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Targeting the ‘right’ patients for integrated care: Stakeholder perspectives from a qualitative study

Jonathan Stokes

Research Associate, Manchester Centre for Health Economics, University of Manchester, Manchester, United Kingdom.

Jonathan.m.stokes@manchester.ac.uk

Lisa Riste

Research Fellow, Centre for Primary Care, University of Manchester, Manchester, United Kingdom.

Sudeh Cheraghi-Sohi

Research Fellow, Centre for Primary Care, University of Manchester, Manchester, United Kingdom.

Corresponding author:

Jonathan Stokes

Research Associate, Manchester Centre for Health Economics, University of Manchester, Manchester, United Kingdom.

Jonathan.m.stokes@manchester.ac.uk

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Abstract

Objective:

To explore the perceptions of relevant stakeholders in terms of targeting the 'right' patients for integrated care.

Methods:

Secondary analysis of qualitative interviews with relevant stakeholders (including programme managers, programme initiators, a representative of the payers, medical and social care professionals, and allied health services staff) from two integrated care sites in England. A thematic analysis was conducted of cross-cutting themes.

Results:

Both sites focused on individualized management of 'high-risk' patients through multidisciplinary team case management. The data-driven approach to targeting patients, recommended in the policy literature, did not align with stakeholders' experience of selecting patients in practice. The 'right' patients were at lower risk than those

recommended by policy, and their complexities were identified as comprising mostly social rather than medical issues.

Conclusions:

These findings raise timely questions about the individualised management approach. They potentially explain why management of high-risk patients has not been found to be effective using quantitative measures, undermining the assumption that this approach will lead to cost savings. There is a need to expand beyond an individually targeted approach to incorporate prevention and to address social issues.

Introduction

Health systems internationally face common sets of challenges, with ageing populations, increasing multimorbidity, and severe pressure on health and care budgets threatening the sustainable delivery of services.¹ ‘Integrated care’, posited as new models of care which integrate services across different providers and sectors (for example, health and social care), is hailed as a potential solution to these challenges.²⁻⁴ In this paper, we set out the policy context for integrated care in England, the study setting. We outline the importance of potential cost savings in this setting and the policy shifts required to achieve cost savings. We use qualitative methods to explore the perceptions of relevant stakeholders in terms of

targeting the 'right' patients for integrated care and discuss the policy implications of our findings.

Background

Policy context

The National Health Service (NHS) in England currently faces a large gap between health care funding and spending, with an estimated deficit of £30 billion a year by 2020/21.³ It is argued that integrated care will simultaneously generate significant health gains alongside improvements in patient satisfaction and cost-effectiveness, a bundle of aspirations known as the 'triple aim'.^{2,5} With its hypothetical potential for cost-saving, integrated care is envisaged as playing a key part in tackling the funding gap. Integration features heavily in the strategic vision outlined in the NHS 'Five year forward view' (FYFV)³ and the resulting exemplar new care models enacted via 'Vanguard' sites.⁶ It is hoped that increased cost-effectiveness, by reducing overall costs, might allow funds to be reallocated to other parts of the system in most financial trouble, such as social care. Better integration, then, may not necessarily lead to overall system savings.⁷

In practice, the dominant application of integrated care in England (and internationally) has been via multidisciplinary team (MDT) case management.¹¹ This involves the identification of 'high-risk' patients – those thought to be at most risk of unplanned hospital care^{8,9} – at the service delivery-level and provision of individually-tailored care to these patients. The evidence for the effectiveness of this approach in terms of the health system's 'triple aim', however, suggests that not all goals are positively or equally met. In particular, compared to usual care, cost is not significantly affected (that is, total cost of care, and utilization of

secondary care services).¹⁰ Self-reported health status may be slightly improved in the short-term, but not in the long-term.¹¹ Patient satisfaction is, however, consistently improved by case management in both the short- and long-term.¹¹

Case management and cost saving: the assumptions

The policy context outlined above highlights the importance placed on the theoretical ability of case management to achieve reductions in costs. The process by which this aim is to be achieved rests on two assumptions.

The first assumption relates to the target group. It is well-recognized that a very small, high-risk segment of the population accounts for the majority of health care costs (that is, 5% of patients are estimated to contribute to up to 50% of spending).¹² Targeting this group of ‘super-utilizers’ has the potential to reduce costs if their utilization of services were to decrease.¹³ It is worth noting, however, that in practice this is an ever-shifting group at an individual-level, with on average a regression to the mean. At least some of these high-cost individuals would return to a lower level of spending without additional long-term intervention; for example, those with a short-term acute episode of high need. Therefore, the potential savings from targeting this group are debatable.¹⁴

The second assumption relates to the mechanisms through which reduced costs may be generated. Generally, it is assumed that better clinical management and increased co-ordination between primary care and social care services can prevent deterioration and emergency admissions and/or can substitute for more costly secondary care services.¹³ This is an intuitive but largely untested assumption. Assuming care needs remain constant, any

savings rely primarily on the difference between the large overheads in secondary care compared to primary care; for example, the costs of additional expensive medical technologies typically found in hospitals, larger premises, and twenty-four hour service delivery.

Aims of this study

As outlined, assumptions that case management will save costs do not appear to be borne out by current evidence. One potential reason that the cost-savings are not being delivered is that the wrong people are being targeted. We aimed to explore the perceptions of relevant stakeholders in terms of targeting the 'right' patients for integrated care, focusing on how patients are being targeted and why.

Methods

This paper draws on the qualitative component of the 'Sustainable intEgrated care modeLs for multi-morbidity: delivery, FinanciNg and pErformance' (SELFIE) project being undertaken by a partnership of European nations.¹⁵ Specifically, the paper draws on qualitative work from the two UK sites in the SELFIE project: 1) Salford (using secondary analysis of transcripts from the Comprehensive Longitudinal Assessment of Salford Integrated Care [CLASSIC] study)¹⁶ and 2) South Somerset (with interviews and transcripts conducted specifically for SELFIE).

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2
3 *Sampling and recruitment*
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5

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7 Salford and South Somerset are both ‘Integrated primary and acute care system’ (PACS)
8
9 Vanguard sites in England. The sites were selected and funded by NHS England to join up
10
11 general practice, hospital, community, and mental health services.⁶
12
13

14
15 The models at both sites aim to shift towards a population health management approach;
16
17 that is, targeting all population ‘risk’ levels in some respects, not only the highest-risk. This
18
19 includes a major emphasis on interventions delivered by MDT case management of high-risk
20
21 patients, as outlined above, but also less targeted interventions aimed at lower-risk patients
22
23 for the purpose of prevention. Both sites began their integration models with the roll-out of
24
25 a range of service delivery interventions (Table 1).
26
27

28
29 Table 1: Interventions in Salford and South Somerset to enhance integration, MDT case
30
31 management interventions outlined in bold
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33

34
35 [insert Table 1]
36
37

38
39 As PACS Vanguard, both sites are also looking to introduce organizational changes to help
40
41 support their service delivery interventions. Both are planning to establish Accountable Care
42
43 Organization (ACO)-inspired changes, with a number of providers coming together (either as
44
45 a fully integrated body, or through alliances/networks) to assume responsibility for the cost
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47 and quality of care for a given population.¹⁷
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51 In this paper, we focus on interviewee views on targeting, and on the needs of the most
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53 complex high-risk patients, that is, we focus on the MDT case management intervention in
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each site. More details of each model can be found in the thick description reports on the SELFIE website.¹⁸

Initially, the two sites set out to target slightly different 'high-risk' patient populations: Salford initially targeted those over the age of 65 (but now expanded to all adults), while South Somerset focused on those with multimorbidity (particularly, those with three or more long-term conditions). Both sites were at slightly different stages of their envisioned integrated care models at the time of this research (as shown in Figure 1 below), but both began with implementation of their MDT case management interventions.

Figure 1: Timeline of integrated care interventions in the two selected sites. Service delivery: MDG = Multi-disciplinary group; CoC = Centre of Contact; CA = Community Assets; CCH = Complex Care Hub; EPC = Enhanced Primary Care. Organizational: ICO = Integrated Care Organization; IP Ltd = formation of a Ltd company of Integrated GP Practices. * = Vanguard status awarded to both sites.

[insert Figure 1]

Data collection

The interviews took place at the early implementation phase at each site, with the roll-out of service delivery waves ongoing, and organizational changes still in the planning stages.

Individual semi-structured interviews were conducted face-to-face with a range of professional stakeholders (including programme managers, programme initiators, a representative of the payers, medical and social care professionals, and allied health services staff) in both sites (total, n = 18).

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3 In Salford, in order to minimize the research burden on the site and to avoid duplication of
4
5 data, the transcripts were a subsample of relevant interviews conducted by researchers,
6
7 including LR as part of the CLASSIC study.¹⁶ JS liaised with the CLASSIC researchers to select
8
9 relevant transcripts and categorized the participants' data in order to identify which of the
10
11 participants would fall within the purposive sampling frame, ensuring 'data fit' (that is, the
12
13 data fit the new questions being asked);¹⁹ namely, those who had significant narratives
14
15 around the introduction and implementation of integrated care covering an array of
16
17 stakeholders. The topic guide focused on questions relating to implementation of the
18
19 model. Ten stakeholder interviews meeting the SELFIE selection criteria were selected from
20
21 those interviewed between November 2014 and October 2015.
22
23
24

25
26
27 South Somerset interviews were conducted (by JS) face-to-face with eight stakeholders in
28
29 August 2016 and complemented the Salford interviews. The topic guide was formulated by
30
31 the SELFIE work package leaders in Austria, and covered a broad range of topics around
32
33 implementation and enactment of the model in practice;¹⁸ it was therefore comparable with
34
35 topics covered in the Salford interviews.
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39 All interviewees provided written informed consent and were reassured that interviews
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41 were confidential and voluntary, and data was anonymized. Ethics approval was granted by
42
43 the NHS Health Research Authority Research Ethics Committee (SELFIE REF: 16/WM/0295;
44
45 CLASSIC REF: 14/NW/0206). For both locations, interviews were audio-recorded and
46
47 transcribed using 'intelligent verbatim' (that is, recorded speech to text, editing out
48
49 pauses/repetition that distract from content) by an external agency. Recordings were re-
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51 checked for accuracy by the authors.
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Data analysis

We analysed the transcripts using thematic analysis.²⁰ Initial familiarization with the data via reading and re-reading of transcripts was followed by initial open coding of the data which led to theme formulation as themes emerged from the data, using Microsoft Word for data management. Each site's data was independently analysed and reported separately.¹⁸ For this paper, however, we pooled the data across both sites and re-analysed the composite dataset with respect to the aims of this study. All authors discussed and reached consensus on the final analysis and presentation of the data.

Results

We identified four main themes emerging from the discussion, relating to 1) the motivation for case management; 2) the 'right' patients as a shifting target; 3) the actual needs of the patients; and, 4) the possible outcomes and scope of the intervention. Below, we discuss each of these in turn and relate these perspectives to the policy context.

Motivations

Overarching motivation narratives amongst stakeholders in both sites appeared to align with the 'triple aim' of the policy. Both sites constructed a number of more specific performance measures based on these aims, using reduced emergency admissions and re-admissions as a proxy for costs. Linked to this, the aim to 'stop people slipping' (who would then require high-cost and intensive hospital care) emerged as a primary motivation, with maintaining these patients' ability to self-manage a goal of both programmes.

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2
3 So the bottom of the triangle [referring to the Kaiser risk pyramid, where the top of
4 the pyramid are a small number at highest risk, with larger numbers at the bottom at
5 lower risk] [...] the key role there is about doing everything we can with the patients
6
7 so that they're activated to manage their own health and they stay in that bottom
8
9 one [...] if they're in the middle part of the triangle then again it's about working a bit
10
11 more intensively with them, because what you don't want them to do is to go up to
12
13 the top part of the triangle. (IP02_02, South Somerset)
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21 *Shifting targets: the 'right' patients*
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24 Across both sites, participants described a gradual shift over time and with experience
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26 gained, moving away from the policy recommendations of focusing on the highest-risk
27
28 patients, and towards a more flexible approach. Both shifts appear to have been bottom-up,
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30 but have occurred through different methods. In Salford, this shift occurred due to
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32 perceived need once the initial formal patient quotas had been filled:
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37 So the way it started out [the managers] wanted everybody with a code of three
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39 [high-risk]. I suppose part of the cynical side of me was, well, we know they're all
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41 okay because they've [already] got all the services involved but I understood that we
42
43 needed to get the care plans done [...] fortunately, we got through ours fairly quickly.
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45 And it's your twos and your ones even [less high-risk], because in the blink of an eye
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47 things change, don't they? (IP09_1, Salford)
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3 In South Somerset, this shift appeared to have been led by the experience of those
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5 professionals interacting with the patients and comparing the initial selection criteria with
6
7 the reality of their 'complex patients'.
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10 [the clinicians] were really specific about [...] three or more comorbidities,
11
12 polypharmacy, high admissions. But then, again, they've had to look at, actually, you
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14 might have somebody that meets the criteria of all of those, but is managing their
15
16 condition really well [...] they might have COPD [alone], and they're coming into ED
17
18 every other week, because they're not managing. So we've had to just be a bit more
19
20 flexible [...] So, you could have 450 patients in the service, tick a box, and say, great,
21
22 but actually, they might not be the right patients, and we might still end up with the
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24 other patients being admitted, so our admission rate hasn't been impacted. (IP07_2,
25
26 South Somerset)
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32 In practice, both sites found selecting 'complex' patients from a purely formal data-driven
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34 approach difficult. Participants identified problems with risk stratification tools based on
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36 hospital data and which emphasises health care utilization. Such patients were described as
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38 well-known to health care services, frequently with little room for doing more to support
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40 reduced utilization (utilization may be necessary, so was not always seen as preventable).
41
42 Additionally, other important 'unobservables' (for example, social circumstances) not
43
44 present in the data were described as having more of an effect on defining patient
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46 complexity/their utilization of secondary care (see also the section on patient needs, below).
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51 [...] what you find is the high-risk people that are identified by these risk stratification
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53 models that are promoted nationally, is that the only data that's easy to count is the
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55 hospital data [...] so the people that were at the top are the people who have most
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support from services, that because they have a lot of support from services they're usually quite well managed, and so therefore they are more reasonably stable.

(IP02_1, Salford)

Due to these insights, there has been a transition to a more fluid, active process of selection via iteration and team consensus. Stakeholders described the relative importance of getting the 'right patients' (that is, those with *unmet* and *actionable* needs), rather than simply quota filling.

Over time, it's become much more refined, really, because we've realized that some people do benefit and some people don't benefit [...] it's not a strict criteria of referral in or not referral in. It's who would best have their needs met by that service. (IP03_2, South Somerset)

So the MDGs started to work to try and find these people [...] because that is ideally what you want an MDG to do, if you see somebody slipping, that you put a little bit extra in to keep everybody afloat for X or Y amount of time longer. (IP02_1, Salford)

Patient needs

The unmet needs of complex patients were described as extending beyond the medical domain. Frequently, medical practitioners felt needs were primarily related to social factors in terms of isolation, poor housing or living arrangements, and other socio-economic issues. Clear pathways were described between these social issues and patients presenting in the

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3 emergency room. Linked to this, mental health needs were highlighted as being particularly
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5 challenging to address, complicated by a lack of effective treatment options.
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8 People get very, very isolated, and when they're very isolated, they're not very
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10 resilient [...] If you're happy as Larry, and you've got loads of social interaction, and
11
12 your family seem to care about you, and you have day-to-day contact with people,
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14 you might have something wrong with you, but you deal with it... Whereas if you
15
16 have nobody crosses your path, and you're as miserable as sin, and it blooming
17
18 hurts. Well, what shall I do - I'll call the doctor, or go to A&E. (IP05_1, Salford)
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23 I think anxiety and depression are huge and I certainly didn't realize how much that
24
25 impacts on a person's health and wellbeing and, you know, some people can have
26
27 three, four long term conditions and can manage quite well, somebody that could
28
29 have anxiety and depression could have one long term condition and it's, you know,
30
31 they don't manage at all. (IP08_2, South Somerset)
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35 Some patient needs were identified around acceptance of a chronic illness that would not
36
37 alleviate, or acceptance of approaching the end of life. While some of these issues were
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39 potentially addressable, this was not the case for all.
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43 [...] you have other patients who are bouncing in and out of hospital. What is quite
44
45 evident is actually they've got a chronic health problem that's deteriorating but
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47 nobody is really having those conversations. They are constantly feeling unwell, they
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49 are constantly feeling they need to be in hospital and of course they never get
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51 better, so they think the hospital has not done it right so they go back in and do it
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again. It's [...] being able to talk through and explain that actually it's a natural progression of the condition and that's where life is now. (IP05_2, South Somerset)

I've got an alcoholic bloke, who refuses to accept he's got an alcohol problem. And he must have had about 75 A&E attendances in the last three years. And we've had multidisciplinary professional meetings [...] It's not made a jot of difference [...] he won't accept he's got problems, and he won't stop drinking. (IP05_1, Salford)

Outcomes and scope

Participants indicated that the stated aims of reducing emergency admissions and costs via case management were unlikely to be achieved, particularly in the short-term, due to the changes occurring in patient selection, as described above. Potential cost savings were seen as longer-term, where models could target lower-risk patients with preventable issues and could work to prevent future admissions. Research participants also emphasized that key intermediate steps that could lead to making savings, such as improving self-management ability, were difficult and time consuming. Additionally, there was some scepticism about the relative cost of acute episodes of hospital care versus long-term intensive community management, with some questioning whether the long-term approach would ever really save money, but recognizing it had other positive outcomes.

Cost-wise, we definitely cost money, everything we're doing is costs, you will see no savings for a long time. But quality wise, I reckon, it's through the roof. (IP04_2, South Somerset)

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3 However, there were also some suggestions for improving the case management
4
5 intervention, in line with observed need. For example, the importance of broadening the
6
7 MDT beyond a medical focus to include professionals from housing and social work was
8
9 well-recognized. Social workers were included in the Salford team, and medical practitioners
10
11 there described learning from them. For example, social workers provided support and
12
13 advice on relocation of patients to appropriate housing to prevent falls and reduce social
14
15 isolation. Particularly in Salford, where the focus was initially on older adults, the medical
16
17 expertise of geriatricians were seen as particularly valuable for rationalizing care, for
18
19 instance to reduce polypharmacy. Relationships developed during MDTs enabled GPs to
20
21 discuss concerns about patients with geriatricians in more depth than occurred by letters
22
23 alone. Likewise, mental health practitioners were highly regarded.
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29 A number of stakeholders also highlighted the importance of a broader organizational focus
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31 on prevention, and pointed to the supporting changes planned to incentivize prevention (for
32
33 example, towards establishing Accountable Care Organizations).²¹ They suggested that such
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35 changes would enable efficiency improvements in the wider system, which in turn would
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37 make the new models of care sustainable.
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41 So I think the model that we're putting in will help because it's facilitating the
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43 services to work differently in specific areas. But the real efficiencies [...] so that's a
44
45 different way of working, but the efficiencies have to come through the Integrated
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47 Care Organization [ACO-type organisation], I believe. (IP02_1, Salford)
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51 Importantly, despite limited impacts on costs, participants did describe some positive
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53 effects of engaging in the MDT integration approach at both sites. For example,
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55 professionals discovered additional social services offered by others within (or known to)
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the MDT that they could refer patients to. There were also examples of clear scope for improving the quality of life of patients through additional support and services. For example, alleviating loneliness through a befriending scheme for older people.

On the other hand, some stakeholders also described some concerns. One interviewee highlighted an alternative to funding case management, a wider-reaching approach provided by community services. The social engagement provided by these services was described as a particularly important preventative measure, particularly in reducing social isolation.

[...] we used to have the [x] Day Centre [...] So you had frail, crumbly people, mixed in with less frail, crumbly people, who just wanted a bit of social entertainment. And that was the most amazing service, and of course, because of the cuts, it closed [...] if you want my absolute, honest opinion - I would much rather all this money that's being spent on this project, was given to social care, to start actually providing social care for patients [...] I actually think that's what makes a difference to patients' lives.

And I don't know whether this is going to. (IP05_1, Salford)

Discussion

Principal findings

Participants' motivations for integrating care aligned with policy in terms of achieving the overarching 'triple aim', including cost savings. However, a shift away from formal policy was evident in both sites in terms of identifying which patients to target, and the methods for doing so. This shift was a result of experience gained by local professionals. The purely

data-driven targeting approach recommended in policy came to be seen as inadequate, as it resulted in the selection of patients already well-known to services whose needs were being met, or whose needs were unresponsive to change. Over time, the sites adopted a more fluid process of selection based on informal consensus among MDT members.

The needs of complex patients were described mostly in terms of their social situations rather than their needs for medical management. The exception was mental health conditions, where treatment options were felt to be limited. Patients' acceptance of deteriorating health was highlighted as another issue, but not always a solvable one. Suggested improvements to the case management interventions were related to these patient needs; for instance, participation of other non-medical staff.

Strengths and weaknesses

This study is based on two very different sites in England facing similar issues, which may add strength to the generalizability of the findings in terms of the commonalities they describe. However, there are limitations: data was collected from each site at different times and not for the precise purpose of answering the questions proposed here. Nevertheless, we sampled a range of stakeholders at each site, and each site was at a similar stage of implementation when interviews were conducted.

Relation to other studies

This study contributes to the published literature on targeting high-risk groups. As a qualitative article, it offers potential explanations for findings in quantitative research that case management generally fails to reduce costs.¹¹ In the view of those implementing these interventions, achieving the goal of reduced costs is unlikely in the short-term as those at

highest risk are not those with addressable unmet needs. Furthermore, the unmet social issues identified are often multifaceted, deeply ingrained and linked to wider social context, and therefore highly resistant to change. However, there is a clear view (from participants in this study, and findings in the wider literature) that there is the potential for quality improvement via increased personalized contact through case management interventions. Hence, we consistently see increasing patient satisfaction with this type of intervention in the literature.^{11, 22, 23}

These qualitative findings complement the work of Wallace and Roland et al.^{24, 25} who have shown, using quantitative data, the flaws in the assumption that individually targeting patients in a high-risk group will save costs: that is, studies have highlighted the extremely small number of potentially avoidable emergency admissions in this group amenable to prevention, and hence the negligible cost savings that are plausible.

Implications for clinicians and policymakers

These findings present clear implications for policymakers in terms of funding of social care and public health, both sectors where budgets have been dramatically reduced in light of austerity decisions in the United Kingdom. If the means of achieving cost savings is to be prevention of medical *and* social needs (and a resulting reduction of demand on services), then broader, population-wide approaches might prove a better use of resources rather than the current focus on selecting specific patients for intensive healthcare services.

Of course, not all ill-health can be prevented, and managing the highest-risk patients will remain important (aside from the economic aim of cost-saving). If such management is carried out via an MDT, our findings in relation to the needs of complex patients have

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2
3 implications for the mix of professionals who might best deliver quality care to these
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5 patients. In essence, MDTs should include those with the capability to address the multiple
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7 unmet social and/or mental health needs many patients face.
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10 Both sites we observed have adapted their case management selection process to try and
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12 focus on *impactability*, that is, identifying the subgroup of patients who will tangibly benefit
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14 from the case management intervention. This may affect health inequalities. For example,
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16 focusing on those patients whose care appears suboptimal may help reduce inequalities,
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18 with suboptimal care more prevalent in deprived areas.^{26, 27} On the other hand, excluding all
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20 of the very highest-risk patients because of a belief that they are less likely to respond to the
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22 intervention may increase health inequalities, as again, risk is associated with deprivation.^{28,}
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Future research

Further research is required to determine the generalizability of this study and its findings to
other models of care that emphasize integration. If case management intervention
continues to be delivered to high-risk patients as a means of increasing quality of care, then
studies should examine the optimal delivery methods for achieving better quality (for
example, how best to select patients, MDT skill-mix, and so forth). There is also a need for
increasing debate on where the limits of the responsibility lie for health systems – for
example, in terms of delivering increased social support. In addition, research is required to
identify where a wider governmental approach is needed in order to construct a society
where an ageing population can be supported in a community where their social needs are
addressed without having their problems over-medicalized. It is promising that a number of
new models of care in England appear to share this long-term vision.⁶

Conclusions

These findings provide evidence about how professionals identify high-risk patients and their health and care needs, conceivably forming the basis for more effective design of future models of care for such patients. However, intensive social support delivered by a highly-paid MDT of medical and other professionals alone is unlikely to lead to cost savings in the short term. There might, however, be other valid objectives for implementing new models of care.³⁰ Local NHS programmes currently face difficulties in moving beyond a focus on high-risk groups, despite additional start-up funding and a national vision to do so. With increasing financial pressure, more work is also needed to design and deliver cost-effective models of care across an ageing and increasingly multimorbid population.

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Under Review

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Figure 1: Timeline of integrated care interventions in the two selected sites. Service delivery: MDG = Multi-disciplinary group; CoC = Centre of Contact; CA = Community Assets; CCH = Complex Care Hub; EPC = Enhanced Primary Care. Organisational: ICO = Integrated Care Organisation; IP Ltd = formation of a Ltd company of Integrated GP Practices. * = Vanguard status awarded to both sites.

254x190mm (72 x 72 DPI)

Salford

South Somerset

- **MDT case management of the highest-risk patients by neighbourhood groups**
- Centre of contact – a centralised telephone hub to help with navigating services and self-management (via health coaching)
- Community assets – investment in community resources to promote social interaction and active lifestyles later in life

- **Complex care hubs – an ‘extensivist’ GP intervention with GPs located in a hospital hub case managing the most complex patients in MDTs**
- Enhanced primary care – co-location of health coaches in GP practices to assist with disease self-management and prevention