HSDR (15/77) Models of Care Multispecialty community providers – proposal 15/77/34

From Programme Theory to Logic Models for Multi-specialty Community Providers: A Realist Evidence Synthesis.

Detailed project description

Full title of project

From Programme Theory to Logic Models for Multi-specialty Community Providers: A Realist Evidence Synthesis.

Summary of research

This realist evidence synthesis will produce more strongly evidence-based logic models to guide the formation and early operations of Multi-specialty Community Providers (MCPs). It will do so by three main steps:

1. Eliciting policy-makers' initial assumptions ('programme theory') about what structures, working practices and services ('mechanisms') the MCPs (or each main variant of MCP) will contain, and how these mechanisms are expected to produce the outcomes stated in the NHS Five Year Forward View (5YFV) [1].
2. Finding and synthesising existing international evidence about what effects are likely to be produced by the kinds of structures, working practices and services ('mechanisms') which MCPs will contain. By comparing the policy-makers' initial programme theory with the evidence synthesis findings, we will elaborate and/or qualify and/or revise each main component of the policy-makers' original assumptions.
3. Assembling the revised, corrected and elaborated components into an elaborated, more coherent, consistent and evidence-based version of the initial programme theory, that is into a set of more strongly evidence-based logic models for MCPs.

The study will be informed by a strong combination of subject expertise, clinical experience, and methodological expertise in conducting systematic reviews and realist evidence syntheses. By drawing on international evidence testing and refining theory, it will produce findings in a form which can inform decision-making at a national level and make commissioning more sensitive to context at regional and CCG levels.

Background and rationale

This proposal addresses the problem of strengthening the evidence base of the logic model(s) specifying which mechanisms (e.g. the governance structures through which the required working practices of practitioners) are most likely to enable Multispecialty Community Providers (MCPs) to achieve the policy outcomes of the 5YFV. The relevant evidence is disparate and scattered. The problem is therefore to synthesise it in such a way that logic models relevant to MCPs can be derived from it.

The proposed study builds on the following findings of NIHR-funded research:

- Parts of the NHS have organisationally integrated community health services with hospital care and/or community mental health services, but not yet with GP services although Scandinavian evidence proves the feasibility of doing so (HSDR 09/1801/1063 – Sheaff et al. [2]). Similarly the Primary Care Workforce Commission [3] developed an expanded framework for general practice within which MCP models of care can be situated, but international evidence about the detail of how these models can work in different contexts is needed.

- How service design can enable health and social care professionals to provide effective and preferred intermediate care (HSDR 10/1012/07 – Anderson et al 2013 [4])

- The importance of developing the working relationships between different providers which underpin integrated care (HSDR 08/1809/231 – Goodman et al. 2013 [5])

- Conceptual platform for collaborative care in offender mental health [6,7].

The present study will synthesise the extant evidence as to how, and how far, MCP structures and governance arrangements are likely to be able to improve 'person centred coordinated care' (National voices, <http://www.nationalvoices.org.uk/person-centred-co-ordinated-care>) at clinical team level. It will describe for commissioners and providers what structural and governance arrangements need to be in place to ensure patients have better experience and outcomes within a reducing overall budget.

A rapid review of new organisational models of primary care [8] found that the existing evidence was mainly descriptive and did not sufficiently consider implementation issues, suggesting the need for deeper and wider search (including searches into other disciplines and fields) for further evidence. This study further confirmed that a 'one size fits all' model of MCPs is unlikely to be tenable – decision-makers need the knowledge that will enable them to make judicious choices adapted to their local context.

Policy Background

Since 2008 the NHS has faced stronger imperatives for cost control. Reducing hospital use was bound to be a focal means. Even before 2008 governments judged this goal was most likely to be achieved by reducing the volume of unplanned, especially repeat, admissions by older patients with multiple morbidities; and an important means to achieving that was better coordination of hospital, GP, community health and social care. To achieve, in short, better 'integration' of these services, the 5YFV proposes seven new 'models of care', i.e. new organisational models of (above all) healthcare provision.

MCPs are described as 'extended group [GP] practices' which might be 'federations, networks or single organisations' (5YFV p.20). They might commission and/or themselves provide specialist services in the community. Potentially they might also organisationally integrate general practice and community health services within one provider (which the so-called 'integrated' care pilots never did). MCPs will also have an element of vertical integration, or rather coordination, of care, although they will not structurally integrate primary and secondary care. Their aims are most similar to, though they contrast structurally with, the 'acute and primary care systems' model in which combined GP and hospital providers serve a patient list.

5YFV says the aims (policy outcomes) of all seven new models, including MCPs, are:

1. 'upgrade in prevention and public health' (p.3)
2. 'Patients will gain greater control of their own care' (p.3)
3. 'support people with multiple health conditions, not just single diseases (p.3).
4. 'comprehensive and high quality care' (p.5)
5. 'close the £30 billion gap' in projected NHS funding 'one third, one half, or all the way' (p.5).

MCPs are also to 'enable new ways of delivering care [...] become the focal point for a far wider range of care' (p.20).

To achieve these ends MCPs will:

- 'bring in' other doctors (e.g. consultants) as partners, employees or out-posted staff 'alongside' senior nurses, community nurses, therapists, pharmacists, psychologists, social workers, and others.

- shift outpatient consultations and ambulatory care out of hospital.
- run local community hospitals with (perhaps) expanded diagnostic services, dialysis, chemotherapy.
- give GPs hospital admitting rights and use ‘hospitalist’ doctors, as in 'other countries' (i.e. Canada and above all the USA).
- Manage the budget(s) for their patients.
- Use inputs from carers, volunteers and patients
- access hard-to-reach groups and take new approaches to changing health behaviours' (p.21).

Doubtless MCPs will in practice select from the above list and import or invent additions to it. 5YFV suggests that these components of MCPs are the mechanisms (resources, opportunities) which will trigger specific responses from practitioners and patients.

As possible MCP governance structures for implementing these changed working practices, 5YFV envisages:

1. Networks of independent general practices, perhaps with a strong central coordinating body (a 'federation').
2. Quasi-markets (MCPs commission specialist providers)
3. New hierarchical organisations (e.g. on the lines of NHS Foundation Trusts).
4. Enlarged professional partnerships.

In explicitly accommodating local variation and experiments, 5YFV comes close to implying that an MCP might also have the structure of a social enterprise or cooperative. Some of the above governance structures may either not exist at all in some MCPs or, if present, may operate differently as mechanisms for changing working practices in differently-configured MCPs. We therefore expect that different logic models (in the plural) may be required, to accommodate differently-configured MCPs.

So far as can be ascertained in advance of the proposed research, the above is in outline the programme theory (see below) underpinning the policy of constructing MCPs.

Rationale

Realist synthesis, the method which we propose, starts from the premise that 'Every policy is a theory', including the policies stated in 5YFV, in the sense that it either states or presupposes (implies) a set of assumptions as to:

1. What policy outcomes ought to be achieved (normative assumptions).
2. What mechanisms (i.e. which actions and working practices, by which agents, though which mediating links and governance structures) will produce them (empirical assumptions).
3. What circumstances and moderating factors (context) maximise the mechanisms' effects and maximise the likelihood of the mechanisms working as intended (empirical assumptions).
4. Which alternative mechanisms produce the desired policy outcomes, and the contexts which each requires to do so (empirical assumptions).
5. Where alternative mechanisms are available, which one is preferable and why, whether
   (a) on grounds of effectiveness (empirical assumption) or
   (b) for policy reasons (normative assumption).

The empirical assumptions are corrigible in the light of new evidence (whether newly-produced or new to the policy-makers). Such corrections result in a revised, more strongly evidence-based and coherent assumptions which constitute a more elaborated and valid theory predicting which mechanisms are most likely to produce the outcomes which the policy-maker desires. We therefore distinguish the terms:

1. 'Initial Programme Theory', i.e. the policy-makers' original, with often implicit, ambiguous or incomplete assumptions about what mechanisms would produce the planned policy outcomes. For this study, the relevant initial programme theories are policy-makers' assumptions (see above) about what MCP variants, structures and working practices will be formed, and how these variants, structures and working practices will produce the policy outcomes outlined in 5YFV .

2. Component programme theory. In practice a policy 'mechanism' is usually a complex of nested mechanisms-within-mechanisms. Each component mechanism has its own implicit programme theory, which can be revised, corrected and elaborated in light of all the available evidence, to produce a more fully developed component of a wider logic model. The components of relevance to MCPs are likely to be:

   (a) developed from examination of the wider literature related to integrated care, and

   (b) useful for a wider range of models than just MCPs

3. 'Logic Model' or 'full programme theory', which assembles the revised, corrected and elaborated components into an elaborated, more coherent, consistent and evidence-based version of the initial programme theory.

'Programme theories contain, although not always explicitly, assumptions about how a problem can best be addressed and what factors will potentiate or undermine the interventions made in order to address that problem. These programme theories, expressed at a 'middle range' level of abstraction, will provide the framework for searching both for evidence regarding the validity of the programme theories, hence to define more accurately the processes that are necessary to realise the goals of programme theory.[9]

Correspondingly, the rationale for the present research is therefore to:

1. Articulate the initial programme theory about MCPs that underlies the 5YFV and other policy statements that will appear as MCPs are establised. That is, what NHS England and other policy makers assume about how MCPs will function as mechanisms to achieve the policy outcomes stated in 5YFV, and under what contextual conditions.

2. Assemble a logic model by synthesising existing evidence within an analytic framework based upon the found at step 1 and then comparing that synthesis with the components of initial programme theory to ascertain how the latter require elaboration and/or modification to strengthen their evidential basis. The term 'synthesise' marks the fact that the available evidence is of very diverse types, sources, extents and degrees of scientificity, so that combining it for these purposes this way requires techniques which the methods section explains.

The methods section below elaborates how we propose to undertake both steps. Pending the findings from this work (if commissioned), the following section outlines how the programme theory of MCPs currently appears, and the existing state of evidence about the main themes of that programme theory.

Evidence explaining why this research is needed now

Because MCPs are so new there is a complete absence of studies directly concerning them. Our initial scoping search of Ovid MEDLINE(R) 1946 to August Week 1 2015 for variants of the term "multi specialty community providers" retrieved zero hits, and the same when searching EMBASE,

PsycINFO, Social Policy and Practice. and PubMed. Against this, there are numerous published studies of care ' integration' . However these studies tend to focus on

1. the causes of the absence of care 'integration' (although an analysis of causes implies what the possible remedies might be);
2. practical models and experiments in working practices and network structures designed to improve care 'integration'. However
   (a) they are often small-scale, one-off studies, often in non-NHS-like settings.
   (b) nearly all report changes in care coordination across organisational boundaries, not the organisational integration of primary medical care and/or community health services and/or hospital services and/or mental health services.

Because this body of evidence is disparate and fragmented, re-analysis of it is needed to draw out the implications for NHS and MCPs in particular. In the absence of any existing studies of MCPs our research strategy will be to seek evidence from other settings, of what (under other names) are the equivalents to the mechanisms (working practices, organisational structures, resources etc.) that NHS policy makers and managers expect MCPs to contain.

The health needs warranting this project are that:

- Strong continuity of care ('Integrated' service) is vital for the delivery of effective, safe and efficient person-centred care for people with multiple morbidities in the community [10–13].
- Non-integrated care risks insufficient focus on the person, lack of co-ordination, and duplication (quality and safety)
- Person-centred care (i.e. care which patients experience as co-ordinated, as involving them in decisions and in which decisions are based on the person not just diseases) is more acceptable to service users
- Integrated care has the potential to increase efficient use of resources without compromising quality and safety

The health policy need for such a synthesis is that the idea of establishing MCPs implicitly rests on the following main assumptions:

1. Repeated unplanned admissions of older people with multiple morbidity make proportionately heavy use of NHS hospital bed-days [14,15].
2. Reducing these admissions would substantially reduce cost and access pressures on NHS hospital services [16].
3. A substantial proportion of these admissions are clinically unnecessary, even iatrogenic, hence preventable [17].
4. 'Integrated' (or at least, better-coordinated) care will reduce these admissions by partly replacing hospital care with non-hospital care, hence raise the quality and reduce the cost of NHS care.
5. MCPs will promote the 'integration' of care for these patients.

To varying extents the first three of these assumptions have been verified through research (some references above). The evidential basis of the fourth is more mixed [18–20]. The fifth, about which the present study would synthesise existing evidence, still requires evaluation.

An NIHR HSDR workshop with service leaders, policy makers and researchers (February 2015) identified a gap in knowledge about the evidence underpinning the integrated care models described in the NHS Five Year Forward View , which has led to the commissioning of this call. These considerations apply to MCPs in particular, as a care model new to the NHS. The proposed study supports the HSDR mission since it:

- addresses an issue of major strategic importance to the NHS
- is likely to inform changes in practice that will have a significant impact on a large number of patients across the UK

- will be the first step to filling the clear 'evidence gap' about what effects MCPs might be expected to produce, how, and in what contexts, in respect of improving the "integration" of care, as outlined above.
- because it is designed to synthesise international evidence to strengthen the programme theories for proposals to strengthen care "integration", the findings will be applicable to organisational innovations and situations beyond MCPs alone, and indeed beyond the NHS alone, and will concern more than one research site

The NHS managers who endorse this bid have done so because (as one of them wrote) 'we can seize opportunity to align the Logic model development that your teams will be progressing with our Test and Learn pilots with the NHS England proposed approach.'

Aims and Objectives

Overall, this study therefore aims to appraise and synthesise the diverse sources of knowledge (from the UK and internationally) so as to understand and test the 'programme theories' underpinning the idea of an MCP, elaborating and refining the programme theories to produce more strongly evidence-based logic models. Specifically we aim to:

1. Map the current variants of MCPs and their component proposed 'ways of working', especially in Vanguard sites.
2. Describe the equivalents of MCP, and of the main component mechanisms of MCPs, that are in use internationally.
3. Identify through a review of international literature the ways in which these equivalents are reported to achieve beneficial effects in terms of care integration and the other policy outcomes mentioned in the Five Year Forward View.
4. On that basis, hypothesise how the resources and mechanisms deployed in MCPs will contribute to changing care for different groups of people (defined by morbidity, e.g. single major condition (e.g. cancer), multiple low functional impact morbidities (e.g. diabetes, HT), high functional impact multi morbidity (e.g. stroke, arthritis, dementia)).
5. Describe the causal chains from structural and governance arrangements, through inter team and inter-professional relations and interactions, down to the critical downstream behaviours of practitioners and patients which are the primary pathways to (policy) outcomes of interest (better health outcomes, better experience, at lower cost)
6. Hypothesise how differences in types of MCP (e.g. networks, confederations etc.) and other external contexts affect how this chain of causation operates
7. Re-formulate new logic models (revised programme theory) of MCP models of care in ways that inform the formation of MCPs, commissioning and stakeholders' continuing contribution to decision-making about and within MCPs.

In pursuing these aims we will focus on MCPs (or equivalents) whose main purpose is to provide services for patients with complex needs, defined as patients who over the period of a year or more recurrently need services from at least two of: general practice; community health services; acute hospitals. The corresponding group of patients includes some, but not all, patients with:

1. a single long-term condition with complex needs
2. combined physical and mental health problems
3. need for both health and social care

but it is a narrower focus than each of (1) to (3). It does not include the management of once-off episodes of care or hospital referrals. We will interpret the following research questions (Study Objectives) accordingly:

1. How do policy makers and top NHS managers predict MCPs will generate the policy outcomes stated in 5YFV? What variants of MCP are they creating?
2. Internationally (including in the UK), what equivalents to MCPs, or components of MCPs, exist?
3. How do these equivalents and their 'mechanisms of action' compare to those proposed for MCPs in the NHS?
4. What policy outcomes are these equivalents reported to produce?
5. What is the evidence about the ways in which these mechanisms of action depend upon specific contexts (e.g. the presence of non-hospital beds for frail older people)? That is, how do the different components of the MCP models of care produce different outcomes in different contexts? Specifically, what are the barriers, facilitators and costs in implementing these MCP models?

6. What do the answers to the above questions imply for the organisational design (logic models of governance structures, internal management and working practices) of MCPs in the NHS?

Research plan/methods

Design and theoretical/conceptual framework

Realist synthesis is the method best suited (indeed designed) for these purposes. As our methodology we will use a realist logic of inquiry to identify, appraise, and synthesise diverse forms of knowledge to explain how MCPs, their component structures and working practices, and their equivalents elsewhere, achieve effects relevant to the policy outcomes stated in 5YFV. This methodology is well-suited to the present research aims and research questions because a realist review aims to attain a contextualised understanding of *how* and *why* complex interventions achieve particular effects (in realist language, how mechanisms lead to outcomes in particular contexts).

The overall study method (and research plan) will therefore consist of the following steps:

1. Elaboration of the policy-makers' initial programme theory from published sources, including any assumptions implicit in the proposal to establish MCPs, and decomposing the initial programme theory into its core component assumptions.

2. Realist Review. Search for published evidence relevant to the core components, overarching logic and key outcomes which make up the policy-makers' programme theories. Consolidate these findings and formulate them as components for new, evidence-based logic models (revised programme theories) for MCPs.

3. Realist Synthesis

   (a) Compare policy-makers' initial programme theories with the realist review findings from the above evidence. Where programme theory and evidence differ, revise, replace and add to the programme theory to ensure consistency with the evidence. Such 'logic analysis' [21] produces revised, more strongly evidence-based components of a new logic model (i.e. an empirically informed revised programme theory) [22,23].

   (b) Assembling new logic models. The revised components will be recombined as coherently and consistently as possible so as to assemble an elaborated, more coherent, consistent and evidence-based version of the initial programme theory, that is construct a new set of logic-models for MCPs. .

The whole study will be conducted and reported as RAMESES standards [24] prescribe. Throughout the review we will express programme theories and logic models in the form of context-mechanism-outcome configurations, where ‘mechanisms’ are the way in which a programme’s resources, opportunities and governance structures interact with the reasoning of individuals and lead to changes in their behaviour, and ‘contexts’ are the wider configuration of factors (not necessarily connected to a programme) that may enable or constrain the operation of specific mechanisms.

To make the scale of work feasible we will identify ***types*** of MCP (i.e. those using similar governance and care coordination structures) and focus on the programme theories of the main types, rather than single instances, of MCPs. We will develop this focus in consultation with the stakeholder group, to ensure we select types that have resonance, applicability, and potential reach beyond MCPs. Our experience in eliciting NHS programme theories about commissioning (HSDR 08/1806/262, Sheaff et al. 2015 on commissioning) suggests that we are likely to find relatively few main variants. They are likely to be differentiated by governance structure, hence by working practices for care coordination. For the focal types of MSP we will focus on the level(s) of abstraction (e.g. those of service access, integration, coordination) which are of wider application than MCPs alone, by applying the analytic framework developed in our HSDR recent study (HSDR 09/1801/1063: Sheaff, et al., 2015 on Integration and Polyclinics). Our analyses will therefore focus on programme theory assumptions, and the corresponding research evidence, about: care coordination; care planning; care teams; inter-organisational care networks; vertical integration; and conversely barriers to care access and coordination. We will compare variants of MCP in these terms.

Elaboration of the Policy-makers' Initial Programme Theory of MCPs (step 1 above)

The purpose of this stage is to articulate the initial programme theory about MCPs that underlies the 5YFV and other policy statements that will appear as MCPs are established. That is, what NHS England and other policy makers assume about how MCPs will function as complexes of mechanisms (M) to achieve the policy outcomes (O) stated in 5YFV, and under what contextual conditions (C). To expose the initial programme theory of MCPs we will apply the methods of discourse analysis used for a recent HSDR project (COM238), i.e. a cognitive frame analysis [25] of the descriptions of MCPs and of how MCPs will work in current policy documents, developing the methods used in (HSDR 09/1801/1063 – Sheaff et al. [2]). The Background section above outlines some first steps in elaborating policy makers' assumptions (initial programme theory).

Policy makers' initial programme theories will be identified from a range of sources (opinion pieces, grey literature). In order to present policy makers' initial programme theories in the most complete, coherent, consistent and evidence-based forms that the facts will bear, we will content-analyse the following, purposively-sampled sources:

1. The NHS Five Year Forward View itself, and whatever supporting documentation and guidance NHS England and DH issue during the study period. We will consult NHSE and DH web-masters to find which documents have been most download, hence are prima facie likely to have widest influence on NHS practice.

2. Transcripts of any published policy maker (ministerial, high-level NHS managers) speeches explaining and justifying MCPs, including speeches only from supportive, but (for the reasons explained below) not of hostile, MPs.

3. Vanguard sites' own publications describing what logic model(s) they are adopting. As first-hand accounts these will be particularly valuable.

4. 'Third-party' policy interpretations from think-tanks and similar sources, but (again for the reasons explained below) only from supportive, not hostile, commentators.

5. Besides suggesting what kinds of logic model will eventually be of most use to them, we also assume that stakeholders' interpretation of MCP policy (hence, of the programme theories embedded in it) are likely to be an important determinant of how policy (indeed, what policy [26,27]) is implemented in practice. Through our stakeholder meetings, and from information from vanguard sites and other NHS informants as to how MCPs are being developed, we will therefore also identify stake-holder's own interpretations of the initial programme theories of MCPs.

We will focus on ‘actually occurring’ texts and utterances. Without diverting our efforts into analysing their ‘genre’ [28] or ‘deeper rules’, we will nevertheless regard these texts as a systematic set of ideas, values and problematics [29]. In view of the time-scale and the focus on synthesising existing evidence, will we not supplement the content analysis of documents with interviews of policy-makers or conduct a Leximancer or similar quantitative analyses of the above texts (our experience suggests that the latter will for present purposes add little). We will not ignore any 'negative' aspects of the above sources in the sense of ignoring caveats or warnings in them about limitations to the proposed MCP models, risks, uncertainties, settings to which the models are not relevant, or likely barriers to implementing them. Rather, any such 'negative' comments will form part of our account of the Context assumptions in the initial programme theory. One purpose in analysing policy-makers initial programme theory (step 1 below) is to identify which logic models are worth concentrating on for maximum relevance to UK health policy and NHS management.

As the framework for content analysing this material, we will start from the standard C-M-O framework used by realist, but be sensitive to the fact that (as noted) programme programmes usually have multiple nested C-M-O configurations as their components. We will identify the main variants of MCP which the initial programme theory accommodates, and for each variant to identify its main component assumptions.

Our previous research eliciting programme theories [30] and other studies [31–34] show that in practice important elements are often missing from the initial programme theory stated in policy documents. Policy statements mention mechanisms with no explicitly linked outcomes, and vice-versa. Then the researcher has to impute the missing assumptions. These imputed assumptions will, unless the evidence suggests otherwise, carry forward into the logic models. In this event we will follow the rules of good practice in discourse analysis by:

1. Clearly identifying which are the imputed assumptions, differentiating them from the assumptions actually found in the original programme theory.

2. Selecting, when alternative assumptions might be imputed, those which have the strongest evidence base and are most consistent with the assumptions actually found in the original programme theory. Our aim will be to interpret the policy at its strongest, avoiding the construction of a 'straw man' or unfairly weak interpretation. Hence we will draw only on 'third-party' policy interpretations from supportive, not hostile, think-tanks and similar sources.

These strongest imputed assumptions will, with the explicit assumptions, be the raw material for Step 2. This approach will ensure that the Initial programme theory put forward for comparison with the evidence (next step) and the eventual logic model (final programme theory) still reflects, so far as possible, the main components, especially the outcomes, which the policy originally intended.

Realist review (step 2 above)

We will locate and incorporate relevant information from a range of published and unpublished sources, proceeding (as is usual for a realist review approach) iteratively through stages of exploration, search, selection and refining. Our critical reflections upon synthesising complex theories in three recent realist reviews [4,35] have led us to question [9] proposed processes of reasoning (juxtaposition, reconciliation, adjudication, consolidation, and situation) in the synthesis process. Whilst these processes provide a useful broad framework, they insufficiently articulate the details of the analytic process in a realist review. For this study we are also aware of the need to strike an appropriate balance between exhaustive transparency and to progress the project in a timely way that will produce useful knowledge. Our realist review will therefore iterate (and if necessary re-iterate) through the stages of:

A) Exploration

B) Search

C) Selection

D) Data Extraction

A) Exploration: We already know (see above) that database searches using the term 'MCP' will in the near future be fruitless. To 'seed' the exploration we will start from:

1. Exposure of the MCP initial programme theories (see step 1 above), which will indicate an initial set of assumptions, concepts and themes about which evidence is required.

2. Studies which the researchers already know to be relevant to the programme theory for MCPs. These might include studies of the NHS Integrated Care Pilots [19] and of Scandinavian polyclinics [36]. In particular, we will start from key reviews that have already been conducted about integrated care, in particular working practices which strengthen continuity of care [37–39], the contribution of different governance structures, systems of sharing information [40], and health system 'reforms' to care integration [2,41,42], and inter-professional and inter-organisational collaboration [11,43].

Together these sources will suggest empirical domains (which other health systems, which other parts of the public sector, which other non-public and non-health organisations) appear likely to hold evidence relevant to evaluating the MCP programme theories. Sources for the initial exploration will be identified partly by the researchers and partly by our stakeholder informants.

B) Search. The exploration stage will provide the initial main search terms. Using these search terms, we will make bibliographic database searches of at least : ASSIA; CINAHL, EMBASE: IBIS; Ovid Medline; PsycINFO; Social Policy and Practice; SSCI. Because attempts to integrate care organisationally go back many decades (to the 1920s, in Britain) we will search from 1950 onwards in order to maximise the likelihood of finding MCP equivalents. (However, where older and later studies cover similar topics, we will use the most recent.) To cut through the conceptual fuzziness which surrounds the idea of 'integrated care' we will follow the WHO in defining integrated care as: ‘bringing

together inputs, delivery, management and organization of services related to diagnosis, treatment, care, rehabilitation and health promotion […] to improve services in relation to access, quality, user satisfaction and efficiency' [44]

We will supplement the main bibliographic database searches with:

1. Concurrent highly-focused key-term searches in key health and social care journals, hand-searching of these key journals, and pragmatic searches of key websites.
2. Searches within databases of the international health and social care literature for programme theories from other fields ('refining').
3. Backwards and forwards citation chasing, and highly-focused database searches using keywords, authors and programme names identified in consultation with the stakeholder group to identify relevant programme theories from other fields.

C) Selection. Realist review strikes a balance between the rigour and relevance of the sources of knowledge drawn upon. It follows that a diversity of sources (e.g. research studies, policy documents, compendiums of experiential knowledge, 'think-pieces') will be included and that it is the element(s) of interest to be appraised rather than the study (or document) as a whole. Accordingly,

1. The *research studies* that we find will be analysed in two stages. For the selection stage we will not yet rate their scientific quality (which occurs later at Step 3a when we compare the Initial Programme Theory with the Evidence Review findings, as described at paragraph 6d below). Rather, we will select scientific studies for relevance to the study research questions, keeping in mind that relevant 'nuggets' of evidence and causal assumptions are often found as much in the discussion as in the findings sections of scientific studies.

2. For *other sources of knowledge* we shall simply ask '*why* is this information or evidence sufficiently dependable or trustworthy for us to build on in a particular way?' and document our rationale. To aid in the task of negotiating a potentially large and complex literature we shall also *classify* sources according to their conceptual (explanatory) richness so that, if necessary, we can be explicit about our rationale for drawing on groups of conceptually-richer studies. We found this to be a useful and workable approach in a recent complex realist review [7].

Study selection will be geographically bounded. The study will be international in that we will prioritise the selection of studies reporting MCP equivalents in Europe, North America, and Australasia because these regions have health systems and social settings most similar to those of the NHS. We will also prioritise studies reporting MCP equivalents for care groups particularly germane to the study focus as defined above and the English setting (e.g. people with chronic diseases, multiple morbidity, combined mental and physical health problems, frail older people). Where older and later studies cover similar topics, we will prioritise extracting data from the most recent, and work back. Between them team members can read material in Spanish, French, German, Russian and Italian but since it is slower to do and translations (from other languages) are costly we will use such material sparingly, only if we judge it to be seminal to the formulation or evaluation of relevant MCP models which English-language studies report.

We will obtain the selected studies in full text for data extraction.

D) Data Extraction. Data extraction tables will be used to collate data or information from these sources. Records will be exported to and managed using Endnote or similar software. Again, the data extraction forms will be structured using the standard C-M-O framework used by realist evaluation as the basic analytic framework into which the extracted data will be assembled for review. The unit of analysis will be the individual component programme theory (i.e. one component assumption of the policy-makers' original programme theory) as identified at stage 1 above. In this way, the exposed programme theory or theories will also structure the framework into which the above data will be assembled. Where policy outcomes are the focus of such studies we will populate the data extraction sheets by using Jackson and Kolla's [45] strategy for identifying explanatory accounts by 'working backwards' from outcomes, both intermediate and final, and personal or organisational. Where the

similarity of context and/or mechanisms and/or outcomes permit, we will also include any relevant already- synthesised theory in the data we extract, provided that the ready-made theory has some supporting evidence. In analysing contexts, we will include as categories the barriers and facilitators to implementing the focal MCP models.

Conceptually this method is equivalent to a tabulation in which each row is one assumption from a programme theory and each cell in that row contains the relevant data from the sources discovered and selected as described above. A concise project research diary documenting key questions, issues, and reflections on the research process will be cross-referenced with this table. Tabulating data also immediately exposes any points about which evidence is lacking, unclear or ambivalent. Any such findings will trigger a repeat of the above cycle of search, selection and data extraction, but this time focused on these more specific, as yet uncertain points. Using the above realist framework, and within it programme theories as the unit of analysis, will enable us to apply knowledge from other fields to the MCP models of integrated care. Where full texts refer to theories (logic models), and antecedent and related projects in terms of theory, we will obtain the latter studies too.

Any disagreements about what data to extract would most likely reflect ambiguity in the researchers' initial formulations of (in this case) the MCP programme theories or lack of clarity about how to operationalise those theories (i.e. about what would count as evidence for or against a particular assumption). If that should happen, we will adopt a procedure of agreeing and documenting tighter definitions of these terms, i.e. precisely what data are relevant to our analytic frameworks and research questions. Where recent realist reviews [46–50] are relevant we will utilise their findings rather than repeat that work ourselves. Similarly, we will utilise (not repeat) existing analytic and empirical work on care coordination [2,51] and, as a source of ideas for new logic models, the Organisational Change Tool.[52]

Comparing Initial Programme Theory with Evidence Review findings (Step 3a above)

Next we will review the main components of the policy-makers' initial programme theories by comparing each key component of the MCP programme theories (exposed at step 1) with the evidence review (assembled at stage 2). Conceptually this is equivalent to adding a final column to the data extraction table described above, so that into the final cell in each row contains a summary conclusion as to whether that data in that row (i.e. the available evidence) tends to corroborate (which might include elaborating), falsify or qualify that assumption(s) of that component of the policy-makers' initial programme theory.

The term evidence 'synthesis' marks the fact that the available evidence is almost certain to be of very diverse types, sources, coverage and degrees of scientificity. To assess the latter we shall use a modified version of Wallace's[53] quality appraisal tool. This tool encompasses key components of rigour (e.g. sampling, data collection and data analysis) that are relevant across different fields of research practice. Importantly, given that the number of included studies may be large, the Wallace et al. tool focuses on key elements of critical appraisal without becoming so detailed as to become unusable in the context of conducting a review to a reasonable time-scale. Using this tool will also enable us to pinpoint whether or not certain *aspects* of a study are of higher or lower quality - this is particularly important in a realist review where both relevance and rigour are considered in tandem, meaning that an otherwise poorly conducted study may contribute to the synthesis if the aspect concerned is of sufficient rigour. Furthermore, we already know that for many aspects of care integration the only available evidence is weak, in terms of the conventional methodological 'strength-of-evidence' hierarchies (most of which anyway are designed to grade intervention rather than the observational studies which predominate in the present domains of study). Any disagreements about study inclusion in the evidence synthesis will be resolved at this stage. In our experience, they arise when the original inclusion or exclusion criteria turn out to be ambiguous. We will attempt to prevent this problem arising by defining our inclusion and exclusion criteria precisely from the outset. But if nevertheless it arises, we will disambiguate the original criteria by agreeing and documenting more precise sub-criteria for study inclusion or exclusion. We will retain theories that disagree until it become clear that the evidence favours one or other.

When reaching a finding involves the comparison of different kinds of data, especially data which point to divergent findings, we will note where the balance of evidence appears to lie, and document the criteria and reasoning by which we reach our conclusions, including the relative weights we

therefore attach to any apparently-conflicting pieces of evidence. In the final column we will therefore also note any points where:

1. the review findings are based on a balance of evidence.
2. evidence necessary to yield a firm finding is missing (indicating needs for further primary research).
3. where review findings supplement and enlarge upon ('elaborate') assumptions in the policy-makers' original programme theory or its components.
4. where contextual factors (which in other study designs might be ignored or factored-out as 'confounders') mediate and/or moderate the outcomes produce by the equivalent of an MCP or of one of its components.

Each row of this virtual table thus comprises an evidence synthesis and review of one assumption of one component of the policy-makers' initial programme theory.

To say that evidence and programme theory differ is to say that the mechanisms chosen will not produce the intended policy outcomes, or not produce them as fully as feasible, or will produce different outcomes to what the policy-makers intended. (Policy and think-tank documents which are negative (hostile) towards MCP proposals tend to highlight such points.) When this discrepancy is found either or both of two changes might be made to the programme theory:

1. Propose different mechanism(s) i.e. mechanisms which the evidence suggests are more likely to achieve the stated policy outcomes.
2. Retrofit new policy outcomes to match what outcomes the proposed mechanisms are, the evidence suggests, likely to produce.

Where possible will adopt approach 1 because that is more conservative of the policy-makers' stated original intentions.

By comparing each component of the initial programme theory with the evidence synthesis, we will ascertain how the former require elaboration and/or modification to strengthen their evidential basis. Each component of the initial programme theory will be endorsed (perhaps elaborated) or revised, to make a new evidence-based counterpart. These new logic models will be constructed by replacing any invalid or missing assumptions in the policy-makers' original programme theory, or in one of its components, with valid alternatives suggested by the assembled evidence, and by adding any qualifications suggested by the evidence but missing from the original programme theory. To explain by example, the original programme theory for introducing case management in the NHS assumed that case management would reduce unplanned hospital admissions, but a comparison with US studies [54] showed that this outcome results only in the context of sufficient non-hospital beds being available for people who would otherwise have an unplanned hospital admission. In these ways candidate new logic models will be extracted from each row in the aforementioned tabulation. Wherever possible they will be formulated as 'if….then' statements which propose an explanation of context, mechanism and outcome interact, although we shall also record 'partial accounts' (e.g. contextual information alone) where these may prove informative. The resulting component logic models might, for instance, specify how different approaches to structural integration influence inter-professional working or how different organisational processes influence patients' involvement in self care.

1.a Assembling a logic model. (Step 3b above)

These elaborated and revised component logic models will then be organised into over-arching thematic categories , which might as examples include:

- mechanisms of action for care integration in MCPs; for horizontal and vertical service integration; and for multidisciplinary or interdisciplinary clinical workforce models or shared and devolved services.
- understanding how these mechanisms models might work differently in different contexts (e.g. through different governance structures or in different types of local health economy).

- their intended outcomes, hence how these models might be evaluated, including capturing different types of impact

These categories are likely to map in part onto the currently recognised components of MCPs (e.g. vertical coordination or integration with hospital service providers) as well as cross-cutting processes (e.g. information exchange). Grouping logic models thematically will also enable us to identify inter-relationships and overlaps between the component logic models (and by implication, inter-relationships and overlap between different component mechanisms within MCPs). It will also enable us to differentiate, if required, the logic models relevant to the different forms of MCP that 5YFV anticipates will develop in the NHS.

These thematic groups will then be consolidated into a coherent whole, producing a set of more general, overall logic models (revised programme theory) for MCPs. In addition to conformity with evidence, the other criterion of a sound logic model is that it adds important refinements to the understanding of contexts, mechanisms or outcomes made in the policy-makers' original programme theories. The overall logic model (also expressed as a set of 'If… Then…' statements) and associated insights will be documented in a table so as to provide a single reference point for stakeholder discussion and input.

We will predominantly draw on on stakeholder input for interpretation of the findings and guidance as to what contents and forms of presentation are most likely to be of use or interest to NHS organisations. The causal assumptions we have imputed or found in the evidence, and added to produce the new logic model(s) will be reviewed with stakeholders. This will enable us to challenge and refine the synthesised logic models so that they engage with the interpretations and perspectives of stakeholders.

Lastly, these empirically based consolidated logic models will be contrasted with the initial policy makers' initial programme theory to highlight points for dissemination (and the 'value added' by the present study).

Dissemination and projected outputs

The type and content of the project outputs will reflect our realist approach and address issues of interest to a broad range of different stakeholders. The outputs will explicate what works, in what circumstances and for whom. To add to the evidence base for new models of care we will submit the review findings to high impact, open-access journals besides the full report appearing in the HS&DR Journal. To this we will add conference presentations, web-pages and social media dissemination. We know (see above) that so far no studies specifically about MCPs, or indeed the other new models of care in the NHS, have been published so the present study would make a new addition to health services research. Another reasonably foreseeable impact is as a platform to inform and direct new primary research into how the new NHS models of care work, and to what effect.

The applicants recognise that HS&DR projects may not make direct policy recommendations, so the project report will not contain any. Nevertheless it is important that the project outputs are relevant to all those involved in the development, commissioning, and operation of MCPs . We will use the model of knowledge mobilisation developed by Davies et al. [55] as a framework to develop robust and effective methods of dissemination. Each output will be developed with our stakeholder group and consider each logic model component during development. In developing these outputs we will particularly consider: the purpose and goals of this knowledge transfer; what knowledge is most appropriate to our three main audiences; connections and networks among the recipient groups; which people, roles and positions they represent; what actions and resources are available to them; and the contexts in which they operate. We will employ this framework to devise outputs and strategies which engage the following three audiences especially:

1. Multispecialty community provider practitioners: these will include GPs, community nurses, community health service professionals, hospital specialists and mental health and social care practitioners. We anticipate that a range of strategies will need to be employed to best reach this diverse range of individuals. Many of them are unlikely to favour the more traditional publication routes so we will work with our stakeholder group to explore other mechanisms such as bespoke briefing documents disseminated through professional networks, email lists and social media.

2. Patient groups and voluntary sector partners: these will include those patient groups already part of the NHS five-year forward plan and those voluntary sector groups linked in delivering MCP. Again, it is unlikely that traditional publication routes will be the most robust route for knowledge transfer and so we will work with the group to develop short summary pieces, infographics, and web-based video where appropriate.

3. Commissioners and policy decision makers, whom we expect will be responsive to local and regional contexts. Hence a key aim of the project is to explicate how those contexts bear upon the mechanisms that make up MCPs.

Obviously it is beyond the researchers' power to guarantee that policy-makers and NHS managers will apply the logic models we generate. Nevertheless, we will take certain steps to increase the likelihood. Its scope for practical impact is another way in which a realist approach is well-adapted to the project's aims. It will be reflected in project outputs that explicate (for MCPs) what works, in what circumstances and for whom. Such outputs are directly relevant to all those involved in the development, commissioning, and delivery of MCPs, and probably to the other model of care proposed in 5YFV. There is evidence[23,56] that very act of formulating logic models, as we jointly will with our stakeholders, helps create a shared understanding of (in this case) how MCPs work and why.

To ensure that targeted and focused dissemination (involving appropriate information, efficient channel and target audience as outlined above) is achieved we will offer to run workshops for local and stakeholder CCGs with professionals in various roles across the NHS health and social care policy and provider landscape. We will identify these wider audiences through the project stakeholder group and through our Person Centred and Coordinated Care CLAHRC and AHSN networks. Our current networks of service leads and delivery teams span the south west and beyond. In particular we are connected, through the West Midlands, Wessex and North West CLAHRCs, with the corresponding AHSNs. With academics in Kent we are involved in evaluating integrated care initiatives such as local Pioneer and Vanguard sites, giving us a further set of dissemination channels to NHS and social care research users. Supplementing our proposed webinar, the workshops will allow us to present and target our findings for different professional audiences. We will also involve patient and carer representatives in the workshops. Engagement and the involvement of stakeholders is a recognised strength of PenCLAHRC, whose networks and credibility we will also exploit as a springboard for stakeholder involvement and dissemination of the project findings.

A more novel form of dissemination will be through our Organisational Change Tool (OCT; Horrell, Lloyd & Byng, 2015), which is already being used in service improvement projects across the SW peninsula. Findings from this review will help us to refine and develop that tool. The OCT has been developed to help services create and self-monitor efforts towards Person Centred and Coordinated Care, and is itself based on a realist approach of identifying and critically examining the logic of current models of integrated and coordinated care, using systematic reviews of the same. The OCT sets out components and supporting activities that promote integrated care and support for patients, including ways that professionals from different teams work together and with patients. Findings from the realist review of MCPs that we are now proposing will allow us to update existing components of the OCT and potentially add new ones. Then the OCT will in turn provide another efficient mechanism for disseminating findings of this work to those who deliver NHS services, as we are currently discussing with Janet Pearce, Policy Manager for NHS England's Person Centred Care team how the OCT could be used more widely. We will make a copy of the OCT, as revised by findings from this project, available on our web-pages, and encourage its use further afield. We are also currently setting up a comparison between the OCT and a similar tool developed in the USA and Australia.

Thus the project web-pages, besides describing the project and its aims, and inviting the contribution of ideas and evidence from its readers, will provide access not only to the project findings but also to a tool to aid practical application of those findings. Social media postings will used to announce project progress and any emerging headline findings, so as to elicit visits to the project web-pages, to reinforce its contribution to the project and its dissemination. We will explore with our stakeholders which avenues of dissemination we ought to develop and use, as best suited to them. If necessary, we would then seek HSDR's advice about funding for dissemination.

Plan of investigation and timetable

The project will begin on 1st July 2016 and finish on 30th June 2017.

1. Contract signature: begin arrangements to recruit RF and RA. Confirm membership of stakeholder group and PPI advisers. Start formulating search terms and strategies based on the existing published literature.

2. Project start date to end of month 3:

   (a) Step 1 of the research design. Obtain policy documents, conduct cognitive frame analysis, formulate policy-makers' initial programme theories, agree search terms derived from the latter.

   (b) Initial meeting with stakeholders and patient representatives.

3. Months 3 to 5:

   (a) Begin realist review (step 2 of the research design). Search databases, conduct supplementary searches, select and obtain full-text sources.

   (b) Further meeting with stakeholders and patient representatives to discuss findings from step 1.

4. Months 5 to 8.

   (a) Complete realist review (step 2 of the research design). Data extraction, tabulation, further supplementary searches as necessitated by emerging findings. Summarise evidence in respect of

      i. substantive findings relevant to MCPs.

      ii. quality, uncertainties and gaps.

   (b) Further meeting with stakeholders and patient representatives to discuss findings from step 2.

5. Months 9-10.

   (a) Compare Initial Programme Theory with Evidence Review findings (Step 3a of the research design).

   (b) Revise programme theory assumptions so as to formulate component s new logic model. Combine these components into a new overall logic model (Step 3b of the research design).

6. Months 11-12.

   (a) Write up final report.

   (b) Further meetings with stakeholders and patient representatives to discuss the revised logic models, and how best to formulate, present and disseminate the latter.

   (c) Submit final report.

Project management

The project team will be led by RS and consist of MP, RB, HL, SB and JVM as well as the recruited RA and RF. The team will take overall responsibility for the project and outputs, including:

- Project management, including budget management (with support of institutional administrative and research support systems);

- Project outcomes delivery;

- Relationships between researchers, stakeholder group, and partners;
- Data management. The core project team will plan, deliver and disseminate all elements using appropriate software for creating and sharing documents and papers. Any data held will conform to local and national data protection policies.
- Guidance, mentorship and career development support for junior researchers (RA, RF);
- Dissemination and impact;
- NIHR reporting requirements.

The team will meet fortnightly, face-to-face where possible or otherwise by teleconference and circulate discussion points and feedback where appropriate.

In addition, the stakeholder group will meet on four separate occasions and provide input on scope, methods, theory development, synthesis and informing decision makers. It will be invited and recruited to cover areas which are likely, because of their different NHS infrastructure and different populations (one predominantly urban are, one predominantly rural), to develop different variants of MCP, including test-and-learn sites. Our invited NHS stakeholders will include: Robin Miller, social care lead within the Chronic Disease of the West Midlands Collaborations for Leadership in Applied Health Research & Care, and a Fellow of the School for Social Care Research; Louise Witts, Director of Integration, South West AHSN; and Steven Foster, Interim director of Transformation Programmes at Somerset CCG (site of one the first MCPs). The researchers are already linked with NHS and social care providers in Somerset and Devon (community care, hospitals, local authority in both counties), and will involve them too as stakeholders.

To strengthen the project's links with NHS and social care participants we will invite individuals from the stakeholder group (see below) and other leading professionals (such as Fiona Jenkins Chartered Society of Physiotherapy, AHP lead for Wales; Julie Brown, CAFCASS) to be advisers to the project, extending their stakeholder group role into the provision of less formal but more frequent and concrete advice. Similarly, we will recruit advisers from the four AHSNs with which are are in regular contact.

RS, MP and RB have extensive experience in conducting realist and systematic reviews and will build on existing methodological expertise in management of complex reviews. The review will also build on a growing programme of primary care integration and coordination research and evaluation led by HL, and upon JVM's expertise in health systems, care quality and multimorbidity. Overall financial and project oversight will be provided by the University of Plymouth / Plymouth University School of Medicine and Dentistry.

Through their own extensive networks of contacts and (if HSDR agree) HSDR itself, the researchers will liaise with any other researchers working on evidence syntheses to support the other 'models of care' proposed in 5YFV, so as to cross-fertilise methods and findings and reduce duplication.

Approval by ethics committees

Not required for this desk-based research. As for stakeholder consent, and that of PenPIG members, coming to participate in discussions can reasonably be taken as implied consent. (Stakeholder, PenPIG and similar groups would not normally need written consent forms.) PenCLAHRC has extensive experience in designing and running stakeholder groups (which indeed underpin the whole PenCLAHRC approach as a collaborative), and that such consultation does not require formal ethical approval. Nevertheless as a safeguard we will, if HSDR decide to commission this proposal and then wish it, submit the proposal for ethical approval through the Plymouth University REC and/or register it with IRAS.

Patient and public involvement

Planning the research

We have sought to involve patients and public throughout the research planning process and will continue to do so if the project is funded.

PenPIG members played the leading role in revising the plain English summary of the proposed research; focusing the research by providing feedback on drafts of the research proposal; and developing the role for PPI within the research (e.g. through a stakeholder group). Feedback received was positive, with six members agreeing in principle to involvement and ongoing input.

Specifically, members indicated that integration of care was achieved in their cases only through proactively seeking services and individuals. The ways in which models of integrated care operate and mechanisms to improve those was seen as both highly impactful and timely by the group.

The stakeholder group will include representation from those PPI members who have already expressed interest, and we include costs in the project for attendance and reimbursement (see detailed budget). We will endeavour to accommodate the preference of the majority of members for meetings to be held in Exeter. We have requested that members inform us of any access requirements, though none have yet been raised. However, we shall ensure that any such requirements are met.

Between the initial and revised submission of this proposal, members have fed back on a completely revised Plain English summary (see the revised on-line application form) and have agreed a plan to participate in three stakeholder meetings during the course of the project. In discussion with members, we have also agreed to hold a pre-project meeting with PPI members so that ways of working in the stakeholder groups (with managers, commissioners, practitioners, etc.) can be discussed so that equal participation in these groups can be achieved.

Undertaking the research

In this project we will be exploring the ways in which multispecialty community provider models of care 'work', and their proposed mechanisms of action. We are particularly interested in how these mechanisms operate in different contexts.

Therefore input from those who experience services is central. We have already received interest and agreement of inclusion from six members of PenPIG and at least three of these will be representatives on the stakeholder group. This group, as described, will provide input at all points of the project and we will also expand this group at key decision points in the process (for example, when exploring candidate programme theories and dissemination outputs). Their inclusion in this project – as always – will be voluntary and can be withdrawn at any point with no implications for future participation. We will provide assistance for travel to and from physical meetings (in line with the INVOLVE framework), provision of materials where needed for comment (including, where appropriate and for example, alternative formats for print documents). MP will act as the key liaison and manage input from the group.

Expertise and justification of support required

Research team and Expertise

Rod Sheaff, Plymouth University (CI)
Mark Pearson, Exeter University & South West Peninsula CLAHRC
Richard Byng, Plymouth University School of Medicine and Dentistry & South West Peninsula CLAHRC
Helen Lloyd, Plymouth University & South West Peninsula CLAHRC
Simon Briscoe, Exeter University & South West Peninsula CLAHRC
Jose Valderas Martinez, Exeter University & South West Peninsula CLAHRC
Research Fellow: to be appointed.

Research Assistant: to be appointed

This evidence synthesis requires expertise in: organisational and network research; primary care (in the widest sense); public health; HSR; the sociology of healthcare; health policy; international comparison of health systems; the substitution of primary for secondary care; health care commissioning; and economics. The research team includes this expertise or (for economics) has ready access to it via the SW Peninsula CLAHRC, including experience of completing HSDR-funded studies. It brings together topic and methodological expertise in service design and delivery, integrated care, and realist review, involves provider and commissioner managers and clinical practitioners as co-researchers, and a stakeholder group of service users and practitioners.

Sheaff: Research on primary care integration and on commissioning, systematically reviewing & synthesising organisational research. Experience in researching, hence in evaluating and interpreting research on, international health systems. Background in NHS management. Role: CI, overall project coordination, analysis of policy-makers' programme theories for MCPs.

Pearson: Nursing background. Experience in undertaking realist evidence syntheses and in ethnographic research. Role: day-to-day project leadership.

Byng: GP. Research on avoiding acute admissions and on mental health. Expertise in multi-morbidity, quality and safety of primary care. Experience in conducting realist syntheses. Role: contribute to data analysis & synthesis.

LLoyd: Expertise in patient experience of complex care, health behaviours and public health, medical anthropology. Role: contribution to the evidence synthesis.

Valderas Martinez: GP. Expertise in multi-morbidity, quality and safety of primary care. Experience in researching, hence in evaluating and interpreting research on, international health systems. Roles: contribution to evidence synthesis, input on care requirements for different levels of morbidity and mutlimorbidity.

Briscoe: information specialist, experience and expertise in conducting systematic searches, and in evidence synthesis. Roles: detailed search strategy and methods design, data access methods.

RF & RA (tba): Roles (with others in team): Conduct searches, select & obtain studies, extract & collate data.

All the team will contribute to data analysis and synthesis of logic models.

Justification of support

The aim of the research is to produce more strongly evidence-based logic models to guide the formation of MCPs, and to show how different logic models are applicable to differently-structured MCPs and to MCPs which prioritise different policy outcomes. If such logic models were put into practice by MCPs, this would ensure that their efforts to create new governance structures (for coordination general practice, community health services, hospital outpatient services etc.) and to establish new working practices within them would be selected and focused on the approaches most likely, in light of this evidence synthesis, to produce the intended policy outcomes. Conversely, adoption of the findings of the evidence synthesis would reduce the risk of NHS organisations wasting time, money and political capital on approaches to MCP formation that were, according to the synthesised evidence, likely to succeed. In either event the cost of this study would be small compared to the practical and financial benefits to the emergent MCPs.

NHS England intend that MCPs will be evaluated at national and local level. DH and/or NIHR may also decide to commission primary research to evaluate MCPs. The present synthesis would help reduce the time and cost of such evaluations by assembling and analysing, in advance, the requisite contextual research and providing ready-made logic models which could provide an analytic framework for new primary data used to evaluate MCP activities and outcomes.

To synthesise research relevant to MCPs requires expertise from various disciplines: organisational and network research; primary care medicine; public health; health services research; the sociology of healthcare; health policy; international comparison of health systems; and economics. The research team includes this expertise or (in the case of economics) has ready access to it via the SW Peninsula CLAHRC. The evidence synthesis will also require specific expertise in the organisation of health systems, of primary care (in its widest sense, not only general medical practice), of the wide and diverse literature on care integration, of international health systems, of the substitution of primary for secondary care, and of health care commissioning. Staff costs are calculated to allow inputs across this range (for details, see 'Expertise' above), specialist informatics input for database search and access to data, which we already know to be scattered and disparate.

Costs of consumables, PPI and other stakeholder involvement reflect our experience of the costs incurred in earlier systematic reviews and evidence synthesis studies. PPI costs include honoraria as recommended by Involve. We have included costs to involve non-academic GPs and AHP staff as paid advisers to the project, in the light of experience that such inputs are otherwise becoming increasingly difficult to obtain.

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