Measuring and understanding patient coordination across the healthcare continuum

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Introduction
Population health approaches to screen patients for Case Management Programs have been developed in recent years in the USA health systems, and increasing in other countries. The tools used include a variety of predictive models to provide initial at-risk populations, and data mining techniques to further identify vulnerable patients with specific patterns of conditions or utilisation. Increasingly these measures are spanning all sectors of care provision, family doctors, outpatients, inpatients and social services.

Care coordination is seen as a critical component to providing effective and safe care to patients, particularly who are seen my multiple carers across multiple settings and organisations.

Methods
A review of studies was used to identify key factors and confounders of care coordination, both those that will lead to potentially poor coordination, and those that improve coordination. Algorithms were derived to produce a classification of care coordination and interaction between providers using routine hospital, community and family doctor data.

Results
Key measures in examining care coordination includes the number of providers, numbers of doctors and specialties involved, what proportion of care is provided by a majority provider, and whether a generalist such as a family doctor or geriatric consultant is involved. Patient sharing between doctors and specialists has also shown to reduce overall costs, while adjusting for case mix complexity.

Conclusions
Combining simple multiple measures to derive an algorithm and analytics to understand and identify patients at risk of poor patient coordination is an important tool to support case management and support to patients across health care providers and sectors. Programs are also increasingly identifying social care as well as health care determinants that increase and decrease risk of poor care coordination.

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