Reviewer's report

Title: Understanding success and failure in multimorbidity: protocol for using realist synthesis to identify how social learning and workplace practices can be optimised

Version: 1 Date: 1 May 2013

Reviewer: Graeme C Smith

Reviewer's report:

1. Will the study design adequately test the hypothesis?
   There is no hypothesis.

The objective is to understand interactivity between models of experience-based workplace education and models for patient-centred / integrated care as mediated by socio-cultural processes.

The authors intend to build a conceptual map and a realist programme theory, populated with evidence from the literature, as the first step towards answering their overall generic review question:

What is known about how and why concurrent health service delivery and professional medical education function with respect to multimorbidity in primary care?

Further questions:

• How and why does learning about and delivering healthcare in primary care for people with multimorbidity work (i.e. what are the programme theories for learning about and for delivering healthcare? These may, of course, overlap and intertwine with each other)? Which, if any, theories are used in the literature to explain mechanisms for concurrent education and health service delivery in this area?

• How and why are success and failure in medical activities conceptualised in the absence of cure?

• What role do social interactions play in education and patient care in the context of multimorbidity?

• How do interactions between agents and structures at individual, local and wider institutional levels affect consequences?

• How do official explanations compare to actual practice of both education and service delivery?

• What areas for further research can be identified to inform the development and sustainability of a medical workforce to provide care for patients with multimorbidity?
Methodology
The methodology involves first a literature search, and second the building of a conceptual map and a realist programme theory, populated with evidence from the literature.

Literature search:
The proposed literature search will include that of social science, education and primary care. The exclusion of other (specialist) medical literature is justified on the basis of pragmatism and the supportable claim that the majority of people with multimorbidity spend most of their time outside of hospital, interacting with the healthcare system at the primary care interface.

An account of a systematic search strategy already established is provided. It covers 20 pertinent databases and has been supplemented by key author searches and contact with identified experts. Reports in grey literature published by pertinent organisations will be screened.

Comment: The plethora of terms that have emerged in the relatively new fields of multimorbidity and patient-centred care make it particularly difficult to identify pertinent literature in the medical field alone. Since different disciplines use different terminology for the same thing, extending the literature search to the disciplines of social science and education adds to the challenge presented. The literature search strategy presented is likely to pick up most of the pertinent literature, but it should be seen as another probe in this study. Anything that can be learned about how to identify literature in this messy field will be valuable.

Building a conceptual map and a realist programme theory:
The authors propose to use Realist Synthesis, a recently developed form of theory-driven interpretive systematic review method designed to study complex interventions in complex systems. One of its key features is that it seeks to analyse any evidence judged to be relevant and of sufficient quality to support the inferences being made, regardless of its nature. It aims to overcome the problem of producing meta-analyses and systematic reviews that use only data from controlled studies. For almost all studies on multimorbidity, such data are highly unlikely to be available, now or in the future, as complexity theory predicts. There are too many variables. A number of interesting analyses using such methodology have emerged, throwing light on issues that need further research using both quantitative and qualitative methodology. The authors propose using published standards for realist syntheses.

Comment: The use of Realist Synthesis is appropriate and likely to lead to a valuable conceptual map. Again, the use of this probe should be regarded as also producing results that can be used to refine the method.

2. Are sufficient details provided to allow replication of the work or comparison
with related analyses: if not, what is missing?

The nature of such studies is that they evolve, with revision based on what is being learned. The detailed methodology will emerge only in the publications.

3. Is the planned statistical analysis appropriate?

Not applicable. See comments above.

4. Is the writing acceptable?

The paper is well constructed and written. It conveys well the enormous challenge that health care disciplines face in coming to grips with the emergent phenomenon of multimorbidity, and the social phenomenon of a move to patient-centred medicine. The challenges are clinical, administrative and educational. The paper gives a clear rationale for its methodology, and explicates the novel processes that will be used.

Declaration of competing interests:

I declare no competing interests.