

# What are the key factors for successful multidisciplinary team working?

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As an independent evaluator of seven NHS Vanguard projects, we are sharing key findings relevant to replicating success in integrated health and social care.

The development of multidisciplinary teams (MDTs) has been a key part of community care integration. It is clear that achieving successful integrated care is not straightforward. However, our review of existing evidence<sup>1</sup> identified several common features of successful multidisciplinary teams working in integrated care. Here we shine a spotlight on the factors that support or that hinder multidisciplinary team working.

Please get in touch with our Head of Research, [Dr Stephen Boxford](#), for more detail or to continue the conversation.

## 1 About multidisciplinary team working

### 1.1 What is multidisciplinary team working?

Multidisciplinary and multiagency working involves appropriately utilising knowledge, skills and best practice from multiple disciplines and across service provider boundaries to redefine, re-scope and reframe health and social care delivery issues, and to reach solutions based on an improved collective understanding of complex patient need(s) ([NHS England 2015](#)).

Multidisciplinary teams (MDTs) are therefore teams of professionals from different disciplines in primary, community, social care and mental-health services who work together to plan a patient's care ([Sheffield CCG 2018](#)). There is not one set form of how multi-disciplinary teams must be organised. The level of integration can range from a single professional with continued responsibility for care drawing on other staff or services for input, through to multiple professionals holding shared responsibility for care of the service user, potentially drawing on a much wider pool of services and professionals ([NHS England 2015](#)).

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<sup>1</sup> If you would like details on the methodology used for the literature review, or a full bibliography, please get in touch with the Cordis Bright research team: [info@cordisbright.co.uk](mailto:info@cordisbright.co.uk)

In practice, a range of models for operating MDTs have been used to deliver integrated care, ranging from shared case management models, models based on collaboration between services and fully integrated teams. There are, however, a number of common features identified as present in MDTs that work in the community. These include:

- They are based around general practices that include generalists working alongside specialists.
- There is often a focus on case management and support to provide home-based care rather than secondary care.
- Joint care planning and co-ordinated assessments of care needs.
- Personalised health care plans and programmes.
- Named care co-ordinators who act as navigators and who retain responsibility for patient care and experiences throughout the patient journey.
- Clinical records that are shared across the multi-professional team.

## 1.2 Why multidisciplinary teams?

The NHS Five Year Forward View ([NHSE 2014](#)) highlights that the NHS will need to dissolve the traditional boundaries between primary care, community services and hospitals. This is understood as essential if the NHS is to provide the personalised, integrated and coordinated health services that people need. MDTs are considered to be an inevitable part of this change ([NHSE 2015](#)).

The new models of care established through the NHS Vanguards programme have created new opportunities for developing and expanding MDTs. This is particularly the case for the Multispecialty Community Provider (MCP) and Primary and Acute Care Services (PACS) models ([NHSE 2015](#)).

## 2 Key success factors for multidisciplinary team working

### 2.1 Overview

Our review of the existing evidence identified seven best practice factors associated with effective multidisciplinary team working:

- Patient-centred care
- Physician integration
- Shared goals and objectives
- Shared information technology and access to patient data
- Culture, collaboration and shared decision making processes
- Co-location / geographical integration
- Targeting high risk populations

We explore each of these factors in the following sections.

### 2.2 Key success factors

#### 2.2.1 Patient-centred care

The Nuffield Trust's 2011 overview of integrated care considers service users to be "*the organising principle of integrated care*" ([Shaw et al. 2011](#)). The need for a shared vision encompassing service user perspectives and patient experience is therefore essential for effective multidisciplinary working. Organisations and interventions that fail to place the patient or service user at the centre of their integration efforts are unlikely to succeed. For instance, failing to take into account patients' and carers' choices can lead to major delays in discharging patients from acute care.

Moreover, integrated health systems should be easy for patients to navigate. One way of doing this is to provide a single point of access and a single key worker for patients, which has been shown to improve provision and patient experience ([Cameron et al. 2013](#)). The importance of involving the communities served in the design of services, as well as getting feedback from users, has also been emphasised ([Suter et al. 2009](#); [Cameron et al. 2013](#)).

Finally, the timeliness, flexibility, responsiveness and suitability of services are likely to matter more to service users and carers than the structures and processes adopted by health and social care agencies. Defining outcomes that matter to service users and carers is therefore important even where they differ from policy and practice imperatives ([Cameron et al. 2013](#)). This is an integral part of delivering patient-centred care and therefore must underpin any multidisciplinary working.

### 2.2.2 Physician integration

Suter et al.'s (2009) review of the literature on principles for successful health systems integration concluded that physicians needed to be effectively integrated at all levels of the system and play leadership roles in the design, implementation and operation of an integrated health system. This includes having strong representation and involvement from GPs and consultants on the front line of an MDT. This was found to be a key success factor for ensuring that (i) integrated care works for patients and (ii) more care is delivered away from hospital settings.

However, the review highlights the barriers to integrating physicians into care teams and identifies shared decision making and working in inter-professional teams as significant challenges for doctors.

### 2.2.3 Shared goals and objectives

Successful joint working requires clear, realistic and achievable aims and objectives, understood and accepted by all partners, including patients, families and carers. Several studies found that staff often lack understanding of their precise roles and responsibilities and / or lack a shared appreciation of the goals and objectives of the multidisciplinary team (Goodwin et al 2013; Erens et al. 2016; Madge & Khair 2000). This has led to issues such as non-compliance with referral processes and eligibility criteria, resulting in inappropriate referrals and delays in treatment.

### 2.2.4 Shared information technology and access to patient data

Studies have found that success in MDT working depends on robust information systems for rapid communication between sectors and organisations and within teams, for example by using a single record gathered from shared assessments. To facilitate seamless communication between providers, information must be accessible from anywhere in the health and social care system, at any time (Suter et al. 2009).

Quality information systems also enhance communication capacity and information flow across integrated pathways. As well as management of clinical data, system wide patient registration and scheduling coordination should therefore be available (Suter et al. 2009).

Further, it is also crucial to be able to monitor progress when implementing new ways of working that involve challenging financial targets. This requires IT systems that facilitate effective data management and monitoring of activity and outcomes. The ability to integrate clinical and financial information is viewed as important for monitoring cost-effectiveness and facilitating service planning. Electronic health records support this by linking users, commissioners and providers across the continuum of care and provide relevant information to these stakeholder groups (Suter et al. 2009).

That said, developing and implementing integrated electronic systems is time-consuming, complex and costly. Suter et al.'s review highlights some key barriers to successful information integration: poorly designed electronic information systems; lack of a clear business plan; lack of common standards; inadequate training and incentives for providers to participate; poor technology solutions; and ineffective leadership (Suter et al. 2009).

## 2.2.5 Culture, collaboration and shared decision making processes

Cultural barriers have been shown to be one of the key challenges to integration. For example, studies have highlighted cultural differences between providers of medical services and long-term care services, or between physicians and other professionals as contributing to the failure of integration efforts. The studies also identified an “*acute care mind set*”, which places the hospital at the centre of the integration process, as a key cultural barrier ([University of Birmingham 2010](#); [Hibbard 2004](#)).

To make integrated services work, staff must therefore be able to put the interests of service users before professional cultural norms and be prepared to work in different ways. For example, Robertson’s review of integrated care pilots in England and related evidence found that some projects floundered because of professional protectionism or because of a team’s failure to work in a truly collaborative way ([Robertson 2011](#)).

The importance of effective collaboration was also highlighted by a 2013 Kings Fund report. Following the relative success of the Torbay integrated health and social care programme its evaluator suggested that partnership working was in fact *the* local strategy, rather than one of several strategies ([Ham and Walsh 2013](#)). A long-term commitment to partnership working is also particularly important given the length of time it can take to realise the benefits of new ways of working ([NAO 2017](#)).

Accountability and joint decision-making are equally important for multidisciplinary teams. This is emphasised in a 2014 McKinsey report, *What it takes to make integrated care work* ([Carter et al. 2014](#)). It highlights that, although primary care physicians hold central responsibility for care delivery, all team members are accountable for patient well-being and must therefore have opportunities to voice their opinions about care delivery. Appropriate clinical governance mechanisms and standing agreements must be in place to support this and ensure team members practise at the top of their license.

## 2.2.6 Co-location/geographical integration

Co-location is considered an important element of joint working, encouraging informal contact, increased mutual understanding, quicker and easier communication, expedited problem-solving and facilitating learning across professional boundaries ([Ling et al. 2010](#)).

Based on evaluations of over 30 community-based interventions designed to reduce emergency hospital admissions, the Nuffield Trust has emphasised the importance of “*an organic structure with diverse communication channels that efficiently transfer information across organisational boundaries*” ([Bardsley et al. 2013](#)). Suter et al.’s review of successful integrated healthcare systems also found that co-location of services supported inter-professional collaboration and provider relationships. This was largely because, along with frequent team meetings and the use of electronic information systems, the co-location facilitated effective communication between different providers and/or professionals ([Suter et al. 2009](#)).

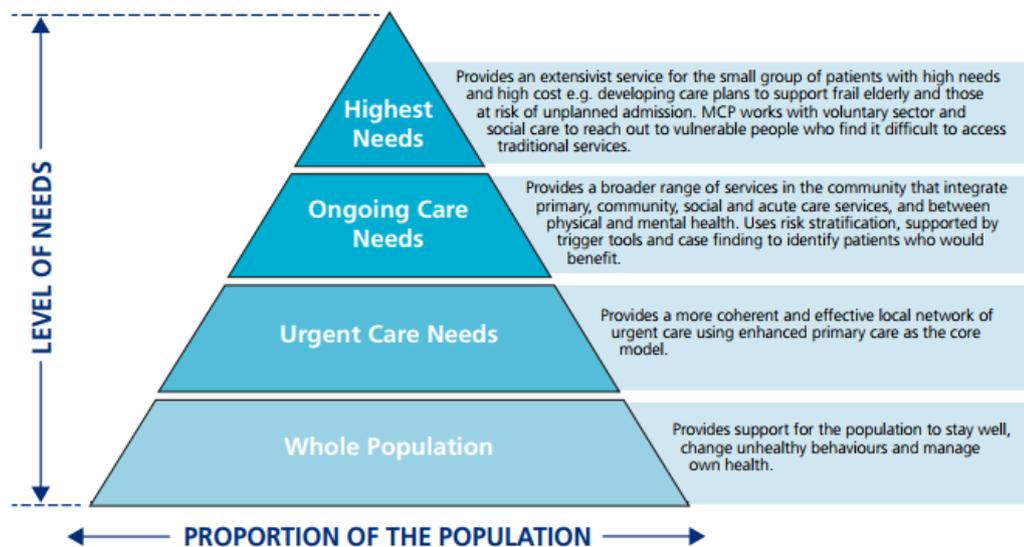
## 2.2.7 Targeting high risk populations

### *About risk stratification and case finding*

Risk stratification is a key element of the Multispecialty Community Provider (MCP) emerging care model. According to the MCP Framework, MCPs should map differential

needs, activity and spend, and use models to predict the health interventions that will be required by sub-populations and individual patients associated with different levels of needs. MCPs should then use these models to target services to specific individuals and sub-population groups, with the aim of achieving specific outcomes ([NHSE 2016](#)). Figure 1 illustrates the MCP risk stratification approach.

Figure 1 - MCP risk stratification approach<sup>2</sup>



The literature reviewed did not identify any definitive consensus regarding the ideal segment of the population to target with MDT working. However, evaluations of integrated care services have consistently shown that case finding individuals with complex conditions for targeted work helps to avoid hospital admissions ([Purdy 2010](#)). The evaluations also suggest that the greatest cost savings opportunity through case finding services is in averted hospital admissions.

Identifying the group of patients with high or complex needs and who are at risk of high-cost unplanned admissions is challenging for several reasons:

- Clinicians do not formally diagnose patients as being high risk or having high needs, which makes systematic case finding and proactive care more difficult. However, it should be noted that this has recently changed for older frail patients, with the introduction of new requirements for routine frailty identification in patients aged 65 and over in the [2017/18 GP contract](#).
- High intensity work and/or preventive care cannot simply be offered to all patients who have frequent use of healthcare services. This is because of the statistical phenomenon of 'regression to the mean' i.e. if we select a statistically extreme event (such as high level of recent health care use), the next event is likely to be less extreme. As such we cannot tell whether the intervention has had an impact or if it was

<sup>2</sup> Source: NHS England MCP Care Model Framework

simply a statistical likelihood that an individual's use of health care services has reduced ([Lewis et al. 2011](#)).

### *Approaches to identifying at-risk populations*

This means that risk of unplanned admissions (or other patterns of healthcare needs/utilisation) instead needs to be predicted, balancing the chance of providing costly interventions to people who would not otherwise have absorbed significant costs (i.e. whose risk was lower than predicted) against the chance of failing to provide interventions to people who go on to absorb significant costs (i.e. whose risk was higher than predicted).

There are several approaches to identifying at-risk members of the population ([Purdy 2010](#)):

- Traditionally the NHS has used clinicians' existing knowledge to identify high risk patients, though this approach is less likely to identify those at risk in the future or those who do not visit their GP ([Goodwin et al. 2012](#)).
- Threshold modelling is a rules-based approach which identifies those who meet a set of criteria as high risk. Although susceptible to regression to the mean, case finding has tended to follow this approach, e.g. identifying patients with repeated emergency admissions as a marker of high risk of future admissions. Other examples include the Emergency Admission Risk Likelihood Index (EARLI), a six-item questionnaire used to identify patients over 75 who are at high risk of admission. EARLI correctly identified more than 50 per cent of those at high or very high risk of emergency admission, and more than 79 per cent of those who were not at risk ([Lyon et al. 2007](#)). However, this method does not take account of changes in health status, unless repeated regularly.
- Risk prediction models provide the benchmark for case finding and have been used successfully by integrated teams, such as the PARR++ tool ([Purdy 2010](#)) or the Electronic Frailty Index ([Clegg et al. 2016](#); [De-Biase et al. 2016](#)). These use patient-based data to predict future likelihood of admission and are thought to be the best available technique for case finding ([Purdy 2010](#)). A McKinsey report suggests that the best integrated care services combine both algorithmic predictive modelling with clinical judgment: i.e. algorithmic models screen patients' records and results are checked for false positives and negatives by a physician ([Carter et al. 2014](#)).

### *Challenges to effective risk stratification*

However, the Nuffield Trust highlight the need for caution upon implementation for several reasons ([Lewis et al. 2011](#)):

- The proportion of high risk people is relatively small. It is therefore essential that identification is accurate to mitigate against the use of high cost interventions among individuals who would not otherwise have absorbed significant costs.
- Although targeting interventions at larger populations at lower risk might offer more opportunity to intervene early, the lower the risk threshold chosen, the cheaper and/or more effective the intervention needs to be in order for the approach to be cost-effective.

- Where improved case finding is combined with improved co-ordination of services, there is a good chance that co-ordinated care will reveal additional unmet need. This is likely to increase rather than reduce total system costs.
- Financial gains made by successfully targeting resources at high risk individuals can be undermined by hospitals subsequently admitting lower-risk individuals. As noted in the Nuffield Trust guide for commissioners on choosing predictive risk models, “*a hospital bed built, is a hospital bed filled*” (Lewis et al. 2011). Risk stratification must therefore be considered as a part of a wider strategy for reducing hospital admissions or saving resources if that is to be its aim.

## 3 Key challenges in multidisciplinary working

### 3.1 Key challenges

Our review also identified a range of factors that can make it more challenging to successfully operate an effective multidisciplinary team. These key barriers are:

- **Time:** Service leaders and policy makers are often keen to see changes at scale and pace. However, as noted in the National Audit Office report on health and social care integration, integrated care often takes at least five years to deliver on the planned objectives and become self-sustaining (NAO 2017). If projects are not seen to deliver immediate financial benefits, they may risk being deemed unsuccessful and abandoned. In particular, building effective relationships, developing a culture of collaboration, and implementing the necessary information systems and data sharing procedures for effective multidisciplinary teamwork can require significant time investments.
- **Misaligned performance indicators and financial incentives:** Financial savings from integrated care projects are typically realised in the acute sector, while most services provided are based in primary and social care. Evaluation of the English integrated care pilots found that reluctance to shift resources across the system was a key barrier to integration. Co-ordinated service provision may reveal unmet needs and may be targeted at very small portions of the population. As such, economic objectives and improved quality of service provision targets may not be well aligned.
- **Reluctance to learn from elsewhere:** There is a considerable body of evidence on what works in integrated care, and independent organisations such as the Nuffield Trust, King’s Fund and Health Foundation have collated much of this into accessible documents for practitioners. It is important for projects to be able to learn from what has happened elsewhere and to introduce continuous evaluation into their work to ensure that formative learning also happens.