

CONFERENCE ABSTRACT

Implementing Stratification by Predictive Risk in General Practice

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Damien John Hannah, Paul David Roseman

ProCare Health, New Zealand

Introduction: Risk stratification identifies a cohort of individuals who are more likely to respond to a treatment or model of care. The combined predictive risk model (CPRM) developed using a cohort of 800,000 patients, predicts the risk of an individual having an unplanned medical hospital admission in the next six months. The risk prediction was accompanied with availability of a support programme including a patient centred care plan and a flexible suite of interventions applied according to patient need and at the discretion of the patient's primary care team. This was applied to a population of 200,000.

Short description of practice change implemented: The CPRM algorithm combines primary and secondary care data. Scores for individuals with the highest risk are reported to the practices for consideration of condition modifiability and amenability of the patient to engage in the programme. Patients are invited to join the programme.

Aim and theory of change: CPRM takes a multi-morbidity rather than a disease specific approach taking future risk into account rather than solely focusing on patients currently needing intensive support. The aim was to provide practices with a list of patients for proactive clinical consideration.

In addition to case finding the calculated risk can be used to prioritise enrolment into the support programme which has limited capacity.

Clinician judgement and autonomy remains crucial to successful implementation of risk prediction in general practice.

Targeted population and stakeholders: The key stakeholders are the patients and the primary care clinicians. Secondary care providers and funders are also engaged as unplanned hospitalisation is not only a poor outcome for patients and their families but also contributes pressure to a secondary care system increasingly burdened by a growing, aging population.

Timeline: Development began in 2011 using hospital data to predict readmission. The combined primary and secondary care model predicts admission and has had three major iterations.

Highlights: (innovation, impact and outcomes) The reports have been welcomed by practices where a corresponding support package was available.

CPRM has utility as a quality improvement tool ensuring the very old, very young, Maori, Pacific Island and socially deprived patients who are at greater risk have equitable access to the support programme.

Comments on sustainability: Algorithms need to evolve and require regular recalibration to be maintained and improve. Sustainability of the intervention package is also a key consideration.

Comments on transferability: There is a high degree of transferability of the processes used to create risk algorithms. However an effective intervention to address risk is key to engaging clinicians in using risk scores.

Conclusions: (comprising key findings) Risk stratification is a valuable tool to promote culture change in the health system, support quality improvement and for monitoring impact. Evaluation methodology should be clear from the beginning of the project. Change management processes to ensure clinical engagement are essential for effective implementation. Risk stratification requires a robust integrated intervention.

Keywords: predictive risk; risk stratification; multimorbidity; model of care
