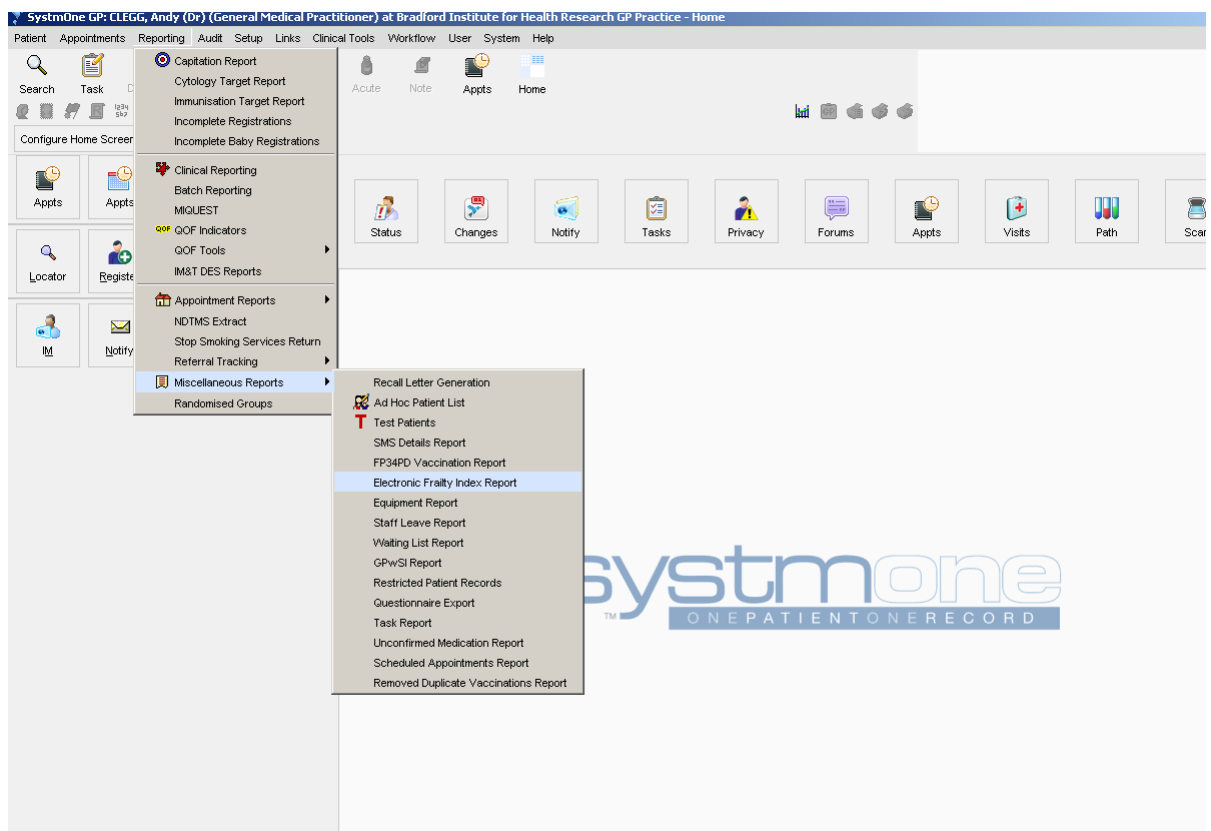
### The eFI can be used to score to define frailty categories:

1. **Fit (eFI score 0 - 0.12)** – People who have no or few long-term conditions that are usually well controlled. This group would mainly be independent in day to day living activities.
2. **Mild frailty (eFI score 0.13 – 0.24)** – People who are slowing up in older age and may need help with personal activities of daily living such as finances, shopping, transportation.

3. **Moderate Frailty (eFI score 0.25 – 0.36)** – People who have difficulties with outdoor activities and may have mobility problems or require help with activities such as washing and dressing.
4. **Severe Frailty (eFI score > 0.36)** – People who are often dependent for personal cares and have a range of long-term conditions/multimorbidity. Some of this group may be medically stable but others can be unstable and at risk of dying within 6 - 12 months.

### Running the eFI Report on SystemOne

1. The eFI is currently only available as open access within SystemOne
2. Go to the reporting Tab within SystemOne and click on Miscellaneous Reports and then the Electronic Frailty Index Report. A **'Run Report'** screen will appear.



3. Go to '**Show top**' column and type in the percentage of practice population you wish to search e.g. 100%. Ensure the Percent tab is selected. Next click 'Run report'. This will generate eFI scores for patients within a GP Practice.



4. The eFI scores listed correlate to frailty categories. These range from 'Fit' to 'Severe' Frailty.

**Fit:** eFI score = 0-0.12

**Mild frailty:** eFI score = 0.13-0.24

**Moderate frailty:** eFI score = 0.25-0.36

**Severe frailty:** eFI score = > 0.36

5. You can export the table to an Excel spread sheet by right clicking the mouse and selecting 'Create Table', then 'CSV'. An excel spread sheet will open – you are then able to sort the table according to ascending age or eFI score etc.

## **eFI Next Steps**

### **EMISWeb/Vision Replication:**

EMISWeb and Vision clinical system providers are currently replicating the eFI algorithm and will be made available as part of system upgrades later this year. It is anticipated the eFI will be available in EMISWeb in March 2016.

### **eFI Development:**

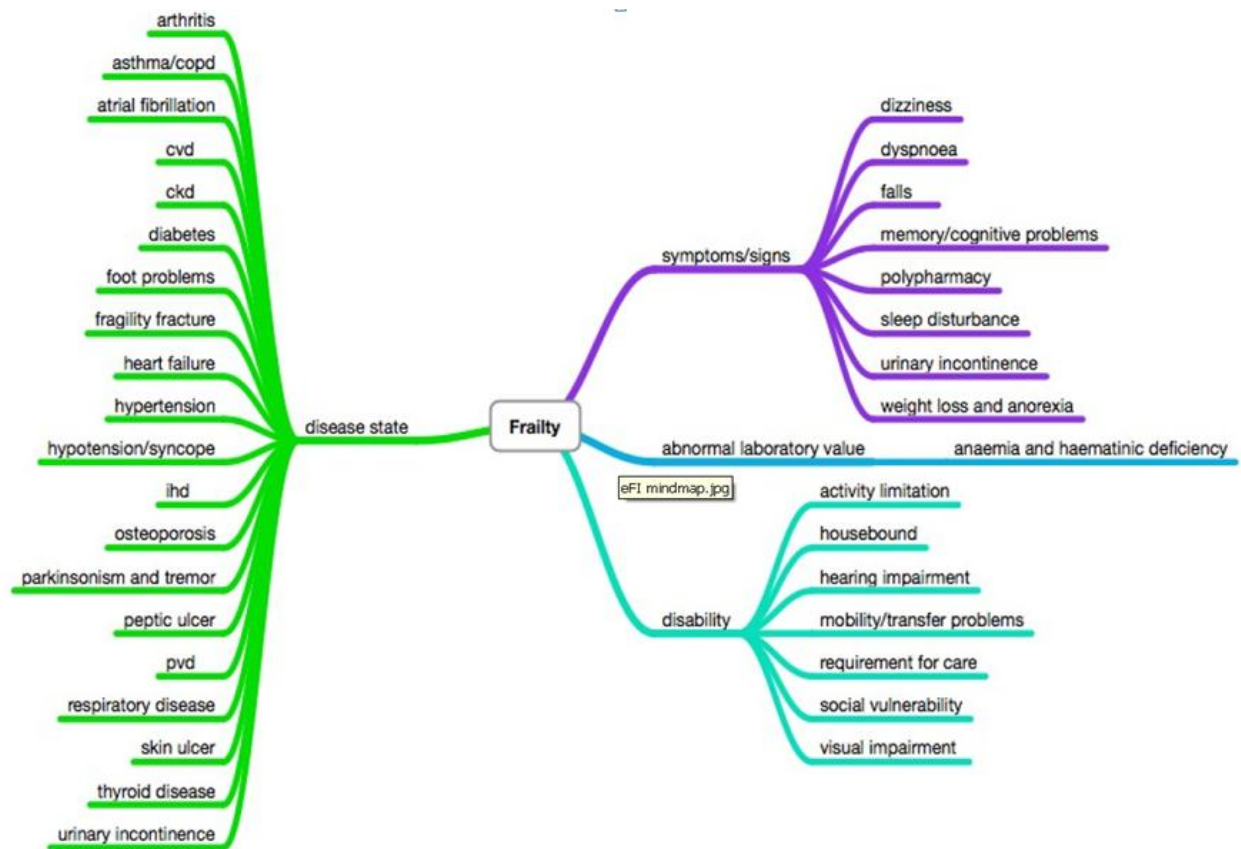
IPSOS Mori for Age UK (March, 2014) undertook qualitative research with older people living with frailty which highlighted older people do not associate the term 'frail' with themselves but they do have an idea what it might mean to others. Often, the term 'frail' is used inappropriately as people conventionally consider frailty as a descriptive label: 'the frail elderly'. Therefore, the decision was made to proceed cautiously when launching the eFI within SystmOne – as such the eFI was launched as a practice population report only initially to allow for feasibility testing in primary care.

However, the eFI provides the opportunity for clinicians to reframe frailty from the perspective of an abnormal health state that behaves just like a long-term condition and therefore, opens up new approaches to helping people who are frail. Acting on the back of feedback from SystmOne users of the eFI, TPP (providers of SystmOne) will make the eFI available in the open patient record. Additionally, there is interest in access to the eFI report from other users of SystmOne i.e. those using speciality modules such as 'Palliative Hospital' and the 'Trust Wide' reporting module – TPP are considering all further development requests linked to the eFI report in response to customer demand.

The vision is to also develop templates and/or protocols aligned to the eFI report to support and optimise clinical utilisation of the eFI within primary care.

*Authored by: Sarah De Biase  
Improvement Programme Manager,  
Healthy Ageing Collaborative  
Improvement Academy part of the AHSN Yorkshire and Humber  
Sarah.De-Biase@yhahsn.nhs.uk*

**Appendix: Table 1: List of 36 deficits in the eFI**



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| <ul style="list-style-type: none"> <li>▪ Memory &amp; cognitive problems</li> <li>▪ Cerebrovascular disease</li> <li>▪ Dizziness</li> <li>▪ Parkinsonism &amp; tremor</li> <li>▪ Sleep disturbance</li> <li>▪ Visual impairment</li> <li>▪ Hearing impairment</li> <li>▪ Hypertension</li> <li>▪ Ischaemic heart disease</li> <li>▪ Atrial fibrillation</li> <li>▪ Heart valve disease</li> <li>▪ Hypotension/syncope</li> <li>▪ Heart failure</li> <li>▪ Peripheral vascular disease</li> <li>▪ Dyspnoea</li> <li>▪ Respiratory disease</li> <li>▪ Peptic ulcer</li> <li>▪ Weight loss &amp; anorexia</li> <li>▪ Urinary incontinence</li> </ul> | <ul style="list-style-type: none"> <li>▪ Urinary system disease</li> <li>▪ Chronic kidney disease</li> <li>▪ Osteoporosis</li> <li>▪ Fragility fracture</li> <li>▪ Arthritis</li> <li>▪ Diabetes</li> <li>▪ Thyroid disease</li> <li>▪ Skin ulcer</li> <li>▪ Anaemia/haematinic deficiency</li> <li>▪ Falls</li> <li>▪ Foot problems</li> <li>▪ Housebound</li> <li>▪ Mobility &amp; transfer problems</li> <li>▪ Activity limitation</li> <li>▪ Social vulnerability</li> <li>▪ Requirement for care</li> <li>▪ Polypharmacy</li> </ul> |
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