



## PRACTICE

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## How to improve care across boundaries



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Charles Coughlan *academic foundation year 2 doctor*<sup>1</sup>, Nishma Manek *GP registrar*<sup>2</sup>, Yasmin Razak *GP principal*<sup>3</sup>, Robert E Klaber *consultant paediatrician 1/and deputy medical director*<sup>1</sup>

<sup>1</sup>Imperial College Healthcare NHS Trust, London, UK; <sup>2</sup>Cambridge, UK; <sup>3</sup>Golborne Medical Centre, London, UK

## What you need to know

- Integrated care aims to improve coordination and continuity of care for patients across organisational boundaries
- There are many different approaches to improving care across boundaries
- Improving care calls for effective and accountable leadership, agreement on a shared vision of improvement, and sustained patient involvement

Integrated care is a healthcare approach focused around the patient perspective, which aims to promote better coordination and continuity of care across organisational boundaries.<sup>1</sup> Integrated care can improve patient experience<sup>2</sup> and reduce duplication.<sup>3</sup> However, structural and cultural differences between physical and mental health services and across the primary and secondary care divide can impede its delivery. Perverse financial incentives and outdated expectations of doctor and patient roles are further barriers to improving care across boundaries.<sup>4</sup> Changes in service commissioning and organisational culture may promote integrated care, but its delivery ultimately depends on the skills, behaviour, and engagement of healthcare workers.

This article will explore the rationale and evidence base for integrated care and highlight salient examples of quality improvement (QI) across organisational boundaries in the UK and beyond. We aim to provide clinicians with a practical guide to implementing locally relevant, sustainable, and patient-centred change across boundaries.

## Why is it important to improve care across boundaries?

The consequences of ill health extend beyond physical symptoms. Disease can affect an individual's mental health, independence and family life. Patients want to receive responsive and holistic care from a trusted professional, in the

right place and at the right time. Siloed and fragmented health systems encourage professionals to treat clinical problems in isolation; patients' wider health and social and spiritual needs may remain unmet. Integrated care moves beyond reductive and compartmentalised approaches towards cross-boundary, coordinated, and person-centred care.

In the UK, many primary and secondary care organisations are working at maximum capacity. Finding new ways of working that bridge traditional divides can improve patient experience without overburdening professionals. Clinicians can learn new skills from their colleagues, and, by engaging in genuine co-production, discover what really matters to patients and carers. This is especially pertinent to patients living with long term conditions, who require regular contact with healthcare services.

## What is the evidence for integrated care?

Most integrated care evaluations have been performed in Western European and North American settings.<sup>5</sup> Several thousand studies have been conducted worldwide, and the volume of literature has expanded threefold since 2007.<sup>6</sup> Integrated care models have largely focused on adults with long term conditions, though specialty-specific models have been described.<sup>7</sup> Interventions are often complex and multifaceted. They include the introduction of joint clinics, multidisciplinary team meetings, staff education, and new financial models. Outcomes of interest include patient and staff satisfaction, health and social care resource utilisation and cost.<sup>5</sup>

High quality systematic reviews suggest that integrated care can deliver improvements in patient experience and access to healthcare.<sup>5,8</sup> Evidence for economic benefits and improvements in staff satisfaction is more equivocal.<sup>9</sup>

Correspondence to: C Coughlan [hcoughlan@doctors.org.uk](mailto:hcoughlan@doctors.org.uk)

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Most integrated care studies are small and descriptive and fail to account for the effects of local contextual factors on outcomes.<sup>10</sup> The absence of well matched control groups in many interventional studies has frustrated efforts to ascertain precisely what caused an intervention to succeed or fail, limiting generalisability and spread of best practice.<sup>11</sup> Successful implementation of change across boundaries seems to be context-dependent. Emerging evidence has identified organisational culture, motivation of front line professionals, and funding<sup>12</sup> as key factors influencing the delivery of integrated care.

## What are the challenges and impediments to improving quality across whole systems?

Quality improvement (QI) across boundaries may form part of a wider strategy supporting integration of care at local, regional or national levels, or stem from grassroots initiatives conducted by small clinician and patient networks. These “top-down” and “bottom-up” approaches illustrate that there is no “one size fits all” method to achieve integrated care. None the less, several factors consistently promote (box 1) and impede improvement work.

### Box 1: General principles supporting improvement across whole systems

#### Stakeholder engagement

- Identify and engage stakeholders affected by changes—patients and staff
- Identify and engage people who are central to the success of the project—senior clinicians, managers, and commissioners

#### Agree coordinated strategy

- Develop shared objectives
- Clearly assign professional responsibility for clinical and administrative tasks
- Establish provisional timeframe for interventions, analysis, and feedback

#### Effective and accountable leadership

- Flatten hierarchies to encourage staff feedback during periods of change
- Advocate for patient involvement

#### Maintain staff and patient involvement and momentum

- Inter-professional and patient education
- Building relationships within and between clinical teams
- Training and up-skilling healthcare professionals

#### Meaningful patient engagement

- Involve patients in all stages of QI from design to dissemination
- Measure outcomes that matter to patients
- Assign clear roles and responsibilities and manage expectations

Improving quality across organisational boundaries requires dedicated leadership from clinicians, managers, commissioners, and patients and carers. NHS Improvement estimates that 5% of an organisation's workforce must receive formal training in QI methodology to foster a culture of continuous improvement,<sup>13</sup> but providing time and space for QI is challenging in the current climate.<sup>14</sup>

Working across boundaries calls for cultivation of a shared vision between groups with potentially competing interests. Stakeholders must invest time and effort in building relationships, and larger organisations must convince smaller providers that integrated care will provide mutual benefits rather than one-sided financial returns.<sup>15</sup> Top-down approaches may

necessitate changes in commissioning practices to provide financial incentives for collaboration.<sup>1</sup>

Separate computer systems in primary and secondary care frustrate clinicians' efforts to form a holistic impression of a patient's health needs and institute optimal treatment. Robust information governance frameworks and data sharing agreements are needed to promote confidence in using electronic shared records and other tools.

The patient perspective is central to all integrated care programmes. Where possible, patients should be involved in planning, conducting, and evaluating improvement work, with sufficient support to avoid tokenistic engagement.<sup>16</sup> Efforts must be made to reach vulnerable and disadvantaged patient groups to avoid the unintended consequence of building inequality into integrated care models.<sup>17</sup>

## How to do it well

Clinicians, commissioners, and policymakers working across the health system need to understand which behaviour changes promote integrated care and how best to implement them. They are currently limited by a lack of high quality evidence.

Current evidence suggests that there is no universal method to improve care across boundaries. Strategic and grassroots approaches are not mutually exclusive and can be synergistic in driving change. Commissioning for improvement can remove financial barriers to collaboration, but commissioning alone may be insufficient to generate sustainable change.<sup>18</sup> Patient populations exhibit different behaviours and health beliefs, so we must canvass professionals and patients to identify locally relevant and tractable change ideas. The perspectives of general practitioners (GPs)—a group with substantial social capital<sup>19</sup> and a rounded understanding of patient problems—are therefore invaluable. Professionals must show leadership to build networks and give patients a voice; these skills can be honed through participation in QI forums and formal training programmes.

As those most affected by changes to health systems, patients should be placed at the centre of service redesign. Co-production allows professionals to see and learn from the patient's perspective, but patient involvement will be meaningful and sustainable only if patients are involved from the outset, clear on their responsibilities, and receive support from senior clinicians and managers. Careful thought should be given to involving vulnerable patients or their advocates to avoid exacerbating existing health inequalities.

In our experience, building relationships, maintaining patient involvement, and developing clinical leadership are essential (fig 1).<sup>20</sup> The following examples highlight approaches that clinical teams have taken to address these challenges in the UK and beyond. Table 1 shows a worked example of a QI project across organisational boundaries.

## Building relationships

Connecting Care for Adults (CC4A), a team of hospital specialists based at Imperial College Healthcare NHS Trust, has developed a model that up-skills GPs caring for adults with long term conditions. This grassroots initiative was embedded within an overarching programme that seeks to deliver integrated care across North West London through service commissioning.<sup>18</sup> Specialists and GPs conducted joint virtual registry reviews for patients living with chronic illnesses such as heart failure. Clinicians used a digital shared care record integrating primary, secondary, and social care data from eight London boroughs to create personalised care plans. GPs felt

more confident in supporting their patients; specialists received detailed feedback on their correspondence with primary care; and patients had their care optimised by a specialist physician without attending in person.<sup>21</sup>

The sustained success of this approach rests on the strength of the relationships built between GPs and specialists, rational use of digital tools, and inter-professional feedback and education. **Box 2** contains a patient's account of the impact of this intervention on his experience of living with long term conditions.

#### Box 2: Patient perspective on remote registry reviews for chronic disease

I am fortunate to be under the care of a clinic which has the benefit of virtual specialist support; many of my conditions are long term and require a high level of monitoring and care. My team at the clinic are [now] able to coordinate this so much better...leaving me to lead a healthier life with fewer outpatient appointments. I much prefer this to the standard approach in either the NHS or my private appointments, where it can take many months to find solutions and clearly my health would be at risk of deterioration.

A particular benefit is that I get specialist opinions about my conditions and treatment not only from the specialist consultants, whom I sometimes see privately, but also from the clinic's NHS consultants who see the results of my pathology and other tests and can discuss them with my team at the clinic. I would say that it has improved my relationship with my primary care team, and this can only be a good thing—the patient experience is much improved.

## Patient involvement

As those most affected by QI and clinical transformation projects, patients can and should play a role in their design. Several prominent examples of patient involvement in QI come from the Swedish region of Jönköping, which boasts a dedicated centre for innovation and improvement known as the Qulturum. This provides patients and healthcare professionals with training to enhance the patient voice and incorporate it into QI. Patients are invited to explore their experiences with clinicians at informal coffee mornings and contribute to simulations that seek to redesign clinical pathways around the patient experience.<sup>22</sup>

For example, one group of patients has worked with specialist nurses to develop a new method of dialysis that maximises patient autonomy and increases system capacity in an area with rising demand. Dialysis-dependent patients attending the county's Ryhov Hospital are trained to use and maintain dialysis equipment independently. In the words of Goran Henriks, chief executive of the Qulturum: "[Patients] no longer think of themselves as sick people, but as healthy people with a need for dialysis."<sup>23</sup>

## Leadership

Several organisations now seek to provide clinicians with formal training in leadership and improvement science, while others promote collaboration between QI leaders to hasten the spread of ideas and best practice.

The adoption of "Big Rooms" across the UK represents a paradigm shift in the field of QI. These QI forums, which bring frontline staff together in structured weekly meetings, provide an environment in which QI can thrive. Trained "flow coaches" work with colleagues to develop a systematic plan for improvement of a patient pathway using QI techniques and tools including stakeholder engagement, logic models, and process mapping. Staff use plan-do-study-act (PDSA) cycles to evaluate small tests of change, and clinical data are displayed in statistical process control charts to monitor progress.<sup>24</sup>

The team behind the UK's first Big Room has now established a national Flow Coaching Academy in Sheffield. Frontline staff

from across the UK undertake a 12 month programme that trains them to coach Big Rooms in their workplace. Big Rooms have already produced impressive results, such as a reduction in time to surgery in patients with acute cholecystitis and a reduction in sepsis related mortality among hospital inpatients.<sup>25</sup> The success of this model stems from multidisciplinary team working, strong leadership from coaches and clinicians, and sustained engagement of frontline staff, who can suggest and test locally relevant change ideas.

In primary care, emerging leadership initiatives such as "Next Generation GP" aim to provide trainees with the skills needed to shape the system around them. Trainees participate in regular workshops that empower them to enact change and provide a forum to share leaders' personal stories. This helps them to understand the opportunities and challenges faced by leaders in primary, secondary, and social care.<sup>26</sup> For those with more experience, the Health Foundation has established the Q Community, which aims to connect over 3000 QI leaders across the UK. This initiative allows clinicians to pool resources and expertise and promotes collaboration to extend the scope and reach of improvement work.<sup>27</sup>

## Conclusion

Integrated care aims to improve patient experience by providing more holistic, coordinated, and person-centred care. Improving quality across whole systems requires stakeholder engagement, agreement on a shared vision, clinical leadership, and patient involvement. Policy levers, commissioning, and organisational culture can promote integrated care, but the different health beliefs and behaviours of patient populations dictate that there is no universal effective approach. Ultimately, the delivery of integrated care depends on skilled and motivated frontline professionals with adequate time, space, and support for innovation and improvement.

#### Additional education resources

- NHS Improvement. Improvement Fundamentals. <https://www.england.nhs.uk/sustainableimprovement/improvement-fundamentals/>  
Free online platform offering self directed mini-courses on quality improvement (QI) for health and social care professionals. Registration required
- NHS Leadership Academy. Edward Jenner programme. <https://www.leadershipacademy.nhs.uk/programmes/the-edward-jenner-programme/>  
Free online courses targeted at early career professionals. Completion of Launch and Foundations modules leads to an NHS Leadership Academy Award in Leadership Foundations. Registration required
- Harvard University. Improving global health: focusing on quality and safety. <https://www.edx.org/course/improving-global-health-focusing-on-quality-and-safety>  
Massive open online course developed by Harvard University. Free to enrol and participate; registration fee for final certificate
- Healthcare Quality Improvement Partnership. <https://www.hqip.org.uk/>  
Independent organisation that supports development of QI. Free resources include guides to promoting involvement of patients and junior doctors in clinical audit and improvement work

#### Information source for patients

- The Health Foundation. Quality improvement made simple. <https://www.health.org.uk/publications/quality-improvement-made-simple>  
This accessible guide from the Health Foundation provides an overview of the importance of QI in the NHS and overseas

### Education into practice

- Does your trust or general practice offer training in quality improvement (QI) methodology to staff?
- How can you empower your patient population to become involved in QI?
- What would you like to learn from your colleagues in primary or secondary care?

### How patients were involved in the creation of this article

When planning this article, we asked a parent volunteer with experience of leading community based quality improvement (QI) work in North West London for her views on this topic. She said that sustained support from clinical staff was crucial in driving patient-led improvement efforts; her involvement in QI also allowed her to see the difference she could make to her local community. A second patient provided a written account summarising the benefits he had experienced as a result of improved coordination of care for his long term conditions. He also read through and commented on the final draft of this article.

Contributors: CC conceived the article and wrote the first draft. NM and YR highlighted examples of quality improvement in primary care. NM, YR, and REK critically revised the manuscript for intellectual content. All authors revised subsequent drafts and approved the final version of the manuscript for publication.

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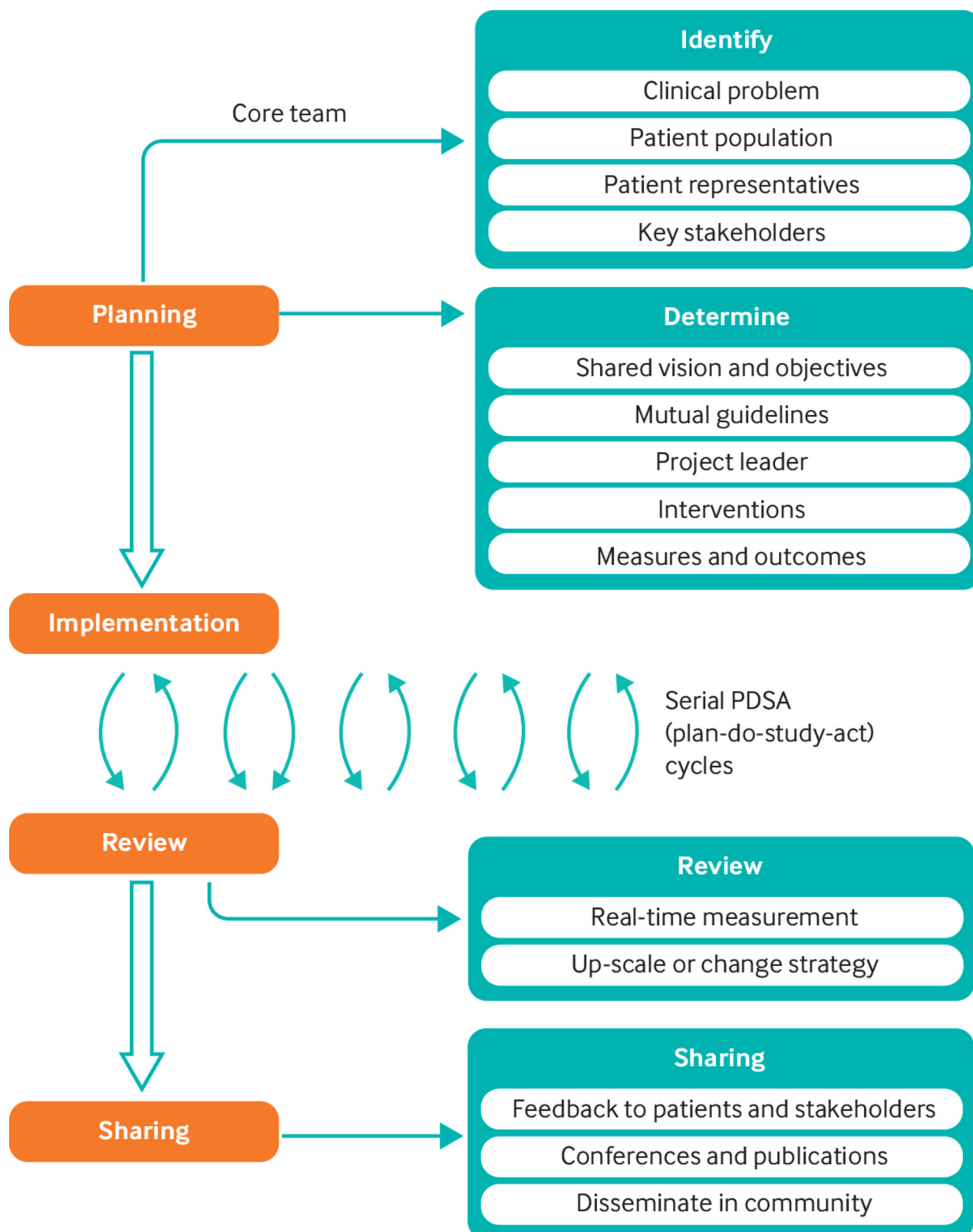


## Table

**Table 1 | Worked example of a project to improve the recognition and management of diabetic peripheral neuropathy in adult patients**

Key stage	Specific example
Clinical problem	Management of diabetic peripheral neuropathy
Patient population	Patients >40 years of age living with type 1 or 2 diabetes and under the care of a single primary care network
Patient representatives	Invite 4-5 patients to participate—ideally from different GP practices and backgrounds and with different disease severity
Key stakeholders	Patients, carers, podiatrists, general practitioners, district nurses, specialist nurses, endocrinologists, orthopaedic and vascular surgeons
Shared vision or objective	Improved recognition, management, and prevention of diabetic peripheral neuropathy in primary and secondary care
Shared guidelines	Mutually acceptable guidelines for referral to secondary care
Nominate project leader	Diabetic specialist nurse, podiatrist, or general practitioner
Plan interventions	Multidisciplinary team meetings to facilitate personalised care planning. Joint clinics with specialist nurses or podiatrists in primary care. Peer mentoring sessions led by patients
Measures that matter to patients and clinicians	Outcome measures—Number of days per month when activity limited by symptoms; hospitalisation; number of amputations Process measures—Attendance at peer mentoring sessions

## Figure



**Fig 1** Stepwise approach to delivering improved care across boundaries. Adapted with permission from Kvamme et al.<sup>20</sup>