A realist synthesis of the international knowledge base for new care models to inform and mobilise knowledge for Multispecialty Community Providers (MCPs)

15/77/15

Alison Turner[1], Abeda Mulla[1], Andrew Booth[2], Shiona Aldridge[1], Sharon Stevens[1], Mahmoda Begum[1] and Anam Malik[1]*

Submitted: 28 June 2017

Version 2 submitted: 21 October 2017

Version 3 submitted: 21 November 2017

Version 4 submitted: 5 December 2017

Word count: 47,122

1 The Strategy Unit, NHS Midlands and Lancashire Commissioning Support Unit

2 School of Health and Related Research (ScHARR), University of Sheffield

* corresponding author (alison.turner14@nhs.net)

Funding: Health Services and Delivery Research Programme, National Institute for Health Research

Keywords: Innovation, organizational; Delivery of health care, integrated; Primary health care; Models, organizational; Community health services; Review

Declarations of interest

Alison Turner reports: I am a member of the NIHR Dissemination Centre Advisory Group. The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) has been commissioned to support the Dudley MCP vanguard and Ms Turner has been involved in providing evidence analysis in support of the local evaluation of the vanguard.

Dr Abeda Mulla reports: * I am a member of the NIHR HS&DR Prioritisation Panel (Researcher-led). *The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) is commissioned by Dudley CCG to deliver a Primary Care Development Programme. I am involved in providing general practices with service improvement and change support and evaluating the programmes workstreams. *The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) was commissioned by NHS England to conduct a rapid research study in the context of GP Access. I was the technical lead for the project overseeing all aspects of the analysis and writing the report.

Dr Andrew Booth reports: I am currently a Principal Investigator on an NIHR HS&DR Evidence Synthesis Centre contract. I have also been a member of the NIHR CRRSU Funding Board.

Shiona Aldridge reports: I work for The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit). The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) was commissioned by NHS England to conduct a rapid research study in the context of GP Access and Ms. Aldridge was involved in undertaking the qualitative analysis. The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) has also been commissioned to support the Dudley MCP vanguard and Ms. Aldridge was involved in providing evidence analysis in support of the local evaluation of the vanguard.

Sharon Stevens reports: The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) has been commissioned to support the Dudley MCP vanguard. I have been involved in providing evidence analysis in support of the local evaluation of the vanguard. The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) was commissioned by NHS England to conduct a rapid research study in the context of GP Access. I was involved in undertaking the evidence review.

Mahmoda Begum reports: The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) is commissioned by Dudley CCG to deliver a Primary Care Development Programme. I am involved in providing general practices with service improvement and change support and evaluating the programmes workstreams. The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) was commissioned by NHS England to conduct a rapid research study in the context of GP Access. I was involved in undertaking the qualitative interviewing and analysis.

Anam Malik reports: The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) is commissioned by Dudley CCG to deliver a Primary Care Development Programme. I am involved in providing general practices with service improvement and change support and evaluating the programmes workstreams. The Strategy Unit (NHS Midlands and Lancashire Commissioning Support Unit) was commissioned by NHS England to conduct a rapid research study in the context of GP Access. I was involved in undertaking the qualitative interviewing and analysis.

Important

A 'first look' scientific summary is created from the original author-supplied summary once the normal NIHR Journals Library peer and editorial review processes are complete. The summary has undergone full peer and editorial review as documented at NIHR Journals Library website and may undergo rewrite during the publication process. The order of authors was correct at editorial sign-off stage.

A final version (which has undergone a rigorous copy-edit and proofreading) will publish as part of a fuller account of the research in a forthcoming issue of the Health Services and Delivery Research journal.

Any queries about this 'first look' version of the scientific summary should be addressed to the NIHR Journals Library Editorial Office – journals.library@nihr.ac.uk

The research reported in this 'first look' scientific summary was funded by the HS&DR programme or one of its predecessor programmes (NIHR Service Delivery and Organisation programme, or Health Services Research programme) as project number 15/77/15. For more information visit https://www.journalslibrary.nihr.ac.uk/programmes/hsdr/157715/#/

The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HS&DR editors have tried to ensure the accuracy of the authors' work and would like to thank the reviewers for their constructive comments however; they do not accept liability for damages or losses arising from material published in this scientific summary.

This 'first look' scientific summary presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health.

Scientific Summary

Background

The New Care Models programme was introduced to the NHS in 2014 and fifty 'vanguard' sites were selected across five different sub-models. One of these sub-models was a multispecialty community provider (MCP) and fourteen sites were chosen to pilot these primary care-led, community based integrated care models. Whilst the model description is new, there is a legacy of integrated care models that the NHS has already experimented with. Furthermore, the MCP model was also a means of applying the international accountable care organisations (ACO) model, most notably from the USA, whose own Pioneer programme began in 2012.

NHS England is replicating Pioneer ACO approach of rapid cycle evaluation and learning and diffusion for evidence-based best practices for a number of reasons including increasing the speed of adoption and improve the timeliness of knowledge mobilization and has advocated shared learning throughout the vanguard models. As part of this MCP vanguards were required to set out their long-term ambitions in logic models articulating them in some form of the triple aim of better health, better care and better value. This triple aim has since expanded to form the Quadruple Aim, to incorporate staff and provider experience.

In keeping with this need for learning, our evidence synthesis aimed to clarify the underpinning evidence-base for MCP like models both in the UK and abroad. By using a realist synthesis approach we wanted to explain which of the mechanisms of action in other models might work in the context of an MCP and how these relate to Quadruple Aim outcomes.

Objectives

The aim of this synthesis is to provide decision makers in health and social care with an ‘actionable’ evidence base for the MCP model of care. As described in our study protocol, we believe this synthesis can serve as a “blueprint” with “active ingredients” to inform design and

delivery of current and future iterations of the MCP model. Specifically, the objectives of the synthesis were to articulate the underlying programme theories behind the MCP model of care, by mapping the logic models of the 14 MCP demonstrator sites, prioritising key theories for investigation:

•identify sources of theoretical, empirical and practice evidence to test the programme theories

•appraise, extract and analyse evidence, reconciling confirmatory and contradictory evidence

•develop the synthesis, producing a "blueprint" to explain how the mechanisms used in different contexts contribute to outcomes and process variables

•consult with key MCP stakeholders from to validate findings and to test applicability to different contexts

•finalise the synthesis, incorporating stakeholder feedback

•disseminate the findings, preparing a series of practical tools to support knowledge mobilization

Methods

We employed an iterative process through which we integrated data from the preliminary logic models with insights from stakeholders (advisory group consisting of MCP leads and service users) and broader findings from the literature to provide a realist understanding of the MCP model of care. We first identified MCP programme theories using the logic models generated by vanguards through generating IF THEN statements from each of the MCPs. These statements were assigned to one of the Quadruple Aim outcomes: population health, cost-effectiveness, patient experience and staff experience and one of the domains across the meta Best Fit Framework. This framework was developed from previous integrated care

programme lessons and policy guidance for MCPs. This process generated a number of themes that allowed for flow diagram illustration in a logic model fashion.

These flow diagrams and their narratives were shared with the project advisory group and following a series of discussions eight programme theory components were agreed upon. These were:

R1 Community based coordinated care is more accessible

R2 Place-based contracting and payment systems incentivise shared accountability

R3 Fostering relational behaviours builds resilience within communities

M1 Collective responsibility improves quality and safety outcomes

M2 Multidisciplinary teams provide continuity for patients with LTCs/complex needs

M3 Engaged and trained staff expedite cultural change

M4 System learning embeds and sustains transformational change

M5: Proactive population health is dependent on shared and linked data

The three 'R' theory components the advisory group prioritised for realist review and the five 'M' theory components were developed as maps. The next stage of our realist reviews involved searching for empirical evidence in order to test and refine our programme theories within a vast and diffuse evidence base with literature. Each item of evidence extracted was used to test the individual programme theory component and the degree to which studies supported, nuanced or challenged that theory. For each of the four mapping reviews we started with a core set of documents, followed by “pearl growing” and “citation chasing” strategies to follow up citations and references. We then purposively identified reviews from the broader literature.

The finalised programme theory components and emerging findings were tested and validated with a wider MCP stakeholder group.

Results

The MCP programme theory components that emerged from extracting IF THEN statements from MCP logic models and their thematic mapping to a meta-framework (Best Fit Framework), encompassed an intricate set of overlapping activities and assumptions highlighting the inherent interdependencies within such a complex service transformation. The components relate to interventions, such as new contracts, as well as behaviours, such as community involvement. These theory components were notable in their coverage of both interventions (WHAT MCPs will do) and ways of working (HOW MCPs will design and deliver services). The permutation of activities is shaped by contextual factors which differed across the 14 MCP Vanguards including programme design or legacy of integrated working. There was recognition within the MCP logic models and associated documentation of enablers and barriers to change but little explicit reference, with limited exceptions, to what might be referred to, in realist methodology, as mechanisms.

The evidence base that pertains to these theory components was for the most part limited by initiatives that are relatively new or not formally evaluated (such as enhanced primary care teams, or contracts based on outcomes), particularly in UK settings. A realist methodology therefore allowed for inclusion of commentaries for instance that implicitly referred to mechanisms. The evidence base included limited empirical evidence; there is a limited number of small scale evaluations comprising uncontrolled before and after studies or single case studies. There are a number of commentaries drawing on experiential evidence. Support for the programme theory components vary, with moderate support for enhanced primary care and community involvement in care; and relatively weak support for new contracting models. Limitations of the evidence base relate to the long-term impacts of a enhanced primary care teams delivering care closer to home; the heterogeneity of contracting

models and variable reporting; and the use of before and after methods prone to bias, resulting in a moderate level of uncertainty around the conclusions.

The extraction of data by either realist or mapping approaches allowed for the following summaries:

R1: To deliver new and expanded roles in primary care as part of the provision of specialist care in the community requires trust between professionals alongside appropriate training and practical tools to trigger professional willingness to adopt new ways of working such as task shifting for community-based care. Subsequent embedding of the effective new ways of working has the potential to achieve outcomes of: better management of chronic conditions and a reduction in the number of secondary care referrals. Cost savings in this context are only possible following sustained implementation and stabilisation of increased demand and costs of training and additional community services provision are included.

R2: The opportunity for clinicians and patients to engage with providers and commissioners for accountable place-based contracting and payment systems requires alignment of personal, professional and organisational values and incentives. Moreover, sufficient time needs to be allocated to: learning and development; agreeing outcome frameworks; and sharing access to robust high quality information that includes cost and quality data. This will allow building of trust, collaboration and shared decision making for accountability across Quadruple Aim outcomes. Furthermore, through service users and a diverse group of professionals having the confidence to hold providers and commissioners to account, MCP leaders will be spurred to make informed (re)investments based on clear measures of value and appropriate management of financial risk.

R3: The development of mutually beneficial relationships in community settings for co-production purposes requires opportunities for equal and reciprocal engagement for all relevant healthcare professionals and the local population. Ongoing training, guidance, feedback and practical support for community-based working needs to be provided and roles,

responsibilities and expectations have to be clearly defined. Together they can empower individuals with the confidence to contribute to decision making or, the sharing of experience and knowledge, to inform system priorities, especially for longer term aims of preventive and holistic care. Shared community ownership of health can result in improved health behaviours, increased social participation and engender community resilience.

M1-5: The maps further demonstrate the interdependencies between individual theory components at individual, organisational and system level. Professional autonomy and empowerment is critical for driving cultural change that is associated with trust and collaboration particularly for structural developments of MDTs and integrated pathway. Cultural change needs to be stimulated through organisational development and system leadership behaviours which promote collaborative, population-based approaches to healthcare and aligned processes which support delivery. Shared data, in particular, offers the opportunity to improve the co-ordination and continuity of care at individual and organisational levels whilst MCP wide learning can be accomplished through training and feedback loops, built into audit and formative evaluation, to support system learning and improvement.

It is clear that delivery of an MCP requires inter- and intra-professional and service user engagement from an early stage. Much of this engagement is dependent on the notions of trust and empowerment, at both individual and group level, that is generated following activities to align values and incentives for an integrated model of care. If successful, this engagement with parallel opportunities for training and development, can result in: shared decision making for accountable service users who take responsibilities for their own health; accountable communities who manage demand at the most appropriate setting with high quality integrated care; and accountable care systems which invest and manage financial risk through agreed contracting and payment arrangements and embed learning at individual (micro), organisational (meso) and system (macro) levels. Based on our overall findings we have developed a conceptual model for MCPs that merges the logic model elements with realist mechanisms.

Strengths and Limitations

Conducting a review against a backdrop of continual change in a complex system is challenging, we sought to minimise this by (1) exploring transferable lessons from international comparisons and UK legacy models and (2) by seeking to identify generic lessons that may be used to explore future care models that seek to achieve large-scale transformational change within complex adaptive systems and (3) utilising the embedded status afforded by being a NHS-based team, and maintaining continuous MCP stakeholder engagement including telephone interviews with key informants throughout the lifetime of the project (and beyond for mobilising the knowledge gained).

Whilst the overall review draws on a broad evidence base, it predominantly derives from within the health sector; there may still be valuable learning elsewhere, for example, from other public services or the private sector in relation to large-scale public-funded procurements. The iterative approach and stakeholder engagement has focused the search on identification of key sources but does not eliminate the risk of confirmation bias.

Conclusions

The overall findings are situated within a framework of complex adaptive systems theory providing an emphasis on different levels of connectivity: the micro (agents, both professional and service users); meso (provider and commissioning organisations); and the macro (the MCP Vanguards). The necessary operation at the edge of chaos (e.g. dynamic nature and learning from mistakes) is likely to facilitate innovation; the feedback loops will support system learning and adaptation. For the purposes of theory driven implementation and knowledge mobilisation, the Capability Opportunity Motivation for Behaviour system (COM-B) is suggested alongside "active ingredients" for practitioners within MCP-like accountable integrated care systems.

Word count : 1981