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Moving Services out of hospital: Joining up General Practice and community services?

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Glossary

ACO	-	Accountable Care Organisation
CCGs	-	Clinical Commissioning Groups
CFTs	-	Community Foundation Trusts
CHS	-	Community Health Services
CN	-	Community Nurse
CQC	-	Care Quality Commission
DH	-	Department of Health
DN	-	District Nurse
FTs	-	Foundation Trusts
GP	-	General Practitioner
LTCs	-	Long-term Conditions
NHSE	-	NHS England
PbR	-	Payment by results
PC	-	Primary Care
PCTs	-	Primary Care Trusts
PHCT(s)	-	Primary Health Care Team (s)
PRUComm	-	Policy Research Unit in Commissioning and the Healthcare System
RCTs	-	Randomised Controlled Trials
TCS	-	Transforming Community Services
YoC	-	Year of Care

Executive Summary

Introduction

Closer collaboration between primary care and community health services is a clear objective of the most recent NHS reforms. Currently, there is much emphasis on integrating healthcare services and in particular, moving care closer to home and out of the acute care setting by utilising Community Services and Primary Care.

This report summarises the findings of a rapid review undertaken by PRUComm of the available evidence of what factors should be taken into account in planning for the closer working of primary and community health/care services in order to increase the scope of services provided outside of hospitals. We synthesised the findings of recent reviews of the published literature seeking to examine evidence relevant to answering the question:

What factors should be taken into account in planning for the greater integration of primary and community care services in order to increase the scope of services provided outside hospitals?

We examined evidence focused at three different levels:

- Micro-level – factors affecting the effectiveness of multidisciplinary team-working
- Meso-level- the impact of service organisation and delivery issues, including population coverage and service location
- Macro-level – structural issues, such as ownership models and financing

Methods

We undertook an extensive review of available evidence at each of these levels, which explored both published research and grey literatures, including reports and policy documents. In areas with extensive research evidence, we focused upon review articles; in areas with less evidence we highlight opinion pieces, showing clearly where evidence does or does not exist to validate claims made.

Micro-level factors

There is an extensive literature which focuses upon the factors which affect the ‘effectiveness’ of multidisciplinary teams. However, much of this literature fails to clearly define what is meant by ‘effectiveness’ in this context, with many articles using measures of process (such as collaboration and innovation within teams) rather than outcomes. However, there is reasonable consensus about the following:

- Good communication between team members is a consistent underlying enabling factor, with shared IT and record systems important
- Structural aspects of teams which have been shown to affect performance (such as team size and shared interdisciplinary training programmes) probably act via improving or impeding communication
- Clear agreed goals are important in enabling collaboration within teams
- Good leadership, with a strong commitment to partnership working is facilitative

- Clear linkage between good team processes and concrete outcomes (such as reduction in admissions) is lacking. However, teams with a good internal 'climate' who work happily together are likely to provide higher quality care, and this in turn is likely to feedback to improve team climate.
- There is no good evidence about the optimum size or skill mix of multidisciplinary teams required to provide care for a given size of population

Meso-level factors

The current organisation of CHS in England means that community nursing services and GP practices generally cover different populations, with community nursing services generally covering geographically located populations which cut across practice boundaries.

- This model developed historically based upon opinion rather than evidence, with advocates arguing it provided greater autonomy for nurses, less professional isolation, more equitable services and better coverage for sickness. Opponents argue that having nurses covering a different population from that covered by their Primary Healthcare Team colleagues is inefficient, inhibits team working and prevents good communication. There is little good evidence to back up either of these positions.
- Many community nursing teams currently occupy different premises than their GP colleagues. There is some evidence that co-location of teams facilitates communication and improves service delivery, but these benefits do not flow automatically.
- New models of care such as the federation of GP practices into larger groups covering the same population as a neighbourhood nursing team have been advocated and proponents of this model offer compelling case studies to back up their claims. However, there is no good research evidence to back these up, and it remains unclear what the important ingredients of a successful model might be
- The London 'polysystems' initiative is largely regarded as having been unsuccessful, in part because community services were not well integrated into the model from the start.
- Alternative models of care provision based upon care co-ordination around the patient rather than structural integration of teams have been shown to improve patient experience, but they do not seem to reduce admissions or save money

Macro-level factors

The financing and ownership of community health services has changed a number of times since the inception of the NHS. Originally the responsibility of Local Authorities, in 1974 they were transferred to District Health Authorities alongside acute care. In the 1990s they were established as standalone organisations, before being brought into Primary Care Trusts in the early 2000s. In 2008 PCTs were required to divest themselves of their provider role, and community services were transferred to a number of different organisations. Some were set up as standalone Community Trusts, whilst others have been taken over by Acute Foundation Trusts and some have set themselves up as Third Sector organisations (TSOs). Some types of community services traditionally provided by PCTs (eg podiatry, physiotherapy etc) have, in some cases, been transferred to different providers than the community nursing services.

- There is no good evidence linking particular organisational forms or ownership models with improved performance
- Foundation Trusts in the acute sector may perform better than non-FTs, but evidence suggests that high-performing trusts are more likely to succeed in their applications to become FTs, suggesting that high performance is not necessarily a consequence of the FT model
- Claims are made that TSOs are more innovative than public-sector organisations, but an international review of the evidence suggests that this is not necessarily the case
- There are some theoretical advantages associated with the integration of community and acute services, as this may facilitate initiatives to keep patients out of hospital, but there is as yet no good evidence whether or not this is the case in practice.
- Community nursing services are currently provided on block contracts. These are regarded by some as inefficient and unresponsive to need, lacking incentives to improve efficiency. Others have argued that block contracts may in fact offer better value for money as increased activity does not necessarily lead to increased costs. It has proved very difficult indeed to move to a payment model based upon activity, largely due to the paucity of data about community service activity and difficulty in identifying the components of each service in order to designate an appropriate tariff payment.
- New models of contracting based upon payment for outcomes are being advocated. Examples include 'year of care' for particular patient groups and so-called 'alliance contracting' in which groups of organisations are contracted to deliver specified outcomes for a given population, sharing risks and rewards. There is as yet no evidence as to the impact of these in healthcare services.

Conclusions and lessons for policy

'Scaling up' primary and community services in order to provide more care outside hospitals will require general practices and their community service colleagues to work together in new ways. This review of the evidence in this area has highlighted the following:

- Good multidisciplinary team working depends crucially on communication. Initiatives to improve community-based care should be allowed to develop from the bottom up, building upon successful local collaborations, rather than imposing a model from above
- Aligning the populations covered by different services may be facilitative. This may be achieved by the local development of models of collaboration based around federations of practices working with community teams, but such models will need careful evaluation to identify the important ingredients for success in particular contexts
- There is no good evidence that any particular ownership models (eg TSO, public sector or private provider) are better than others. There is also no good evidence about the impact on service provision of ownership by different types of provider (eg acute providers, mental health providers or standalone services). Fragmentation of providers may make good service provision more difficult, as it inhibits communication.

- The lack of data about community service activity is a significant problem. In particular, this makes it very difficult to know what services actually cost, and prevents the development of clear guidance about the staffing levels required to provide services for a given population.
- There is no available evidence about the cost-effectiveness of models of community services.

1 Introduction

There is an increasing interest and policy emphasis on developing more integrated primary and community health care services. While emphasis on the role of community health services was highlighted by the White Paper *Our Health, Our Care, Our Say* (DH, 2006) and the Darzi Review (DH, 2008a), following the implementation of the reforms to the NHS in 2013, attention has focused more specifically on developing integration between primary and community health services. In 2013 NHS England launched its consultation on the future of primary care services *Improving General Practice – a Call to Action* (NHS England, 2013a) and the Secretary of State for Health also highlighted the importance of integration between the delivery of general practice and community health services (DH, 2013a). The NHS Mandate for 2014-2015 requires NHS England ‘to explore how better integrated out of hospital care can improve care’ (DH, 2014, 2.4, p10).

This report was commissioned by the Department of Health to provide background evidence to support policy development on primary and community health care integration. It builds on previous work for NHS England on primary care and has been conducted alongside a second review examining the evidence on payment structures for primary medical care services.

The latest NHS planning guidance (NHS England, 2013b, p13) states that:

31. For those patients with a moderate mental or physical long-term condition (about 20 per cent of the population) we need to secure access to all the support and care they need from wider primary care, provided at scale. This will mean access to a broader range of services in primary care, in their own homes and in their communities, centered on a much more pivotal and expanded role for general practice to co-ordinate and deliver comprehensive care in collaboration with community services and expert clinicians.

32. Our strategic framework for commissioning of general practice services, to be published in 2014, will set out the action we are taking at national level to support commissioners in developing joint strategies for primary care as part of their five year strategic plans. **One of our key aims is to enable general practice, community pharmacy and other primary care services to play a much stronger role, at the heart of a more integrated system of community-based services, in improving health outcomes.**

A recent King’s Fund report (Addicott and Ham, 2014) concurs with this view, making the case for closer collaborative working between primary and community services in order to support a move of care out of hospitals. However, the King’s Fund report also highlights the fact that community-based care is not necessarily cheaper than its hospital equivalent, suggesting that such a move would only be affordable if secondary care services could be significantly reconfigured to reduce capacity. This conclusion is backed up by evidence that PRUComm (Checkland et al, 2013) provided for NHS England in a brief report, which concluded that the evidence for cost savings associated with moving care ‘closer to home’ is limited, although such care is generally safe and appreciated by patients.

Against this background, we conducted a rapid evidence synthesis that explores existing evidence relevant to the closer working between primary and community services, which will be useful for those responsible for formulating policy in this area. We did not cover integration of health and social care in this review, as this is a very broad subject which is currently being addressed by the Policy Innovation Research Unit (PIRU) in their evaluation of the Integrated Care Pioneers. However, some of the literature relating to multi-disciplinary team working between health and social care teams includes data regarding collaboration with community health workers and has therefore been included. The over-arching question that we shall address is as follows:

What factors should be taken into account in planning for the greater integration of primary and community care services in order to increase the scope of services provided outside hospitals?

2 Background and Context

2.1 Historical context

Since the inception of the NHS, Community Health Services (CHS) and services provided by General Practitioner (GP) practices have been separate in scope, funding, population coverage and ownership. Initially provided by Local Government, CHS moved into the NHS in 1974. Subsequently the Cumberlege Report (DHSS, 1986) was an important landmark, advocating the provision of CHS by geographically based neighbourhood teams of nurses rather than by staff attached to or employed by local GP practices. This embedded a divide between the two types of service which has lasted until the present day, with community nursing teams (including health visitors as well as district nurses) providing care for different populations than their GP-based colleagues. In practical terms, this might mean a single District Nurse liaising with two or more GP practices, or General Practitioners working with District Nurses from a number of neighbourhood teams. In terms of physical location, many CHS teams were based in local Community Health Centres, some of which also housed GP practices, whilst others (often in more rural areas) had offices within GP practices. Attempts to link the two forms of service are not new, with attention in the 1980s and 1990s focusing upon the development of Primary Healthcare Teams (PHCT), bringing together GPs, District Nurses, Health Visitors and a variety of other professionals (including community mental health teams, Macmillan Nurses, social care professionals, and, in some areas, community pharmacists) for regular multidisciplinary team meetings to discuss case loads and individual patients [Audit Commission, 1992; Hasler, 1992; Wiles and Robison, 1994]. The introduction of Community Matrons in 2005 (DH, 2005a) introduced additional professionals into this arena, with a variety of models being adopted across the country, some based in practice teams and others based alongside their community nursing colleagues in neighbourhood teams (DH, 2005b). However, differences in funding and management structures, and lack of data about community service activity have made commissioning community services a difficult task, although at local level many PHCTs work continue to work effectively together.

2.2 Policy context

According to the NHS Confederation (2013a) community services is an umbrella term for all services provided out of secondary (hospital) care including health and social care services:

‘Community health services provide a wide range of NHS services outside of hospital for children and adults, helping people to stay healthy and independent throughout their lives. In addition to treating people in their own homes, they provide preventative and health improvement services, often with partners from local government and the third sector.’ (NHS Confederation, 2013, p2)

The range of services provided in the community is broad and includes such things as health visiting and district nursing to family support services, physiotherapy, dentistry and audiology services, among many others. Thus, multi-disciplinary teams which include CHS together with primary care it is suggested could enable a shift away from reliance on costly inpatient hospital care to care in the community (Munton et al, 2011). The impetus for this shift is the generally acknowledged costs associated with providing healthcare for a UK population that is ageing and suffering an increasing prevalence of often multi-morbid long-term conditions. For example, in England alone there are 4.2m people over 75 which accounts for 30% of emergency admissions to hospital (NHS England, 2014).

The strategic shift towards ‘whole system care’ incorporating the utility of CHS was heralded in the publication of the White Paper (DH, 2006) ‘Our health, our care, our say: a new direction for community services’. The vision of the White Paper was to reform and improve CHS to meet the healthcare needs of the population which cannot be delivered by secondary care (hospitals) alone. Further, the Paper emphasised the need to have a more patient-led service stating that primary care and patients should be ‘in the driving seat’ of care, setting the direction of the way healthcare services are to be delivered to ‘fit around people, not people around services’ (p6). Thus the Paper promoted improved access to healthcare in the community underpinned by an ethos of prevention and support, reducing health inequalities, putting people more in control of their health and health service and driving closer integration between primary care and CHS to achieve these goals.

However, integration is an ambiguous term and there is currently no one single universally agreed definition of what it constitutes. Boyle, Mutch and Young (2013) who provide a comprehensive overview of definitions and models of care conclude that ‘integration is a complex and multidimensional concept’ (p8). Integration means different things to different people which many have tried to encapsulate, although few would disagree with Goodwin’s (2013a) succinct observation that ‘at its most basic integrated care is combining parts so that they work to form a whole’ (p1). With this in mind, this review has focused on the closer working between services as one integral factor of what is purported to be integrated care.

In 2009 the publication of the Transforming Community Services (TCS) White Paper (DH, 2009a) was devised as a mechanism for delivering the outcome of ‘Our vision for primary and community care’. The programme, aimed to provide direction and leadership, reaffirmed the ‘central importance of community staff and services to delivering the Department of Health’s vision of integrated, personalised care outside of hospital’ (p15). In terms of structures, TCS mandated that PCTs should divest themselves of their ‘provider arms’, transferring ownership of CHS to an outside body. The White paper did not dictate a preferred model, suggesting that

this was a matter for local negotiation. Subsequently, ownership and management of CHS passed to a variety of bodies, including: standalone Community Service Trusts; Acute Foundation Trusts; existing Out of Hours service providers; mental health trusts; private providers; and third-sector bodies. There is therefore currently a mixed picture of CHS across the country, with some services becoming increasingly integrated with Acute Secondary Care services, whilst elsewhere closer working and even joint ownership with social care services is developing (Hounslow and Richmond Community Healthcare, 2013). TCS was also driven by the desire to improve variation in service quality, productivity, costs and health outcomes by CHS arguing that much activity and achievement goes unmeasured. However, this has proved difficult due to the lack of a common understanding of the 'currency' of CHS provision, and the failure to develop a tariff system to measure and pay for outputs.

2.3 Summary: The micro, meso and macro level approach to joined-up services

Together these policy and historical contexts have generated a system within which integration around the needs of patients can be hard to achieve. Our over-arching question is to explore the factors that need to be addressed if more care is to be delivered outside hospitals. These contextual factors generate questions at three levels:

Micro-level

Some research has focused upon the micro-level aspects of team working. By 'team' we mean a group of individuals (often from different disciplines) working together to provide a service or services. 'Team working' refers to the inter-personal interactions within a team. Whilst some of this work is relevant to our question, understanding the detail and nuances of this evidence is not essential to answering the policy question. However, an overview of the kind of issues that arise in this literature is considered valuable. Therefore the review provides a brief overview of evidence relating to the following questions:

- What is known about the factors that enable or inhibit effective working across disciplinary boundaries?
- What is known about the factors which affect the effectiveness of teams in general?
- Is there any evidence about the effectiveness of Primary Health Care Teams in particular, with a focus upon their impact on patient outcomes?

Meso-level

This level highlights aspects of service organisation and delivery. We will explore aspects of the following questions:

- What is known about the effect of co-location of team members on team working?
- What is known about the pros and cons of having a geographical vs practice population base for community nursing services?
- Is there any evidence about the effect of the provision of community services by entities which have different organisational forms on care or care outcomes?

Macro-level

This level highlights structural aspects of the topic area, focusing upon how system-level factors may help or hinder service delivery.

- What is known about the commissioning of community services?
- Is there any evidence that any particular payment models contribute to desirable service outcomes?
- Is there any evidence relating to ownership of primary and community services, in particular evidence about the effect on services of community care services being run by the same organisation as those which provide secondary or primary care services?

2.4 Structure of the Review

The review will be structured in three sections reflecting the micro, meso and macro level approach as detailed above. Findings are reported for each of the factors following a brief introduction to the section and overview of the objectives for that level. This evidence will be drawn together in a discussion reflecting the overall findings of the review before providing concluding remarks with regard to moving services closer to home.

3 Methods

An interpretative ‘review of reviews’ has been conducted for this rapid evidence review. The evidence synthesis brings together existing reviews of relevant evidence (where available) and includes new searches on the topic areas above. The review sought to bring together a disparate range of evidence to illuminate the questions outlined above. A desk based, broad sweep of the literature searching for relevant evidence was conducted and focused on breadth rather than depth in accordance with the aims of the project. Titles and abstracts were reviewed and the search was not restricted to specific dates, area of care (for example; geriatric, paediatric) or medical condition. The review also does not cover integration of health and social care, as this is a very broad subject which is currently being addressed by the Policy Innovation Research Unit (PIRU) in their evaluation of the Integrated Care Pioneers

Existing evidence reviews incorporated international articles with many primary studies included from Canada, USA, Australia, Sweden, UK and the Netherlands. Evidence from the USA and elsewhere is included where it is considered to be relevant to the UK system. Primary studies included in the reviews spanned qualitative, quantitative, mixed method research and RCTs. Searches were conducted through the following databases (search terms for each section are detailed in Appendix 1):

- | | |
|---------------------------------|------------------|
| - ASSIA | - CINAHL |
| - Cochrane Library (EPOCH, SRs) | - Scopus |
| - PubMed Central | - HMIC |
| - Medline on OVID | - Web of Science |
| - EMBASE | - AMED (OVID) |
| - NICE – NHS Evidence Search | |

Google Scholar was also used as an initial search source to identify existing articles from which keywords, key articles and reference lists could be accessed and snowballed.

Alongside academic papers, the review included 'grey' literature encompassing documents and reports from The King's Fund, Department of Health, NHS, NIHR and academic books specific to the subject matter.

4 Micro-level Factors

4.1 Background

This section of the report details findings from a broad review of the literature in respect of the micro-level aspects of team working in relation to joining up primary and community based health services.

Advocates of a whole-systems, multi-dimensional (micro-meso-macro) approach to joining-up primary and community services as detailed above (Rosen and Shaw, 2009; Curry and Ham, 2010; Valentijn et al, 2013) emphasise the interdependence of micro-level factors to an integrated healthcare system. The effectiveness of multidisciplinary team working is therefore considered one such factor. Curry and Ham (2010) illustrate this point by offering the example of care-co-ordination, which is ultimately dependent upon effective cross disciplinary working of clinical and community services, further reliant upon the adoption of shared guidelines and policies. Hunter and Perkins (2014) likewise argue that partnerships perform best when there is a 'bottom-up' (p132) approach to implementing partnership working, with a focus on the micro aspects of how people work together to achieve trusting relationships and effective information sharing.

The aim of this part of the review was therefore to identify overarching, high-level aspects of multidisciplinary team working in primary care, as specified in the research protocol. This did not include focusing on the nuances of teamwork generally for which there is a large body of work, as this is outside the scope of this review. The synthesis of this evidence will be high-level, brief and interpretive, seeking data 'saturation' in terms of the available evidence about effective team working. Preliminary scoping suggests that there is a large volume of evidence in this category, but that it is possible to discern a small number of recurring concepts which we will summarise.

4.2 Methods

Searches focused on identifying existing literature reviews/systematic reviews of the following areas:

- Team working (including search terms primary care, primary healthcare team, review and effective)
- Inter-disciplinary working (including the terms multi-disciplinary, inter-professional, collaboration)
- Relevant aspects of partnership working
- The outcomes of PHCTs (including the terms effectiveness, quality, patient)

15 articles were identified as being relevant and selected for review. Cross-checking of primary studies included in existing reviews was conducted so as eliminate duplicate recording of themes and concepts. Two of the articles overlap:- D'Amour, D., Ferrada-Videla, M., San

Martin Rodriguez, L., and Beaulieu, M.D. (2005) and San Martin-Rodriguez, L., Beaulie, M-D., D'Armour, D., and Ferrada-Videla, M. (2005). Both report on the same literature review but focus on different articles and concepts of teamwork.

A thematic analysis was conducted of the reviews in order to synthesise and identify recurrent themes in the literature. There was a variance in terminology identified during searches and often not a clear definition of the concept used. For example, the terms partnership, inter-disciplinary, multi-disciplinary, inter-professional and trans-disciplinary team working and collaboration are used, often to mean the same thing, adding a further layer to the complexity of the searches conducted.

4.3 Defining 'effectiveness'

The term 'effectiveness' used in reviews of multi-disciplinary team working is ambiguous and ill defined. Nancarrow et al (2013) performed a systematic review of the literature to identify what constitutes characteristics of 'good' inter-disciplinary team working. They note that there is little empirical research available to link the processes of interdisciplinary teams with outcomes to measure effectiveness. Furthermore, in some studies successful team working is regarded as an outcome in itself (Xyrichis and Ream, 2008), alongside the influence of team working on patient outcomes. Research has tended to focus on either the processes of team working or the outcomes, but rarely both. Mickan and Rodgers (2000) succinctly encapsulate this dilemma by noting that research has focused on searching for characteristics of teams that enable them to 'function' well thereby facilitating effectiveness (whatever this may be), rather than evaluating this 'functioning' by their output or outcomes. Nancarrow et al (2013) define 5 competency statements that 'effective' teams demonstrate but the link between these and desirable outcomes remains obscure.

To date, Borrill et al (2000) have provided the most comprehensive report into team effectiveness after being commissioned by the DH to 'operationalise the concept of effectiveness' (p32) and to develop broad measures of the concept. By exploring the relationships between input factors (i.e. team task), group process (i.e. communication) and outputs (i.e. quality of patient care), they concluded that the *quality* of team working (influenced by such factors detailed in Table 1) is powerfully related to 'effectiveness', (which they defined as degree of team participation and amount of innovation) across all 'domains of functioning' (p32). In the rest of this section we will explore the overarching factors said to be important in enabling team effectiveness, before looking at the more limited literature which explores the outcomes of Primary Healthcare Teams

4.4 Multi-Disciplinary Team working

Most articles reviewed focused on team characteristics. Many of the factors identified as inhibiting or facilitating successful horizontal integration of healthcare teams (i.e. between community based services and primary care) are clearly linked (RAND Europe 2012). For example, Lemieux-Charles and McGuire (2006) suggest that teams composed of differing professions are less effective than those containing professionals with the same disciplinary interest. On the other hand, Nicholson, Jackson and Marley (2013) found that team effectiveness is increased by being able to communicate across inter-professional boundaries, suggesting that such communication could mitigate the negative effects of diversity in teams.

Further complexity comes from the distinction made by Nancarrow et al (2012, p64) between teams containing many different professionals who each pursue their own professional tasks and true inter-professional working, which requires contribution and interactive working by all to achieve required outcomes.

Synthesis of the available literature identifies that the following characteristics are frequently concluded upon as being enabling criteria for effective team functioning (Table 1) or as Shaw, Rosen and Rumbold (2011) put it the 'ingredients' of effective teams. It should be noted that review articles lacked contextual depth and therefore caution should be made in generalising findings across teams too broadly.

In spite of these caveats, a number of broad, consistent themes with regard to the characteristics and 'effectiveness' of team working in healthcare were identified, and these are summarised in Table 1:

EFFECTIVE HEALTHCARE TEAM FUNCTIONING – ENABLING CHARACTERISTICS
<p><i>Clear goals and objectives:</i></p> <ul style="list-style-type: none"> - Clear, common and specific goals with measurable outcomes required - Clear team objectives and feedback - Having a joint purpose and shared vision - Limited goals and targets – not having to engage with multiple goals - Common perspective on the meaning of collaboration - Population/patient focused care - Formal agreements between organisations
<p><i>Team Structure:</i></p> <ul style="list-style-type: none"> - Similar/same management structures and reporting lines enables, having different employers and pay structures impedes - Equitable relationships - shared power with regard to professional relationships, hierarchies, knowledge and expertise. - Roles of all professionals clearly identified - Composition of team – occupational diversity of professions involved can both impede or facilitate team working - Team cohesiveness - Size of team – there may be a tipping point at which size of team becomes detrimental to team working and therefore patient outcomes
<p><i>Organisational Factors:</i></p> <ul style="list-style-type: none"> - Hierarchical structures – vertical structures impede, horizontal facilitate - Clear accountability arrangements required - Differing organisational processes impede
<p><i>Leadership:</i></p> <ul style="list-style-type: none"> - Strength of leadership important - strong and determined or weak - Clear leadership is important (singular leader) - Agreed <i>model</i> of leadership required - Good planning required - A commitment to partnership facilitates team working - Purposeful approach to project management needed - Leader needs to co-ordinate and facilitate understanding between teams

<p>IT Infrastructure:</p> <ul style="list-style-type: none"> - Shared documentation - access to shared IT systems/record systems/information /data and documentation enables
<p>Communication:</p> <ul style="list-style-type: none"> - Clear communication needed – informal as well as formal - Good record keeping required - Communication facilitates teamworking effectiveness – promotes collaborative working, removes misunderstandings, and facilitates joint decision making - Communicate enables clear definition of roles and responsibilities - Enables information sharing
<p>Context:</p> <ul style="list-style-type: none"> - Important to consider context in which team are working include: <ul style="list-style-type: none"> - Nature of task, process involved - Localism – local environment/physical buildings/population - Location of teams – co-terminous/co-located or virtual
<p>Co-location</p> <ul style="list-style-type: none"> - Staff located together increases informal contact and mutual understanding - Structures the relationship between professionals/organisations - Increases possibility for formal/informal meetings and discussions - Geographical separation can fragment teams - Inappropriate premises impede possibility of collocated teams
<p>Training and Education:</p> <ul style="list-style-type: none"> - Separatism - separate disciplinary education and training does not foster inter-professional practice - Learning – should be inter-professional and shared
<p>Inter-personal Relations:</p> <ul style="list-style-type: none"> - Team member relationships and interactions can facilitate or impede - Power struggles between professions - Personalities of team members involved - Legacy (historical) relationships increase likelihood of success - Mutual respect and trust is important as are shared culture and values
<p>Professional Boundaries and Role Statuses:</p> <ul style="list-style-type: none"> - Hierarchical and professional boundaries/roles can impede - Lack of mutual role understanding of roles = conflicting expectations held by differing role groups. Clarification of roles and responsibilities facilitates - History of working together helps overcome professional boundaries - Perceived threat to professional identity - Professional values and philosophies (silo working) can impede
<p>Workload:</p> <ul style="list-style-type: none"> - Excessive workload inhibits communication - Division of labour/tasks can increase conflict if not managed

TABLE 1: *Effective Healthcare Team Functioning – Enabling Characteristics*

Of these themes, communication appears to be an underlying factor upon which the effectiveness of interdisciplinary team working depends (Sargent, Loney and Murphey 2008; Blackmore and Persaud, 2012). For example, IT infrastructure plays a pivotal role in facilitating

communication as can co-location. Similarly, relationships and goal setting for example are dependent upon effective communication between team members and partners.

However, it is difficult to ascertain from the literature which of the above characteristics is considered the most important contributory factor to team effectiveness. Suffice to say that where one review placed emphasis on co-location as a defining factor, another placed strong leadership or having a clear vision as an important component of effectiveness. Shaw and Rosen (2013), who propose a 'whole systems approach' to thinking about overcoming fragmentation in primary and community based services, focus on local context and co-operation as important determinants of success as do Lemieux-Charles and McGuire (2006). Arksey, Snape and Watt's (2007) examination of team members roles in the PHCT found that the PHCT depended on 'everyone' to function effectively, but also reflects the outcomes of the majority of literature reviews in terms of overarching concepts regarding clear delineation of roles and responsibilities and role boundaries, communication problems and IT. Alternatively, Sheaff et al (2003) have noted the impact on team working of a variety of organisational forms and structures and conclude that communication and organisational learning is inhibited by vertically differentiated structures as often found in healthcare organisations.

Of note from the synthesised reviews is the attempt by some to formulate principles or models of good team working or integration (outlined in Appendix 2). Although each review or study has a different focus, the principles they highlight share similar elements. Nancarrow et al (2013) identified ten principles of good interdisciplinary team working which encompass the categories in Table 1 above with the addition of a focus on quality and outcomes of care. Nancarrow et al (2013) also take an individualistic approach to focusing on skill mixes, reward systems and autonomy as being important contributors for high functioning interdisciplinary teams. This concept is also supported by Bryar (2008), who advocates a focus on developing the individual at the micro-level as being more effective in strengthening teamwork than concentrating on team wide interventions. Mickan and Rodger (2005) from a study involving 241 health care practitioners using a Teamwork in Healthcare Inventory, further distil the list down to six characteristics of effective healthcare teams. Further, Suter, Oelke, Adair and Armitage (2009) identified ten key principles for successful health systems integration that focuses on shared vision, organisational culture and communication as being key to collaboration.

A final interpretative observation from the literature would be the persistence of inhibitors and enablers to multidisciplinary Healthcare Team over time. This is exemplified by Brown (no date) who studied integrated care in Wiltshire and who suggests that 'the same factors identified in the 70's and 80's as hindering joint working still exist now'.

4.5 Outcomes of Primary Healthcare Teams

In keeping with the assertions of many of the literature reviews included in this synthesis, evidence regarding the outcomes of effective primary healthcare teams is sparse (Mickan, 2005). Cameron and Lart (2003) and Cameron et al (2012) note in both their systematic reviews of interdisciplinary team working that most studies are 'silent' on the matter of effectiveness (p15). What empirical research is available validating the link between Primary Healthcare team effectiveness and patient outcomes is mixed and tenuous. Existing studies

suggest that teamwork is highlighted as an integral element to achieving quality of care for patients (Bower, Campbell, Bojke and Sibbald, 2003; Goh, Eccles and Steen, 2009) but also implicated in patient safety (Mickan, 2005) and recovery outcomes in the community, for example following a stroke (Mitchell et al, 2008).

Kringos et al (2010) suggest that quality of care as an outcome relates to the degree to which services meet patient's needs and standards of care. They undertook a review of reviews into the breadth of primary care and concluded that there was some evidence to suggest efficiency is associated with quality of patient care and reduced hospital admissions for example, but define primary care efficiency in terms of the level of resources (team size, composition etc) being adequate to deliver patient outcomes.

Campbell et al (2001) in an exploration of quality of care in 60 English general practices found that team climate (as measured by staff perceptions of team working, frequency of interaction identified aims and objectives and support for innovation) was a predictor of high quality care for a range of aspects such as continuity of care, access to care and care for diabetes, and that this was the only variable out of four tested which was associated with high quality care across a range of aspects of care for chronic conditions. However, a Cochrane Review conducted by Smith, Allwright, O'Dowd (2007) of 21 studies into the effectiveness of shared care for chronic disease management, concluded that the results of outcomes for patients (including improvements in physical or mental health, psychosocial outcomes, hospital admissions, risk factors and satisfaction with treatment) were mixed and inconclusive.

Nancarrow et al's (2012) evaluation of a tool to improve multi-disciplinary team working (the Interdisciplinary Management Tool) utilised with 11 intermediate care teams concluded that there was no impact on reducing costs nor did it have a positive impact on patient outcomes (measured as patient satisfaction and episodes of care). However the tool did improve team working predominantly through improved communication, increased leadership, staff morale and professional development.

Overall this evidence is tentative at best, as there is a danger that a cyclical process is being observed, in which better functioning and cohesive teams are reflected in better patient satisfaction and outcomes, and caring for a satisfied population feeds back to improve team morale and function (Mickan, 2005; Proudfoot et al, 2007). This mirrors the conclusion of Mannion et al (2008) who reviewed evidence relating to links between the culture of health care organisations and their performance. They concluded that the two were almost certainly cyclically linked and interdependent, and this probably also holds true for multidisciplinary teams in primary care.

4.6 Summary

The evidence from this synthesis of existing reviews with regard to the impact of multi-disciplinary, interprofessional teamworking is sparse, mixed and inconclusive. Too few studies have directly examined primary healthcare team effectiveness to allow us to provide a clear link between processes and outcomes. The findings of the micro-level literature review can be summarised using Donabedian's approach to illustrating causal linkage between structure, process and outcomes, as shown below:

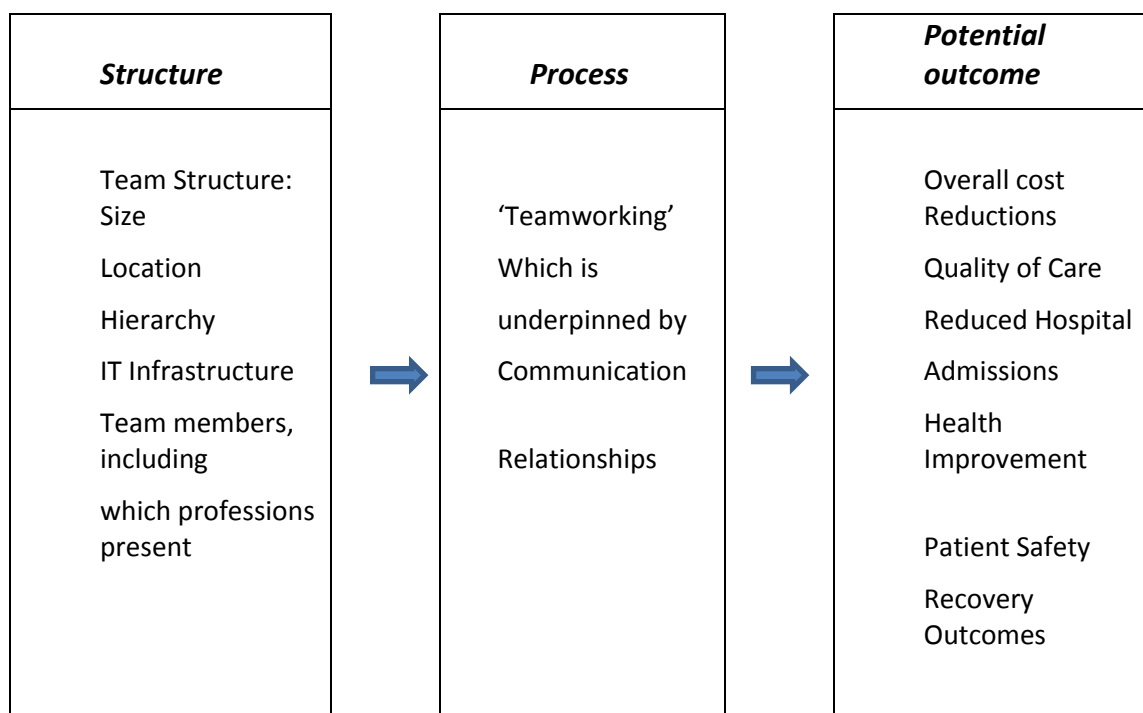


FIGURE 1: *Micro-Level Factors: Effective Teamworking Outcomes*

However, the evidence underlying these potential linkages is tenuous and mixed. It seems fairly clear that factors which facilitate good communication are important, and that a focus on promoting good relationships will bear fruit. Setting a limited number of clear, shared goals is also probably important, but the recursive link between the softer aspects of teams such as their climate and culture and 'good outcomes' (with each facilitating and promoting the other) makes it very difficult to make clear recommendations for how local PHCTs can work together to provide more and more effective care outside hospitals. In particular, there is little evidence about the resources required, with most studies taking PHCTs as a given rather than setting out to explore the number of staff required to provide care to a given size of population or the associated costs.

5 Meso-level Factors

5.1 Background

This section of the review details the evidence in relation to service organisation and delivery. In particular, we sought to explore whether the location of teams (or team members) is an important factor in joining-up services (and providing seamless care for patients). Many of the studies included in the micro-level review mentioned co-location of teams but it is noted that no studies could be found which explicitly examine this factor in terms of 'effective' multi-disciplinary team working. We also examined the literature to ascertain whether there is any evidence to suggest preferences for providing community services based on either the registered GP list practice or on a geographical basis as currently. Again, research in this area is limited and topically dated to the restructuring of CHS following the Cumberlege Report in

1986. Additionally we focused on identifying studies which have examined differing models of community care and their impact on patient outcomes.

The community nursing/district nurse (DN) service was chosen as an ideal function from which to explore these factors because DNs currently work between CHS teams and general practice. Community nurses provide a bridge between the two services and examination of this link has the potential to identify historical and current issues in collaborative working specific to the two services and important to successful community care. Under this heading therefore, we focus on District Nursing to explain how and why the current community health service has evolved and identify arguments underpinning this choice of model as opposed to alternative organisational forms/models. We then examine other models of community service provision.

5.2 Methods

Firstly, evidence relating to the history of the organisation of community and primary care services in the UK was explored. In particular, historical policy documents such as the Cumberlege Report (DHSS, 1986) and more recent policy relating to the provision of community services (e.g. the 'Transforming Community Services' programme and policy relating to the development of Community Foundation Trusts) was examined. Secondly literature searches on issues relating to practice list versus geographical basing and co-location of services, was conducted. Finally, focusing upon delivery mechanisms, the evidence relating to 'polyclinics' and other such attempts to reconfigure services were explored. The 'grey' literature was also searched, looking, for example, for publications advocating particular organisational forms (such as federating GP practices or 'hub and spoke' models of service provision). The evidence base informing these publications was explored when necessary, to understand how conclusions had been derived. Under each heading we have reviewed the available evidence highlighting where gaps exist.

5.3 The District Nursing Service, CHS and General Practice

A brief review of the history underpinning CHS and primary care/general practice illuminates how the services have been successively brought together and separated through various policy initiatives and ownership models. What is of concern for this review is the historical reforms which underpin the current organisational model of CHS and the provision of community nursing services. The community nursing service has, since its inception over 150 years ago, been at the forefront of home based patient care and to improving population health. Therefore the role of community nursing is perceived as central to delivering the vision of bringing health and social care services 'closer to home' and integral to a more primary care focused service (DH, 2009a).

However one factor which impinges on this vision is the disconnect between ownership of community nursing services and general practice, and in particular the patient populations they serve. This stems from the proposals of the Cumberlege Report (DHSS, 1986) which challenged the idea of primary care as GP centred. Cumberlege argued that community nurses should have a higher profile within primary care and a more equal relationship with GPs (Owen and Wall, 2002). However, Cumberlege was most influential in introducing the 'neighbourhood nursing model', with 'neighbourhood' being defined as nursing focused

around an identified geographical area within which there is a recognised local (natural) community (10,000-25,000 people and co-terminous with local authority boundaries). Jarman and Cumberlege (1987) argued that providing nursing services based on a geographically 'zoned' rather than a practice list basis through a separate local community nursing unit promotes equity for both patients and nurses. Patients would receive equal access to services, whilst nurses would achieve an enhanced picture of the particular health care needs of the local population (Ottewill and Wall, 1990, p361), the maximisation of nursing resources (increasing efficiency and avoiding wastage through duplicate visits, travelling etc), professional development and fostering integration with the wider primary health care team.

Cumberlege's ideas, although not initially popular, became pervasive and along with the focus on Family Practitioner Services in the late 1980's (DHSS, 1987), contributed to the already fragmented and complex organisation of CHS and community nursing separate, but 'attached' to general practice. Attempts to negate issues associated with fragmentation of services such as variability in quality and productivity of services as well as improving co-ordination and collaboration (Wilkin, Dowswell and Leese, 2001) have also continued along a geographical basis for the provision of care closer to home. For example Primary Care Groups and latterly Primary Care Trusts (PCTs) charged with developing closer working between general practice and CHS focused healthcare on communities of around 100,000 people (Wilkin et al, 2001). More recently, the re-organisation of CHS mandated by the TCS reforms (DH, 2009b), attempted to improve quality by introducing quasi-market conditions for commissioning of community services by splitting them off from PCTs. This has had the effect of again moving CHS and community nursing away from the Primary Care umbrella to standalone provider services in the form of Community Foundation Trusts, social enterprises or mergers with acute care services. Thus as Edwards (2014) argues, weakening existing connections to both Primary and Secondary Care – which is counter to current policy objectives of a health service wrapped around primary care.

What is not covered by subsequent NHS reforms and the most recent TCS (2009b) restructure is the question of whether providing services on the basis of geographic communities or per the GP registered list is an important factor when CCGs are looking to scale up GP services. In this section of the review, we therefore explore the literature for evidence as to the benefits or not of each model especially in relation to the provision of District Nursing services. Research in this area is limited and does not specifically contrast the merits or otherwise, of the two approaches. Again there is a paucity of existing good quality literature reviews to be found such that much of the findings reported here have been extracted predominately from primary studies which are dated. The current situation of covering geographical populations has not been formally studied and is not therefore based upon robust empirical evidence. Thus, for example, the original Cumberlege report contains no research evidence to back up its conclusions.

5.4 A Question of Patching, Basing and Zoning

According to Tinsley and Luck (1998) and Ovretveit (1993), the question regarding location of DNs and CHS can be encapsulated as one of patching, basing and zoning. In this section we will consider the evidence relating to the population coverage of DNs and GP practices.

5.4.1 5.4.1 **Community nurses covering a geographical area**

Note: much that follows is based upon arguments and opinions rather than research evidence. Where there is evidence this is highlighted.

Claimed advantages:

- 'Zoning' (Jarman and Cumberlege, 1987) or geographically based nursing ensures equity in both service and distribution of workload directed toward need. It is argued that GP lists are too small to allow equitable distribution, as the 'need' for services will depend upon the practice list profile (eg proportion of elderly patients etc). This claim is based upon an assumption that geographical areas will cover broadly similar populations, an assumption which could be challenged
- Cumberlege (1986) argued that some needs were going unrecognised when the focus is only on practice list, and that geographical zoning would allow a broader focus on population needs
- Audit Commission (1999) review of District Nursing advocated that by focusing on geographical populations and on reducing Health Inequalities it should be possible to reduce problems in matching resources to demand although report stresses population size is not a good indicator of need
- Improves coverage for sickness or other absence and removes duplication of services. GP lists often overlap, meaning that two different nurses could have been visiting the same location to see neighbouring patients registered with different GPs
- Cumberlege and Jarman (1987) pointed to the lack of co-terminosity between practice list and the geographical boundaries used by other service providers such as Local Authority and Social Security (DWP) suggesting that covering the same populations would enhance collaboration and allow greater planning for broader local population needs.
- Howard Catton (2012) in an opinion piece discussing how community nursing should be organised, argued that the equity inherent in a geographical population coverage is the most important thing, and that any disadvantages can be offset by the development of a good PHCT

Claimed disadvantages

- Ottewill and Wall (1993) describe an 'uneasy co-existence between the concepts of the PHCT and the neighbourhood nursing team' (p430). They suggest that zoning undermines the PHCT and damages GP and nurse relations.
- Ovreteit (1993) also points out that GPs have less contact with DNs from other neighbouring areas.
- Brown (1994) studied inner city primary care practitioners and found that some GPs viewed the practice list as a community but that others viewed it to be too scattered in the city to be a community. Tension emerged between the practice list and other concepts of community where a geographical focus was deemed to conflict with the scope and purpose of general practice which is orientated towards individuals and care for those on the practice list.

- Ellis (1987) responding on behalf of the BMA to 'Primary Health Care – An Agenda for Discussion' and Cumberlege Report (1986) argues that community nursing and PHCT is best located in general practice as clinical nursing is best 'organised and delivered by this team' (p249). Ellis (1987) also argues that geographical zoning undermines teamwork and promotes a parallel rather than integrated service for patients.
- It is argued that the separation between DN work and GP lists means that GPs may be unaware of the work done by the nurses

5.4.2 5.4.2 GPs and community nurses covering the same populations

Ovretveit (1993) suggests that having different patient populations works against 'closer co-operation' (p186) in PHCTs. Ovretveit argues that having the same population would provide more incentive towards better co-ordination and more frequent contact. Having different populations means there is less to reason to draw practitioners together. The NHS Next Stage Review: Our Vision for Primary and Community Care (DH, 2008b) highlighted the value of the GP registered list as a basis for developing personal and community based services. Our Vision for Primary and Community Care (DH, 2008b) also advocated GP led provision of care using federated models (hub and spoke) with a focus on localism, setting up networked services with strong ties to GP practices.

Claimed advantages:

- Anderson, Draper, Kincaid and Ambler (1970) provide a comparative study of attachment (based on practice list) of community nurses to general practice versus a 'liaison scheme' which was based on geographic populations. They concluded that attachment improved working relationships and patient care.
- A number of studies in the 1980s suggest that PHCT working is improved if DN and GPs cover the same populations (McClure 1984; Williams and Wilson 1987; Bond et al 1987) in a similar study of community nurses attachment to general practice found that DN's preferred to be attached to General practice than working solely in a geographical area.
- 'Local nurses for local people' is an opinion article by Marshall (2012), which argues that with advent of CCGs there is a move back towards practice centred teams or teams linked to a number of smaller practices. He suggests that a 'hub and spoke' model would: improve communication; improve personal relationships; provide clearer accountability; improve joint care of seriously ill patients; and ensure enough staff to cover sickness absence/annual leave etc.
- Smith et al (2004) review of primary care-led commissioning argues for the importance of size of population. If too large there is a trade-off between 'clout' and economies of scale versus maintaining a local focus. This suggests a population base of 100,000 is minimum. Ovretveit (1993) also argues for the risk of 'losing touch with local communities'
- Williams and Wilson (1987) proposal for Health Care Units, suggests that linking of Nursing Units to GP units (merging their populations) leads to a better PHCT as GPs and nurses identify a single population unit.

Claimed disadvantages

- Gowman (1999) Healthy Neighbourhoods report into the impact of neighbourhood on health and health inequalities, argues that many neighbourhoods tend to contain geographical clusterings of people – ie. , culturally and socio-economically – but that not all groups of people may be represented within geographical patterns such as the elderly and the young. Therefore focusing population health strategies on one neighbourhood might miss groupings of people that it is intended for.
- Ernst & Young, RAND Europe and the University of Cambridge (March 2012) undertook a national evaluation of Department of Health's Integrated Care Pilots. These were based on GP registered practice list as a condition of involvement. The study found that the impact of the pilots on patient outcomes were mixed, showing some reductions in outpatient attendance and emergency admissions for the frail elderly but patient satisfaction deteriorated in many cases, apart from satisfaction with care planning. However, it is unclear the extent to which the linkage with GP lists contributed to these outcomes.

5.4.3 5.4.3 Summary

Ottewill and Wall (1990) suggest that there are difficulties in reconciling the principles behind 'attachment' and 'zoning', with each designed to solve a different set of issues. Essentially, basing community nursing services around general practice lists is most likely to create the conditions necessary for effective team-working highlighted in section 4, but this approach brings with it problems of size, with a sufficiently large population needed to ensure enough nurses to provide cover for sickness and allow effective professional development and to ensure that broader population needs can be addressed. Some sort of federated model, whereby groups of practices work together to cover a geographical area alongside a team of community nurses, would seem to meet many of the problems highlighted above, but there is little good research evidence on this topic.

5.5 Effect of co-location of team members on team working

No existing literature reviews could be found which explicitly examine the evidence relating to co-location of team members on team working. However, much of the literature on team work effectiveness and community/district nursing services also discusses the impact of co-location of PHCT members. Cameron and Lart (2003) found that co-location improved co-operation, increased communication and improved understanding of other professionals roles outside of their own specialism, leading to improved information sharing and understanding between professionals, whilst Xyrichis and Lowton (2008) found that co-location increases integration of team members. However, Maslin-Prothero and Bennion (2010) argue that co-location is not always necessary, with some studies reviewed concluding that it is not necessary if other measures are introduced to ensure good communication.

A number of studies have shown that co-location can facilitate multi-disciplinary team working. For example, Griffiths, Austin and Luker (2004) found that co-location improved communication in a multi-disciplinary community rehabilitation team intended to facilitate hospital discharge, whilst Wiles and Robison (1994) argument for co-location from a study of 20 practices suggests that co-location is a benefit, with a particular emphasis on the facilitation

of access to GPs for DNs. However, there was some evidence of tensions over control of workload and between practice and district nurses. The key messages from this literature are as follows:

- Co-location facilitates the development of shared protocols, communication, trust and the development of a sense of being a team (McClure, 1984; MacDonald, Langford and Boldero 1997; Bond et al 1987; Gerrish 1999; Black and Hagel 1996; Hudson, 2002)
- Ernst & Young, RAND Europe and the University of Cambridge (March 2012), National evaluation of Department of Health's integrated care pilots found that co-location of staff was considered advantageous (but not essential) with respondents commenting on the benefits of saving time through improved communication. 'Face-to-face working in the same building was noted to improve quality and frequency of communication, and to expedite problem-solving through quicker access to the knowledge of a colleague from a different professional group.' (p78).
- However, co-location does not guarantee these outcomes, as building infrastructure (particularly size and ability to accommodate staff) may impede co-working (Lawn et al 2014; Immison 2009).
- Ovretveit (2011) found that co-location makes co-ordination of services easier because one or more professionals are often sited together or in the same building and dealing with the same patient groups, but does not in itself inevitably increase coordination. Ovretveit (2011) concludes that co-location has no significant impact on costs or quality unless procedural changes are made to increase co-ordination i.e. attention is paid to the micro team working level alongside changes to location.

5.5.1 5.5.1 *Summary*

This evidence is somewhat patchy, and tends to be based on small scale primary studies. However, it suggests that geographical co-location is a facilitating factor in the development of coordinated primary/community services. However, co-location probably acts via the medium of improving communication, identified in section 4 as the most important overarching issue in team effectiveness.

5.6 **Alternative Models of Community Service Provision**

There is a wealth of literature examining alternative models of care many of which focus on healthcare models from the USA and their applicability to the English healthcare system. Much has been written about Managed Care Organisations (Dixon et al, 2004) and Accountable Care Organisations (Shortell, Addicott, Walsh and Ham, 2014) such that reiterating this evidence here will add little to the review. Evaluations of pilot studies using alternative models of care have been well documented. For example, the evaluation of the 16 DH Integrated Care pilot studies incorporating elements of the Kaiser Permanente and Evercare Models (RAND Europe, 2012) found that most pilots demonstrated improvements in the processes of care, but that these were not accompanied by improvements in patient experience, and overall costs were not necessarily be reduced.

Both the RCGP Roadmap (2007) and The NHS Next Stage Review (2008b) focus upon GP led provision of care using a federated model. They suggest a 'hub and spoke' model, with groups

of practices (spokes) linked to a central 'hub' housing community services covering the same geographical patch. The Nuffield Trust (Smith et al, 2013a) Securing the Future of General Practice Report outlines new models of care across arrange of international examples including federations. The report included analysis of 21 models of primary care organization and 12 organisational types finding that the following models showed the greatest promise with regard to patient outcomes: 1) networks or federations; 2) super-partnerships; 3) regional and national multi-practice organisations, community health organisations. However, like Curry and Ham (2010) and Powell-Davis et al (2008) the Nuffield Report suggests that models of care incorporating multiple strategies of intervention based on the priorities of local populations, and using a mix and match approach to tailoring elements of models, are more effective than those using a single strategy approach such that 'no one single model of primary care provision should be advocated' (p3).

Common to the reports is the emphasis on localism and the need for local context in driving organizational forms. The challenge therefore according to the Nuffield Report (Smith, Holder et al, 2013) is scaling services up whilst keeping them local.

5.6.1 5.6.1 Federated Models

Evidence as to the outcomes of Federated Models is limited to case studies which have yet to be formally evaluated, with commentary based upon self-reported claims of achievement. Empirical evidence underpinning the model could not be found, although the benefits of 'federating' with regard to moving services closer to home are widely claimed to be 'working collectively to develop the local health economy, improved collaboration between members, enhanced cost efficiency, increased innovation and sharing of best practice, and financial, management and contractual independence (Pearson, 2010, p1).

NHS Confederation (2013c) offer 'health care groups' as being able to provide benefit in providing economies of scale for expansion or improvement of services. They cite the success of the North West Collaborative Commercial Agency in providing back-office services to a group of trusts with regard to collaborative purchasing power, delivering substantial savings. However, this was limited to they provision of technical administrative functions rather than clinical care

Case Studies included in the RCGPs paper on Primary Care Federations (2008) are Epsom Downs Integrated Care Services (Federation of 20 GP practices), The Croydon Federation (16 GP practices) and Lincolnshire (14 GP practices). The paper suggests that they provide:

- Greater convenience for the patient
- IT systems integrated with Choose and Book and The Patient Choice Programme
- Aim to increase efficiency and eliminate system waste
- Croydon has diagnostic sites in 6 practices
- Lincoln has reduced waiting times for diagnostic services from 9mths to two weeks

The 'Primary Care Medical Home' model in the USA advocated by Reid et al (2013) based on the same principle as federated practices and incorporating community services such as pharmacy, suggests that emergency department treatment reduced as did primary care

visits. No change was observed regarding hospital admissions. However, it is difficult to make direct inferences from this, as the US health system is so different from the UK. In particular, the lack of a 'gatekeeper' function in US primary care makes it difficult to compare the two.

5.6.2 Polyclinics or GP Led Centres

Polyclinics or polysystems of healthcare were proposed in Darzi's *Healthcare for London* framework (2007). These were somewhat loosely defined in the Darzi report, but are generally agreed to combine multiple health care services in one place or within one system, including primary, community, diagnostic and some secondary care services. They proved unpopular with some professionals (BMA, 2010). Imison et al (2008) for the King's Fund provide a comprehensive review of the international and national literature regarding this system of care which they suggest encompasses primary, community and possibly secondary care services co-located 'under one roof'. Theoretically patient care and quality of care should increase through improved access to an integrated service. However, Imison et al (2008) conclude that there are many risks associated with introducing polysystems:

- they need to be well thought out, planned and the evidence base evaluated
- substantial costs savings are unlikely to be made
- an inspection framework needs to be in place to assure the quality of out of hospital care
- strong leadership is required to foster co-working, as co-locating services alone will not necessarily bring this about

Imison et al (2008) go on to argue for improvement in technologies to facilitate joint working rather than concentrating on the buildings that the workforce resides in. Opportunities for such a system exist in terms of patient access and access to diagnostic services. However, they caution that grouping services might reduce accessibility for those in rural areas if their GP moves to a central hub. Imison et al (2008) does argue that 'a hub-and-spoke model, where the polyclinic acts as a central resource base in a co-ordinated network of practices, is likely to be more appropriate to achieve the desired development of primary care services.' (p4)

Others are similarly negative. Peckham et al (2011) evaluated 4 London polyclinics and suggest that they were eventually more akin to polysystems, diverse in nature and dependent upon local context. Peckham et al conclude that the polyclinics did not include CHS as an integral part of their development counter to the vision of developing networked services and therefore are no nearer to 'developing community services or shifting services out of hospital' (p297). Powell Davis et al (2009) undertook a review of the international literature regarding polyclinics to inform Australian integrative healthcare objectives, and concluded that there was no evidence about the relative effectiveness of the hub-and-spoke model or a combination of hub-and-spoke with co-located structures. Further, Powell Davis et al (2009) suggest that such structures may not be necessary or sufficient bringing the focus back to process of teamwork and communication as being important to joined-up working. Powell-Davis et al (2009) identified a number of factors important to the development of

polyclinics such as ‘a bottom-up approach, clinician led development process’ (p31), balancing the range of professional interests: investment in team development and change management: ongoing support for service delivery partnerships and effective community engagement, Carelli (2010) argues that polysystems will cause loss of patient-doctor continuity and increase travel times for patients, whilst Darzi and Howitt (2012) suggest that the way GP Health centres (polyclinics) were introduced has not fostered integrated care. They point to the top-down nature of collaborative working being imposed on such initiatives rather than focusing on local working relationships.

5.6.3 Other Models

Curry and Ham (2010) provide a comprehensive review of service delivery models and providers of care as do Purdy et al (2012) and Monitor (2012). There is conflicting evidence as to whether new models of service delivery such as the *case-management* approach are effective. Models such as the US Evercare approach whilst claiming cost effectiveness and reduced admissions in the USA, failed to translate to the NHS (Boaden et al, 2006). Curry and Ham (2010) suggest that case management is likely to be more effective when targeted at high risk groups. This has been seen by the effective use of The Unique Care approach for over 65's with LTCs - piloted in the North West of England (Keating et al, 2008). This is a practice based management model with a bespoke approach to care planning. Patients at risk of admission are identified from the practice list and a register created. GPs referred to a care team serving the practice or cluster of practices population of over 65's. The service reduced hospital admissions by 50% and reduced excess hospital bed days by 98%. Saving to the practice on their practice based commissioning budget for hospital services was estimated at £99,000 over five months. However, it is important to note that the costs of implementing the pilot scheme were incompletely reported, making value for money impossible to determine.

Goodwin et al (2013) undertook a comparative analysis of 5 care-co-ordination models in the UK, community based and predominately focused on palliative care, LTCs or care for the elderly. They concluded that although the models were different, some similarities could be identified:

- Services were focused on quality improvement rather than cost containment
- All had a population management approach, targeted at the most in need and specifically aimed at a neighbourhood or local community level.
- Small populations (30,000 max.) enabled care-co-ordinators or case managers to build strong relationships with multi-disciplinary teams and other providers across the community
- Care co-ordination was supported by trust in the model of care and face-to-face communication
- Horizontal integration was good, vertical integration was weak
- Focus on enabling people to live at home tailored to needs of individual service users
- Role of care co-ordinator was crucial

However, demonstrating impact was difficult due to the lack of mechanisms for measuring and demonstrating outcomes. This led to lack of robust evidence on cost effectiveness. In spite of this the authors claimed that: ‘care co-ordination can improve the quality and experience of care for patients with complex conditions without adding to overall system costs’ (P19)

A comprehensive systematic review by Purdy et al (2012) suggests that care models using self-management initiatives, including exercise, rehabilitation and patient education, can be effective when used with carefully targeted payment mechanisms (Purdy 2010). The review finds that there is inconclusive evidence for other models such as the Hospital at Home in reducing unplanned admissions. The King’s Fund Report (Edwards, 2014) lists examples of community initiatives which have shown results such as the Birmingham Healthy Villages – Complete Care Model and the Leeds - People Powered Health model for those with LTCs. Again these are models distinct to the local population but on the whole there is evidence to suggest that they do lower bed use and improve the patient experience.

5.6.4 Summary

Most of the evidence relating to alternative models of providing primary and community services consists of evaluations of particular initiatives. Few of these evaluations clearly explore outcomes, and cost-effectiveness has not been robustly examined. There is some evidence that care-co-ordination approaches can improve patient experience, but there is no clear evidence that this leads to a reduction in the use of hospital services (see our previous report (Checkland et al 2013)). Restructured services are more likely to be successful if their development is led from the bottom up rather than imposed, and it seems that within each model the key micro-level factors identified in section 4 apply. Thus, it seems that the *structure* of community and primary care services is less important than the micro-level factors such as trust, relationships and communication. This fits with evidence from a wider review of health care organisations by Sheaff et al (2003) which concluded that there was no clear link between organisational structures and performance. Co-location is a facilitative factor, but alone is insufficient to bring about change. Ill-thought out restructures bring with them significant dangers, including the disruption of existing strong working relationships.

5.7 Section summary

The current structure of community health services is based upon opinion more than evidence. The split between primary and community services present since the Cumberlege report in the 1980s may have contributed in some areas to a fragmentation of services and a failure of coordination. However, it is also clear that structural problems such as covering different populations and lack of a shared physical base can be overcome by good relationships and communication. A variety of different models of services have been piloted, but few have been robustly evaluated and none properly tested for cost-effectiveness. The top down imposition of change is unlikely to be helpful, as local services need to be sensitive to local contextual factors such as geography and shared history. It seems clear from the evidence evaluated here that any attempt to improve the structure of primary/community services to allow the provision of more care in the community should focus upon relationships and communication and should build upon local history. Combining practices into groups or

federations that relate to a single community service 'hub' would seem to have the potential advantages of covering a shared geographical population and to allow a degree of co-location, but it cannot be assumed that such a model would either be cost effective or necessarily reduce the need for hospital care. Success is likely to depend upon the micro-level aspects of the scheme such as relationships and communication.

6 Macro-level Factors

Background

This section of the review focuses upon how system-level factors may help or hinder service delivery. For this we have chosen to focus on exploring financial models and commissioning of CHS as there is a paucity of knowledge in this area with regard to the impact of payment models on moving services closer to home. This can in part be explained by the historical organisation of CHS within the UK which has led to the fragmented and often disparate nature of services which continues to persist.

Attempts to unify healthcare services to overcome problems arising with quality and co-ordination between separate and distinct organisations have seen CHS undergo many changes of ownership and control throughout the years – to little effect. This direction of travel may have been different had CHS become 'part of a fully integrated primary health care service' (Ottewill and Wall, 1990, p58) and the GP/CHS boundaries brought closer together as advocated, but not implemented by, the Dawson Report in 1920 (Dawson, 1920).

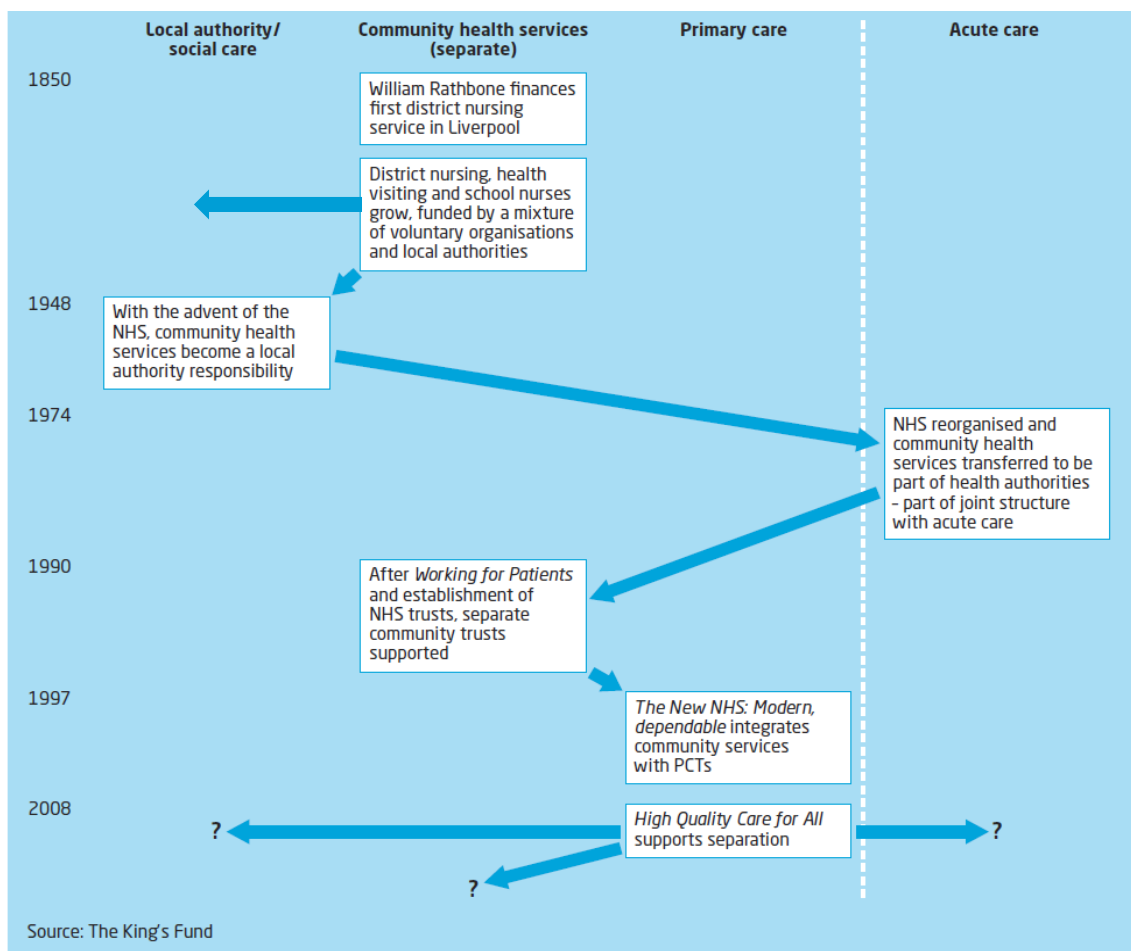


FIGURE 2: Taken from Imison, C. (2009, p15) *Shaping PCT Provider Services*.

London: The King's Fund

As can be seen from Figure 2, CHS were located under Local Authority control until becoming part of the NHS in the 1974 restructure. This situation continued, with District Community Units acting as providers of services, until 1990. With the advent of the internal market to the NHS, which signalled the separation between provider and commissioners of services post the White Paper : *Working for Patients* (DH, 1989), CHS were moved into NHS Trusts but remained separate and established as independent provider services. Many became Trusts or were combined with other acute services such as mental health. Further re-organisation of healthcare services in the late 1990's to enable greater integration between primary and community services for patient benefit as well as cost reduction, led CHS to merge with commissioners of services (in Primary Care Trusts - PCTs). Finally, CHS were once again separated from commissioners of services following the recommendations of *Commissioning a Patient-Led NHS* (DH, 2005) as part of a move to 'increase market structure and competition within the NHS' (Allen et al, 2012, p3) whilst also allowing PCTs to become more patient led. Community services have thus evolved following this purchaser/provider 'split' into differing organisational forms and structures which were further mandated in the *Transforming Community Services* policy (2009b) outlined in Section 6.2.3 below.

6.1 Methods

Under this heading we again started with the evidence base said to underpin the most recent reorganisation of community services, 'Transforming Community Services'. We did a desk based search of titles and abstracts using the databases mentioned in Section 2 to look for any evidence about commissioning/purchasing community services, and also about payment models. In addition we explored what is known about commissioning community health services and in particular previous attempts to commission community services differently in the UK (eg under fundholding or Total Purchasing Pilots) and elsewhere (eg HMOs and Accountable Care Organisations and Patient-centred medical homes in the USA). In each of these areas our initial focus was upon good quality review articles.

6.2 Evidence relating to ownership models

Sheaff et al (2003) undertook a systematic review of the evidence about the relationship between organisational forms and performance, and concluded the following:

- The relationship between organisational form and function is complex and contingent. There are few, if any, simple organisational levers that can be pulled to influence organisational performance.
- The political, socio-cultural and historical environment within which an organisation operates appears to have an important influence on the way that it is structured and the ways in which it functions.
- Different organisational structures (e.g. hierarchical or networked) and cultures (e.g. clannish or rational) appear to be associated with different kinds of outcome.
- Organisational change needs to focus on the engagement of staff in order to have a positive impact.
- There is no consistent or strong relationship between organisational size, ownership, leadership style, contractual arrangements for staff or economic environment (competition, performance management) and performance.

The rest of this section is largely based upon a review of the evidence related to ownership models carried out by Allen and Jones (2011) and Allen et al (2012). It was the explicit intention of the New Labour Government in the late 2000s to move CHS out from PCTs, establishing them as standalone provider organisations. There was no central model dictated from above, and CHS were encouraged to consider setting themselves up as a Community Foundation Trust, a 'third sector' organisation such as a 'community interest company' or as a joint enterprise with other providers, such as an Acute Trust, a mental health Trust or a Local Authority. It was also the intention that competition would be fostered by the accreditation of 'any qualified provider' to enter the market to provide CHS (DH, 2010). It was argued that separating the provision of services from commissioning and enabling greater competition would lead to enhanced efficiency and quality, and that new organisations with greater autonomy would be more innovative. Following this process, the ownership of CHS is now extremely diverse, with services provided by: acute trusts (foundation and non-foundation); standalone community trusts; mental health trusts (foundation and non-foundation); private for-profit providers; social enterprises; and not for profit third sector organisations.

Allen et al (2012) reviewed the evidence relating to the impact of organisational forms on performance. They found very little evidence about the performance of CHS.

6.2.1 Foundation Trusts

Foundation Trusts (FTs) were set up initially under the New Labour Government in 2004 and have greater autonomy than other NHS Trusts. This includes increased financial and operational freedoms from the NHS centre and a governance structure whose membership includes staff, patient and the public. The emphasis on autonomy and participation of local people are factors which purport to produce better performance and results than those public services which are under 'closer central control' (Allen et al, 2012; p14). Research on Acute Sector FTs found that FTs tended to perform better in terms of quality of care than non-FT organisations, but that this *predated* their acquisition of Foundation status – in other words, higher performing trusts were more likely to apply to become FTs and were more likely to succeed in their applications (Allen and Jones, 2011). Allen and Jones (2011) also point to evidence that some FTs acted more autonomously in respect of differing aspects of performance such as making investments to develop and improve services. In this regard, FTs were acting more autonomously because the need to wait for decisions to be sanctioned from other parts of the NHS had been removed (Allen and Jones, 2011). However Allen and Jones (2011) go on to note that this autonomy was still constrained by the need to meet national targets such as the 18 week wait guidelines. Whilst there was no evidence that FTs were significantly using their flexibility with regard to workforce issues there was some evidence of greater flexibility and speed in internal decision making over issues related to improving patient services which – meant they were more likely to be successful and faster in increasing the number of beds or improving car parking and patient information (Allen et al, 2012). There was a concern that FTs were generating surpluses which were not being used or re-invested, and some evidence of a negative impact on the local health economy with, for example, some PCTs reporting difficulty in commissioning FTs services because of the contradiction between PCTs aim to reduce local budgetary overspend and FT incentives to increase their income (Coleman et al 2009). This, however, was by no means universal, with many FTs continuing to work as part of the local health economy, co-operating with other local hospitals and organisations. From their evaluation of the community foundation trust (CFTs) pilot programme, Allen et al (2012) found that aspirant trusts were keen to generate public involvement at a strategic level but that this could be problematic if there was another acute FT in the locale. Pilot sites also recognised the advantages to having their own CHS governing board in terms of autonomy, increasing quality, productivity and management of services. Allen et al (2012) however, highlighted the risk that the organisational/structural changes required to establish CFTs would focus managerial attention away from improving services and that possible mergers of CHS with hospital services would divert attention back to the acute sector and as such would impede policy requirements to move services out of hospital. . There are currently no FTs providing only community health services, despite a policy to establish some of these organisations being launched in 2009 (Allen et al, 2012)

6.2.2 Third Sector organisations

Proponents of this model claim that this organisational form will enable greater innovation. Third sector organisations (TSOs) comprise those not-for-profit organisations which are

primarily socially orientated and which according to the Department of Trade and Industry 'whose surpluses are principally reinvested for that purpose (social objectives) in the business or in the community, rather than being driven by the need to maximise profit for shareholders and owners' (2002, p7). These organisations are often registered charities, voluntary groups and social enterprises. It is believed that non-profit making organisations will have fewer incentives to drive down costs and will be more 'nimble' in responding to client needs. At the time Allen et al's evaluation of the CFT pilot programme was carried out (2012) there were very few third sector organisations working in the NHS, and there is therefore little empirical evidence about their impact. In the social care field a study (Hopkins, 2007) compared private, TSO and public sector providers of care, and found that there were few differences between them. TSOs were slightly more likely to be said to have staff who would go beyond their normal role to help clients, and were slightly more likely to be perceived as keeping their promises. Private providers were marginally more likely to provide what clients wanted. A report from the Kings Fund (Addicott, 2011) reports evidence from interviews with directors of social enterprises providing CHS. These were all at an early stage of development. Motivations for making the move into a TSO were split between those who saw it as an opportunity to innovate and those who saw it as a defensive move to protect their services. There was not necessarily greater staff involvement in decision making (although this is claimed as a benefit of the TSO model), but there was some early evidence of greater speed of decision-making. The National Audit Office in 2011 highlighted concerns about what would happen were a TSO providing essential services to encounter financial difficulties, and an international review (Heins et al, 2010) concluded that there is no consistent evidence that TSOs perform better than other organisational forms. Hall and Millar (2011) reviewed the evidence relating to social enterprise models of healthcare and surveyed successful Social Enterprise Investment Fund (SEIF) applicants. They concluded that there is currently insufficient evidence and a lack of research to suggest if these models provide better outcomes for patients or a more integrated service. However, they did find that some SEIF investment leads to the development of services enabling a greater reach out to patients and service users. A literature review by Pollock et al (2007) concluded that there is no 'consistent evidence than non-profits perform better than other ownership forms' (p7)

6.2.3 CHS organisational forms post-Transforming Community Services in England

In practice it proved difficult to shift ownership models of CHS in the ways envisaged by the White Paper (DH, 2009b). An initial 'pilot' programme of Community Foundation Trust (CFT) development was not continued, and, following the election in 2010, the transfer of CHS from PCTs was speeded up, with PCTs instructed to divest themselves of their provider functions by April 2011. As a result, CHS were transferred to a variety of other organisations, with many taken over by local Acute Trusts. No CFTs had been formed by April 2011. In 2013 Spillsbury et al (2013) mapped community nursing provision across England. They found that 14.5% had formed a standalone Community Trust, 14.5% had set up as a TSO, 43% had integrated with a local acute provider and 22% had integrated with a local mental health provider. Two PCTs had accredited private sector providers, and 3 were yet to finalise the organisational form their services would take. Some other smaller CHS such as incontinence services were transferred to

the ownership of whichever local providers were able to give them a home. The outcomes of these changes in ownership model are not yet evident.

6.3 Evidence relating to contracting and payment models

A recent Kings Fund report (Edwards, 2014) highlights the complex and diverse nature of CHS and their relative neglect by commissioners. There is relatively little empirical evidence available in this area. There are some anecdotal case studies focused upon models of integration of PC and CHS, but published accounts rarely specify funding models. It is therefore not possible to undertake a comparative analysis of funding mechanisms to identify those which are most successful, nor can it be ascertained if the payment model used contributes to successful integration of services either vertically or horizontally.

6.3.1 Problems with current models

From the late 1990s/early 2000s, CHS were provided by Primary Care Trusts (PCTs) under a block funding formula. When activity-based funding was introduced elsewhere in the NHS with the development of the Payment by Results (PbR) system in 2003/2004 (DH, 2002), CHS continued to be provided under block contracts, whereby providers received a fixed amount of money for providing care for a defined population. Such contracts rarely specify the scope or the volume of services to be provided. There is general agreement that such payment systems are not ideal, with the Kings Fund report (Edwards, 2014) arguing that block contracts tend to 'lock in' historical commissioning patterns, and a report by management consultants Price Waterhouse Cooper (PwC) (2012) claiming that block contracts fail to incentivise quality or give providers any incentive to really understand the costs of providing their services. Policy-makers have agreed, with the development of different funding models being an important priority since the publication of the 2006 White Paper, 'Our health, our care, our say' (DH 2006). The Darzi report (DH, 2008) indicated a need to move away from block payments for community services commencing from 2009/10, whilst the 2008 White Paper 'Transforming Community Services: Currency and Pricing Options for Community Services (2008c)' argued that better currencies and pricing would enable commissioners to incentivise 'improvements in quality and value' (p4) and called for the move towards activity-based pricing. However, others (Allen, Pestoulas and Ritchie, 2011) have argued that block contracts may help contain costs in the face of rising activity. The White Paper Equity and Excellence: Liberating the NHS (2010) suggested that reducing barriers to entry by new suppliers and accelerating the development of tariffs and currencies for community services would enable a significant transformation of these services, in particular by encouraging the development of new systems to incentivise and reward quality. However, in spite of these repeated expressions of intent from policy makers, the goal has remained elusive, with a recent study by Monitor (2013) finding that most CHS contracts remain on a block basis.

A review of aspirant Community Foundation Trusts (Bhalla, 2012) provides some possible explanations for the slow development of new payment systems, highlighting the following issues:

- Financial data in community providers is unreliable
- Baseline historic costing of community services was artificially low, with no adjustment for variations in case mix

- The difficulty in standardising the definition of community services, with associated significant variations in costs as providers have historically defined their care programmes in different ways

Trusts included in the review were hoping to move to a 'mixed-activity and programme budget' (p6) arrangement with their local commissioners, but viewed the development of local tariffs a challenge predominately for the reasons outlined above. Respondents suggested that the national contract needs refining to allow for the complexities and specifics of community services, and that providers should be allowed flexibility in delivering services in the most innovative and effective way.

PWC (2012) add that lack of data about activity and costs is a major challenge for currency and pricing development, with a significant lack of consistency in data collection, usage and storage. CHS IT systems are not currently capable of supporting the robust analysis of service activity that would be required for activity-based payment systems. The NHS Confederation (2013) further agree that the lack of data is an inhibiting factor in the development of a suitable payment system and suggest that developing quality data systems and therefore new payment mechanisms will take several years. They also advocate that payment options should not focus on input and process but on outcomes and pathways (i.e. payments for a bundle of services covering a whole episode or whole patient care pathway (Monitor and NHSE, 2013). To this end the Aspirant Community Foundation Trust Network (Lintern, 2014) along with Monitor, NHS England, and the Care Quality Commission (CQC) plan to work on developing a tariff based payment system, outcomes based activity measures and quality indicators for CHS during 2014.

As interest in the greater integration of services has developed, the focus of commentary in this area has also shifted away from a focus on pricing and contracting towards interest in developing a system which allows the sharing of risk and responsibility. The new Chief Executive of NHS England. Simon Stevens (West, 2014) argued that: "We're going to have to find new ways of blending funding streams in order to expand primary and community health services, and do so for defined populations in particular geographies." Many CHS providers themselves are keen to move away from block contracts, with the Community Health Services Forum (2012) suggesting that CHS providers are concerned that, in an era of financial austerity, block contracts leave them exposed to having to make 'greater budget reductions' (p4) than those providers on tariff payments.

An examination by Gleave (2009 - Health Services Management Centre) into what works for transforming community services, suggests that integration of services is dependent upon 'balancing risks and aligning incentives' (p8). By focusing on minimising their own financial risks, rather than aligning rewards and risks with others, Gleave (2009) argues that organisations are disinclined to innovate across organisational boundaries. Ham (2009) suggests however, that PbR is not an appropriate reward mechanism to facilitate cross service working such that it perpetuates organisations to look out for their own interests. He advocates that providers should be incentivised to collaborate across whole care pathways through some form of bundled payments, rather than paid for individual episodes of care.

Addicott and Ham (2014) also argue that block contracts discourage innovation and joined-up working. They extend the argument for alignment of payment models suggesting that differing models between acute services, social services and CHS continues to divide services and discourage collaboration, for example; the acute system encourages activity through PbR whereas the CHS block contract does not. Addicott and Ham (2014) also suggest that models should be aligned to a population based perspective for both commissioners and providers and propose population-based capitated contracts (rather than activity based) which they envisage would be focused on outcomes such as population health, continuity of, and access to, care whilst also concentrating on pro-active care. The population being defined as the combined registered practice lists of patients of federated general practices. Ham (2010) further offer that for federations to function effectively, a population coverage of around 25,000 to 100,000 people is required. Whilst the report suggests financial reward or penalties for (un)delivered outcomes, specifics will require time to evolve and are context dependent. These issues are examined further in a companion review carried out by PRUComm [Checkland et al, 2013]

6.3.2 Is there any evidence that any particular payment models contribute to desirable service outcomes?

As noted in the previous section, commentators are advocating models based on outcomes based commissioning and ‘bundled’ payment mechanisms for CHS. Kerslake (2007) in a report for the DH highlights this, but points to the lack of UK examples of outcome based contracting upon which to draw, suggesting ‘the suspicion is that this may be more difficult to deliver than to describe.’ (p1)

Appleby et al (2012) in a report on the future of PbR for the King’s Fund, argue that models which incentivise providers through pay-for-performance, based on whole pathways of care, may be best to achieve improvements in services and reduced costs. Drawing on the work of Hussey et al (2011), Mechanic (2011) and Sood et al (2011), Appleby et al (2012) found that ‘bundled’ payment mechanisms used in the US and Holland based on whole-system care (pathways of care) or episode of care for certain conditions are effective in stimulating ‘better co-ordination of care, improved the usefulness of the quality data collected, and improved clinical engagement and relationships between payers and providers’ (p26). However, there are certain complexities involved in developing bundled payment models in the UK outlined Appleby et al’s report, in particular the lack of data building blocks for assessing and costing of care provided by community health services on which any bundled payment mechanism would be based.

Some commentators are suggesting that the so-called ‘Year of Care’ (YoC) programme for improving care for people with long-term conditions (LTCs) may have some merit. This is a new model which is being developed to provide more personalised ‘pathways’ of care with a strong focus on need, care planning and collaboration of services at the individual level (DH, 2012). The emphasis is on providers to focus on joint delivery of a year’s worth of care’ rather than for episodes of care, which is supported by ‘strong’ risk sharing arrangements between providers and commissioners (DH, 2012). Benefits are purported to promote clinical effectiveness and efficiencies of organising care with different healthcare providers across the pathway as whole, including reducing re-admissions and improved patient outcomes

(Monitor/NHSE, 2013). This is questioned by Roland and Abel (2012) who note that evidence to this effect is lacking.

Evidence from the US and the Netherlands where YoC bundled payments have been trialled, highlight many implementation challenges (Appleby et al 2012). Amongst them is the time taken to define care bundles and what should be included and what not. Appleby et al (2012) conclude from the Dutch experience that, unlike the larger commissioning structure in the Netherlands, the small and fragmented nature of NHS commissioners make it hard for them to bear risk or have little ability to use scale. Appleby et al (2012) in their detailed report of YoC packages, further advocate from these experiences that a mixed, flexible payment method model would be best, with activity payment models and bundled care running alongside one another until such time that providers are able 'to move to a risk-adjusted capitated payment model' (p26) for a defined population.

A report on the evidence from a pilot project of the YoC model in the UK, with 3 geographically diverse PCTs and 12 health communities using diabetes as an exemplar, suggests that they achieved better community support services, improved care planning and IT systems to link them (Year of Care, 2011). However, the report states that linking all three components of the model was not achieved in the pilot sites. Benefits were reported by both patients and professionals in terms of improved experiences and better teamwork for example, with one of the pilot sites reporting cost reductions in their improvement plans for diabetes care planning. The development of the YoC tariff was pivotal to the success of the model and was based on financial incentives to encourage high quality care for patients using a 'risk adjusted capitation budget, which aims to support improved outcomes and a dedicated "budget" based on a person's needs' (DH, 2012). The YoC model is currently being piloted by 7 early implementer sites which will be completed in 2014 (Matthews and Day, 2013).

One new approach that is being advocated in order to foster coordination of care across several providers is 'alliance contracts' or the 'prime contractor model'. The idea is for groups of providers to enter into linked contracts (or a single main or 'head' contract with subcontracts) with a commissioner in respect of a defined group of patients. The providers are incentivised to cooperate as they share financial risk. These contracts may include an element of payment related to outcomes of care for patients. This is an approach that was first developed in the oil industry, in which groups of providers are 'contracted' together to provide a service. The contract is judged against outcomes, with providers in the group sharing dividends if outcomes are achieved, but also sharing losses if they are not.

It is claimed that such arrangements will deliver better integration and improved outcomes (Stanton et al 2013), but they have not yet been tested in UK healthcare and there is as yet no evidence to back up these claims.

Accountable Care Organisations (ACOs) in the US are another alliance or networked model of healthcare configuration which report having the potential to achieve collaborative care,

quality improvements and cost reductions. Based on a model that ‘links provider reimbursements to measures of quality service delivery’ (Oliver-Baker et al, 2013, p53), ACOs are accountable for achieving quality outcomes in delivering care for a defined population within a given budget (Shortell et al, 2014). Whilst there are a variety of different models of ACO’s, generally they consist of a group of providers who take collective responsibility for providing all care through a contractual agreement with a commissioner, with current population numbers served being between 5,000 and 50,000 (Shortell et al, 2014). Evidence from 32 pioneer ACOs in the USA is mixed. Results suggest that whilst all are meeting quality targets, and 25 had lower readmission rates compared to the Medicare benchmark rate, 14 had generated losses for Medicare and 7 had increased costs significant to owe Medicare. However, evidence shows that a longer running ACO such as AQC Blue Cross Blue Shield (Shortell et al, 2014, p5) which has a global budget combined with ‘pay-for-performance incentives linking quality and costs targets’ (p5), improved savings and quality of care for selected chronic care management measures. Shortell et al (2014) however question the sustainability of quality improvements and cost containments past the initial start-up years where easy gains occur.

6.3.3 Summary

There are increasing calls for services to be commissioned on the basis of outcomes in order to move beyond the block payments dilemma and improve quality of services. Achieving this will be difficult given the lack of data available on the services that CHS provide. Reports also suggest that there is no quick fix and that implementing such payment systems in a complex and fragmented service will take time.

Common to most of these models is the sharing of financial and service risk. Smith et al (2013b) suggest that the aim of ‘crafting’ commissioning that ensures providers are incentivised to deliver high quality, well co-ordinated care, is to avoid the ‘risk of monopoly of provision that compromises choice’ (p17). There is also the question of the applicability of using examples from US managed care organisations to the NHS funding model.

7 Discussion

This evidence review has addressed the following question:

What factors should be taken into account in planning for the greater integration of primary and community care services in order to increase the scope of services provided outside hospitals?

Overall, evidence is limited, in part due to the lack of clear definitions and a significant lack of available data about non-GP community services. To quote Heaney et al (2006) much of the literature is ‘long on opinion and short of robust studies’ (p1). Policy in this area has tended to be based on opinion rather than evidence, with significant policy changes (such as those arising out of the Cumberlege report) occurring without being piloted or evaluated. Even the term ‘Community Health Services’ is fraught with difficulty, with few good definitions and much local variation in how services are badged or provided. In this report we have focused

largely upon community nursing services, as it is these services which are most likely to carry the load of care for a frail elderly population outside hospital. In terms of ownership, services have been moved from local authority to the NHS, and from in house provision to standalone organisations of various kinds, with the most recent focus moving towards models of integration across primary, community and social care.

We have examined available evidence at the micro, meso and macro level. At the micro level it is clear that enabling effective teamworking across disciplinary boundaries depends most upon effective communication. Shared IT systems can facilitate this, as can co-location of teams, although neither of these solutions provides a panacea. At the meso-level, we examined in particular the evidence relating to population coverage and organisational models of services such as federations and multi-service clinics. Good quality evidence in this area is lacking, with strong opinions dominating debate. Advocates of particular models (eg federated GP practices) have produced compelling 'case studies' in support of their solution, but there has been no robust evaluation that includes measures of cost effectiveness. A model which groups GP practices together to provide care for a defined geographical population alongside a team of community nursing colleagues covering the same population would seem to be an attractive option which mitigates some of the disadvantages of existing service models, but there is as yet no good evidence about the impact of such a model. Indeed, the evaluation of the London 'polysystems' experiment (Peckham et al, 2011) would suggest that developing new service models such as this requires local buy in and found that in reality there was little development of community nursing services in the polysystems studied.

At the macro level, the ownership, commissioning, contracting and financing of community services remain vexed questions. There is no good evidence that one ownership model is better than any other, with each type of ownership generating potentially different incentives. The micro-level message as to the importance of communication would suggest that encouraging diversity in provision (at least for general nursing services) is not necessarily a sensible policy goal. There has been a strong policy push to develop better activity and pricing models, but this has proved very difficult to achieve, in part due to the difficulty of defining the content of community nursing and other care services and a resulting paucity of good activity data. It could be argued that the goal of providing holistic, person-centred care at home in order to avoid hospital admission makes tariff setting complicated, as the care that is required will necessarily be highly individualised and diverse in content. This difficulty in 'commodifying' (Harrison,2009) community services has led to increasing interest in the idea of what is called 'commissioning for outcomes' and bundling together payments for the care of particular populations over time. There is some emerging evidence about such models of care finance and provision which may be promising, with some hints from experience in the US that the key to success might lie in a slow and emergent implementation process which combines a bottom up approach with careful formative evaluation, allowing schemes to adapt to meet challenges as they go (Bardsley et al 2013). The current 'Integration Pioneers' under development in England will undergo such an evaluation, but will be subject to the usual difficulties associated with defining and measuring community service activity. There is growing enthusiasm for a range of financing models known as 'alliance contracting' and 'prime provider models', but these have not yet been tested in the UK health care setting. Finally, probably because of the

difficulties associated with understanding and measuring activity, little is known about the ideal staffing model in this area, either in terms of skill mix or numbers per head of population. One thing, however, would seem to be clear: caring for more patients in the community will require significantly more staff, and it is unknown whether there will be overall cost savings if the anticipated shift in care is achieved.

8 Conclusion

In conducting the review it is apparent that research articles, institutional reports and journalistic opinion pieces are re-iterating the same rhetoric regarding the greater utilisation of CHS in Primary Care. It is evident from the available literature that the direction of travel is agreed upon but that little is being done to establish what this means in tangible terms. The research is disparate and lacking in cohesiveness, mirroring the fragmented nature of the services. Lack of usable data about community service activity and outcomes is a significant problem. Our conclusions from this literature review are as follows:

- Good multidisciplinary team working depends crucially on communication. Initiatives to improve community-based care should be allowed to develop from the bottom up, building upon successful local collaborations, rather than imposing a model from above
- Aligning the populations covered by different services may be facilitative. This may be achieved by the local development of models of collaboration based around federations of practices working with community teams, but such models will need careful evaluation to identify the important ingredients for success
- There is no good evidence that any particular ownership models (eg TSO, public sector or private provider) are better than others. There is also no good evidence about the impact on service provision of ownership by different types of provider (eg acute providers, mental health providers or standalone services). Fragmentation of providers may make good service provision more difficult, as it inhibits communication.
- The lack of data about community service activity is a significant problem. In particular, this makes it very difficult to know what services actually cost, and prevents the development of clear guidance about the staffing levels required to provide services for a given population.
- There is no available evidence about the cost-effectiveness of models of community services.

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APPENDIX 1 – Search Details – Terms and Keywords

Micro Section

Literature Reviews included in Micro Section:

Authors	Date	Country	No.of Studies
Richards A., Carley, J., Jenkins-Clarke, S., and Richards, D.A.	2000	UK	Not Stated
McCallin, A.	2001	New Zealand	Not Stated
Cameron, A., and Lart, R.	2003	UK	32
Lemieux-Charles, L. and McGuire, W.L.	2006	Canada	33
Xyrichis, A. and Lowton, K.	2008	UK	10
Belanger, E., and Rodriguez, C.	2008	Canada	19
Maslin-Prothero, S.E., and Bennion, A.E.	2010	UK	18
Blackmore, G., and Persaud, D.	2012	Canada	Not stated
Smith, T., Harrop, D., Enderby, P., and Fowler-Davis, S.	2013	UK	18
Cameron, A., Lart, R., Bostock, L., and Coomber, C.	2012	UK	46
Lanzoni, G., and Schlindwein Meirelles, B.H.	2012	Brazil	14
Nancarrow, S.A., Booth, A., Ariss, S., Smith, T., Enderby, P., and Roots, A.	2013	Australia	101
Nicholson, C., Jackson, C., and Marley., J.	2013	Australia	21

D'Amour, D., Ferrada-Videla, M., San Martin Rodriguez, L., and Beaulieu, M.D.	2005	Canada	17 These report on the same review but focus on differing concepts
San Martin-Rodriguez, L., Beaulieu, M-D., D'Armour, D., and Ferrada-Videla, M.	2005	Canada	10

- * = any word including these characters
 CHS = Community Health Services

MICRO Level

Inclusion criteria for review of reviews:

- a Must be good quality literature reviews (systematic or otherwise) which have examined existing studies which evaluate or describe inter-disciplinary team work in healthcare organisations - preferably primary care.
- b Reviews must examine/evaluate factors related to team effectiveness
- c Articles must examine/evaluate factors related to team effectiveness and patient outcomes
- d Articles not limited to UK - include international evidence where appropriate
- e Keywords: review, collaboration, partnership working, multi-disciplinary, inter-disciplinary, inter-professional team work(ing), primary healthcare team (esp primary); team effectiveness, outcomes

Search terms

	Title	Abstract	Phrase	(Google Scholar, Google and John Rylands Library)
1 Primary healthcare team(s)	✓	✓	✓	
2 What fosters or prevents interprofessional team working			✓	
3 DN and GP collaboration			✓	
4 Multi-disciplinary teams 'and' primary or healthcare	✓	✓	✓	
5 Multi-disciplinary teams 'and' primary care	✓	✓		
6 Inter-professional teamwork 'and' primary care	✓	✓	✓	
7 multi-disciplinary 'or' interdisciplinary teams 'or' team working 'and' healthcare	✓	✓		
8 DN 'and' GP interaction	✓	✓		
9 primary healthcare team 'and' effectiveness	✓	✓	✓	
10 review 'and' primary healthcare 'and' team	✓	✓		
11 teamwork 'and' primary care 'and' effectiveness	✓	✓		
12 review 'and' effective 'and' primary healthcare team	✓	✓		
13 nurs* 'and' general practitioner interaction	✓	✓		
14 outcomes 'and' primary healthcare teams	✓	✓	✓	
15 patient outcomes 'and' primary care teams	✓	✓		
16 healthcare team effectiveness 'and' outcomes	✓	✓		
17 Integrating community health services and primary care			✓	King's Fund Reports etc

Article references were also snowballed and citing articles were also pursued which yielded further articles/references.

MESO Level

Inclusion criteria for literature:

- a Articles and/or reviews must explore the influence of colocation of community health services and primary care on teamworking
- b Articles which evidence arguments for either a geographical or practice base location for community nursing
- c Reviews which explore differing organisational forms for community health services and the effect on patient care and care outcomes
- d Articles relating to the historical formation of CHS and primary care including policy changes
- e Articles not limited to UK - include international evidence where appropriate
- f Keywords: community health services, district nurs(ing), community nurs(ing), colocation, GP practice list, geographical, healthcentres, population, federating, Cumberlege, polyclinics,

18	The future of community nursing in the UK			✓
19	Cumberlege			✓
20	History of district nursing			✓
21	History of community health services			✓
22	Why Transforming Community Services programme?			✓
23	Transforming Community Services evidence			✓
24	Transforming community services	✓	✓	✓
25	Community nursing 'and' primary care	✓	✓	
26	Community nursing 'and' primary care colocation	✓	✓	
27	Community nurs* 'or' disrict nurs* and colocation	✓	✓	
28	Neighbourhood nursing model	✓	✓	
29	Neighbourhood nursing model benefits			✓
30	Why neighbourhood nursing model			✓
31	Why geographical versus registered list basis for CHS care			✓
32	Community health services based in GP practice	✓	✓	✓
33	Community health services and general practice	✓	✓	✓
34	Community nurses based in GP practice	✓	✓	
35	District nurse 'and' GP practice reviews	✓	✓	
36	Where best to base CHS/community nursing			✓
37	Argument for GP practice based community nursing			✓
38	Should GPs manage CHS/community nursing			✓
39	GP commissioning and District nursing			✓
40	District nurse perspective of neighbourhood model			✓
41	District 'or' community 'and' nurse	✓	✓	✓
42	Should GPs and CHS be located together			✓
43	General practice 'and' district nurse	✓	✓	✓
44	Co-location of GP's and District Nurses			✓
45	Colocation of community services	✓	✓	✓
46	Colocation of community services and primary care	✓	✓	✓
47	Coloaction of primary care and community services	✓	✓	✓
48	Colocation of GP and community services	✓	✓	✓
49	Colocation of community health services and general practice	✓	✓	✓
50	Colocation 'and' community health services	✓	✓	
51	Advantage of neighbourhood nursing model			✓
52	Polyclinics	✓	✓	✓
53	Polyclinics in England	✓	✓	✓
54	Walk-in-Centres	✓	✓	✓
55	Accountable care organisations	✓	✓	✓
56	Federated model primary care	✓	✓	✓
57	Community Trusts	✓	✓	✓
58	Health Centre	✓	✓	✓
59	Practice size and patient outcomes	✓	✓	✓
60	Practice size and quality of care	✓	✓	✓
61	Organisational structure and outcome of care	✓	✓	✓
62	Community health services	✓	✓	✓
63	What is best model/evidence for different model of where CHS located			✓
64	Community health services 'and' location	✓	✓	
65	Community health services 'and' practice list	✓	✓	
66	Community health services 'and' district nurs*	✓	✓	
67	Community health services nurs*	✓	✓	
68	General practice 'and' registered list	✓	✓	
69	General practice 'and' population	✓	✓	
70	Community nurs* 'or' disrict nurs* and practice list	✓	✓	
71	Community nurs* 'or' disrict nurs* and population	✓	✓	
72	District nurs* 'or' community nurs* 'and' attachment	✓	✓	
73	District nurs* 'or' community nurs* 'and' zoning	✓	✓	
74	Models of Community Health Services	✓	✓	✓

Article references were also snowballed and citing articles were also pursued

MACRO Level

Inclusion criteria for literature:

- a Articles which examine current status of commissioning of community health services (what is known about commissioning of CHS)
- b Articles which examine historical status of commissioning of community health services
- c Articles which explore ownership structures of CHS and Primary Care and effect on service outcomes
- d Reviews/articles which provide evidence for CHS payment models and influence on service outcomes
- e Articles not limited to UK - include international evidence especially from US
- f Keywords: Transforming Community Services, commissioning, payment models

75	Transforming Community Services programme			✓
76	Transforming Community Services 'and' commissioning	✓	✓	✓
77	Evaluation of Transforming Community Services programme	✓	✓	✓
78	Commissioning 'and' community services 'or' community health services	✓	✓	✓
79	History of commissioning community health services			✓
80	How are community services commissioned			✓
81	Payment models for community health services			✓
82	How were CHS commissioned under PCTs?			✓
83	Evaluation of community foundation trusts	✓	✓	✓
84	Payment by Results healthcare			✓
85	Outcomes based commissioning community services			✓
86	Which funding mechanism best for CHS?			✓
87	Alternative Care Organisations			✓
88	Medical Home Models			✓
89	Health Maintenance Organisations			✓
90	Commissioning social health enterprises			✓
91	Social Enterprises and community health services			✓
92	Evaluation of Evercare Model	✓	✓	✓
93	Polyclinic 'or' polystystem 'or' healthcentre	✓	✓	✓
94	Primary care led 'and' CHS	✓	✓	✓
95	Primary care 'and' community serv*	✓	✓	
96	Primary care provider 'and' CHS	✓	✓	
97	Are CHS better when owned by Primary or secondary care?			✓
98	Primary care ownership of CHS	✓	✓	✓
100	Should primary care provide CHS			✓
101	Funding community health services			✓
102	Evaluation of commissioning for community health services	✓	✓	✓
103	Models of commissioning community health services			✓
104	Review 'and' CHS	✓	✓	
105	Community health service models	✓	✓	✓
106	Community health service 'and' model	✓	✓	✓
107	Purchasing community health services			✓
108	Purchasing 'and' community serv*	✓	✓	✓
109	Commissioning 'and' community health services	✓	✓	
110	Commissioning 'and' community health serv* 'or' community serv*	✓	✓	
111	Community health serv* 'and' commissioning 'or' purchasing	✓	✓	
112	Commissioning 'or' purchasing 'and' CHS	✓	✓	
113	Community Health Services and delivery of healthcare			✓
114	Comparisons of different models of commissioning community health services			✓
115	Comparisons of different models of community health services ownership			✓
116	Alliance Contracts			✓

Article references were also snowballed and citing articles were also pursued

APPENDIX 2: TEAM CHARACTERISTICS (Colours highlight areas of similarity)

Nancarrow et al (2013) <i>Characteristics of a good interdisciplinary team</i>		Suter et al (2009) <i>Ten key principles for integration</i>	
Themes	Description	Themes	Description
1. Leadership and management	Having a clear leader of the team, with clear direction and management; democratic; shared power; support/supervision; personal development aligned with line management; leader who acts and listens.	I. Comprehensive services across the care continuum	Cooperation between health and social care organisations; access to care continuum with multiple points of access; emphasis on wellness, health promotion and primary care
2. Communication	Individuals with communication skills ensuring that there are appropriate systems to promote communication within the team.	II. Patient focus	Patient-centred philosophy; focusing on patients' needs; patient engagement and participation; population based needs assessment; focus on defined population
3. Personal rewards, training and development	Learning; training and development; training and career development opportunities; incorporates individual rewards and opportunity, morale and motivation.	III. Geographic coverage and rostering	Maximize patient accessibility and minimize duplication of services; Roster: responsibility for identified population; right of patient to choose and exit
4. Appropriate resources and procedures	Structures (for example, team meetings, organizational factors, team members working from the same location). Ensuring that appropriate procedures are in place to uphold the vision of the service (for example, communication systems, appropriate referral criteria and so on).	IV. Standardized care delivery through interprofessional teams	Interprofessional teams across the continuum of care; provider-developed, evidence-based care guidelines and protocols to enforce one standard of care regardless of where patients are treated
5. Appropriate skill mix	Sufficient/appropriate skills, competencies, practitioner mix, balance of personalities; ability to make the most of other team members' backgrounds; having a full complement of staff, timely replacement/cover for empty or absent posts.	V. Performance management	Committed to quality of services, evaluation and continuous care improvement; diagnosis, treatment and care interventions linked to clinical outcomes
6. Climate	Team culture of trust, valuing contributions, nurturing consensus; need to create an inter-professional atmosphere.	VI. Information systems	State of the art information systems to collect, track and report activities Efficient information systems that enhance communication and information flow across the continuum of care
7. Individual characteristics	Knowledge, experience, initiative, knowing strengths and weaknesses, listening skills, reflexive practice; desire to work on the same goals.	VII. Organizational culture and leadership	Organizational support with demonstration of commitment; leaders with vision who are able to instil a strong, cohesive culture
8. Clarity of vision	Having a clear set of values that drive the direction of the service and the care provided. Portraying a uniform and consistent external image.	VIII. Physician integration	Physicians are the gateway to integrated healthcare delivery systems; pivotal in the creation and maintenance of the single-point-of-entry or universal electronic patient record; engage physicians in leading role, participation on Board to promote buy-in
9. Quality and outcomes of care	Patient-centered focus, outcomes and satisfaction, encouraging feedback, capturing and recording evidence of the effectiveness of care and using that as part of a feedback cycle to improve care.	IX. Governance structure	Strong, focused, diverse governance represented by a comprehensive membership from all stakeholder groups; organizational structure that promotes coordination across settings and levels of care
10. Respecting and understanding roles	Sharing power, joint working, autonomy.	X. Financial management	Aligning service funding to ensure equitable funding distribution for different services or levels of services; funding mechanisms must promote interprofessional teamwork and health promotion; sufficient funding to ensure adequate resources for sustainable change

Mickan and Rodgers (2005)***Six Characteristics of Effective Teams***

<i>Team Environment</i>	<i>Team Structure</i>	<i>Team Processes</i>	<i>Individual Contribution</i>
1. Purpose (relevant to patients, collective ownership, shared values)	2. Goals (agree upon and set collaboratively; focus on team task and patient outcomes; agree measures)	3. Leadership (set and maintain structures for making decisions, foster team working)	6. Mutual Respect (open to talents of other's in team; accept diversity of opinions, beliefs of other professionals, develop respect for other's expertise)
		4. Communication (Regular patterns enable idea and information sharing; written records and meeting time important)	
		5. Cohesion (sense of camaraderie/team spirit built through communication and team tasks that foster commitment and trust; increases longevity of team)	