Integrated Care Matters

Risk Stratification Approaches
Knowledge Tree Resources
Risk Stratification Approaches: Resources and Services

Scotland

Scottish Patients at Risk of Readmission and Admission (SPARRA) is a risk prediction tool developed by ISD which predicts an individual's risk of being admitted to hospital as an emergency inpatient within the next year - [link]. Case studies [link].

Classification and mapping of high resource health and social care pathways

National Health Services Scotland carried out a study [link]. The work has shown that it is possible to move towards a deeper understanding of the care pathways of high resource individuals. Visualising the patient pathway provides an extremely powerful tool to better understand patient flow through health and social care services and, in turn, improve these pathways.

Many people, One system Living Well in Communities Deep Dive – [link]

The aim of the project is to develop an approach for Health and Social Care Partnerships (HSCPs) to use data on High Resource Individuals for both health and social care to inform the re-design of care pathways and inform strategic commissioning [link]

Health and Social Care Data Integration and Intelligence Project

Effective information systems are necessary to ensure robust intelligence underpins the process of local strategic planning and decision making. To support this, the Scottish Government commissioned the Information Services Division (ISD), part of NHS National Services Scotland, to work in partnership with NHS Boards, Local Authorities and others to develop a linked individual level longitudinal social care dataset. [link]

England

Using case finding and risk stratification: A key service component for personalised care and support planning

This handbook is one of three service components and provides some valuable practitioner insights into case finding and risk stratification to support personalised care and support planning – both of which are key elements of the vision and outcomes in the NHS Five Year Forward View[link]

Enhanced service specification Avoiding unplanned admissions: proactive case finding and patient review for vulnerable people

This enhanced service (ES) is designed to help reduce avoidable unplanned admissions by improving services for vulnerable patients and those with complex physical or mental health needs, who are at high risk of hospital admission or re-admission. The ES should be complemented by whole system commissioning approaches to enable outcomes of reducing avoidable unplanned admissions. [link]

Long-term Care Risk Stratification

In Greenwich, GP Dr Junaid Bajwa from the CCG and Jackie Davidson from the Public Health team introduced a pilot in 2013 to improve the outcomes of patients on multiple disease registers through the introduction of
RAG/risk stratification, prevention and supported/assisted management and support for self-management. They developed and are implementing a software MSDi Tool for managing people with co-morbidities. The tool aims to systematise and integrate care, thus improving the clinical outcomes and improving the patient experience. [video link]

**International Examples**

**United States**

*The Johns Hopkins Adjusted Clinical Groups® (ACG®) System*

The ACG System measures the morbidity burden of patient populations based on disease patterns, age and gender. It relies on the diagnostic and/or pharmaceutical code information found in insurance claims or other electronic medical records. This provides the user with a more accurate representation of the morbidity burden of populations, subgroups or individual patients - as a constellation of morbidities, not as individual diseases.[link]

**Spain**

*Proposals for enhanced health risk assessment and stratification in an integrated care scenario*

Population-based health risk assessment and stratification are considered highly relevant for large-scale implementation of integrated care by facilitating services design and case identification,[publication]

**Canada**

*The Method for Assigning Priority Levels (MAPLe): A new decision-support system for allocating home care resources*

Home care plays a vital role in many health care systems, but there is evidence that appropriate targeting strategies must be used to allocate limited home care resources effectively. The Method for Assigning Priority Levels (MAPLe) algorithm was a strong predictor of all three outcomes in the derivation sample. [link]

**Australia**

*Risk Stratification A discussion paper for NSW Health’s approach to Risk Stratification*

The NSW Agency for Clinical Innovation (ACI) has been tasked by the NSW Ministry of Health to develop a tool or approach for identifying patients at risk of a hospital presentation or health deterioration. It is the intention that this process will assist the NSW Health system to direct ‘Integrated Care Strategies’ to those people most in need.[link]

**Additional Resources**

- Risk Prediction Models for Hospital Readmission: A Systematic Review [link]
- Derivation and validation of an index to predict early death or unplanned readmission after discharge from hospital to the community [link]