

CONFERENCE ABSTRACT

Information technology in multispecialty community providers: results from a realist evidence synthesis

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Introduction: Multispecialty community providers (MCPs) are a proposed model of care by which the NHS can reduce pressures on hospitals and general practices whilst improving the quality and continuity of care for people with complex health problems. MCPs integrate primary, community, mental health, and social care services by linking up services virtually or geographically. This paper presents findings that focus on how health information technology (HIT) could be used to improve services and patient care in the MCP context using a realist synthesis approach.

Methods: We followed the RAMESES guidelines, which outline the following process of conducting a realist synthesis:

Develop an initial programme theory for how the intervention is thought to work. To create our programme theory we met held three meetings with policymakers and service users and conducted a search for relevant policy papers in the HMIC database.

Conduct a systematic and iterative search of the literature to find evidence to support or refute the initial programme theory. To find evidence, we conducted a search in four databases (MEDLINE, PsycINFO, CINHAL, and ASSIA), and screened, extracted data, and critical appraised articles by five team members with 10% of records error checked by a second person.

Revise the theory based on the collated evidence and build a new (evidence-based) logic model based on the findings.

Results: Forty-one primary and secondary sources were included in the synthesis. We found some evidence that HIT in MCP-like organisations support multidisciplinary team working, care planning at the population and inter-organisational level, care planning at the patient level, and reduce unplanned hospital admissions. Few studies directly linked HIT with these

outcomes, but there was a great deal of conceptually rich evidence about different contexts and mechanisms that can support or hinder projects from being most effective.

Discussion: We found a very clear pattern that the most effective HIT projects in new models of care were implemented based on the unique needs of the organisation, customised as needed, and included input from the health professionals that would be using the system. This, in turn, often led to staff buy-in for the projects and supported good team working.

Many sources also described the difficulties in using existing healthcare technology within new models of care and provided insight as to how an ideal HIT system might be designed. Such a system would be interoperable, capable of complex data analysis, contain workflow tools, and be flexible enough to support formal and informal communication between healthcare providers.

Conclusions: We found some evidence that HIT, when well designed, can support MCP-like organisations.

Lessons learned: The presence of HIT does not, by itself, lead to more efficient services or better patient outcomes. HIT must be carefully designed based on organisational needs.

Limitations: Studies were limited to OECD countries and published between 2014-2016.

Future Research: Further primary research is required to test elements of our revised logic model. Additional review work on aspects of HIT in new models of care such as patient registries and telehealth is needed.

Keywords: health information technology; new models of care; multispecialty community providers; realist synthesis
