

Integration and continuity of primary care: polyclinics and alternatives – a patient-centred analysis of how organisation constrains care co-ordination

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Scientific summary

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Background

Nearly one-sixth of NHS patients have multiple morbidities. They usually need more extensive and varied health-care inputs than one clinician can provide, besides 'social' care, informal support and sometimes secondary care, all adjusting to changes in their circumstances or health; that is, complex care. How to co-ordinate all the elements of complex care is an enduring problem. In the NHS, the provision of complex care is distributed across several governance structures: general practices (independent and mostly organised as professional partnerships); NHS trusts and foundation trusts (hierarchical public organisations); and local government (responsible for means-tested social care through a quasi-market). This tripartite division, an ageing population, increasing specialisation of clinical services and the increasing diversity of ownership of health-care providers make the co-ordination and continuity of complex care increasingly problematic and salient policy issues.

Research on continuity of care distinguishes six main forms of continuity:

1. cross-sectional
2. longitudinal
3. flexible ('developmental'; sometimes subsumed under 'management' continuity)
4. continuity of access
5. informational
6. relational (or 'personal').

The way in which the provision of complex health care is co-ordinated produces these continuities, or fails to. A growing body of evidence suggests that care co-ordination occurs at, and results from the interaction between, four levels of health-system activity:

1. care co-ordination by patients themselves
2. provider organisations internally co-ordinating the services that they provide
3. care networks co-ordinating the separate provider organisations
4. at the local health-system level, organisations such as Clinical Commissioning Groups attempting to co-ordinate the above interactions as a whole, and exercising external governance over provider organisations and care networks.

In an attempt to bridge its tripartite structure and improve the co-ordination of care, the NHS has experimented with 'polyclinics' or 'polysystems'. Elsewhere in Europe, polyclinics are integrated organisations that provide primary medical care, nursing (including community nursing) and sometimes further primary care services under a unified managerial structure. Existing research on the relationships between governance structures, care co-ordination and continuity of care suggests, on balance, that an integrated organisation containing a wide range of services (above all, primary medical care) may be more likely to favour the development of care co-ordination, and therefore continuities of care, than co-ordination by care network. This research, therefore, examines the ways in which care co-ordination at the clinical level might be promoted by organisational integration, that is, a unified organisational structure to co-ordinate and provide the different services comprising complex care.

Objectives

The research questions (RQs) were:

1. What difference does the integration of primary care into hierarchical governance structures make, compared with network governance, with regard to:
 - continuity of primary care (horizontal integration)
 - substitution of primary for secondary care (vertical integration)
 - the availability of management information about unit costs of care episodes and management costs
 - diversity of primary care services?
2. In the case of hierarchical governance, what difference does ownership make?
3. How much discretion does either type of governance structure allow for managerial discretion and 'performance'? Within each, which managerial practices tend to promote continuity of primary care, substitution of primary for secondary care and diversity of primary care services?
4. Do the answers to RQs 1, 2 and 3 tend to support or refute the predictions (outlined above) about the differences between networked and hierarchical governance with regard to continuity and integration of primary care?
5. What are the implications of the above for managerial practice in primary care?

Methods

We used a multiple-methods design combining:

1. *Assembly of an analytic framework* by non-systematic review of existing research. This directly contributed to answering RQ 4, and indirectly contributed to answering the other RQs.
2. *A framework analysis of patients' experiences of continuities of care* in a maximum-variety sample of care co-ordination mechanisms (contrasting types of organisational structures, care network structures and managerial practice) using patient interview data and, as validation, quasi-quantified patient record data; and comparing the findings with the co-ordination mechanisms described in the organisational case studies. This contributed to answering RQs 1 and 4.
3. *A systematic comparison of organisational case studies* made at the same study sites. For each site, a case study was produced describing co-ordination mechanisms at organisational, care network and local health-system governance level. Applying the above analytic framework, we systematically compared co-ordination mechanisms across sites; that is, across a variety of organisational and network structures. This contributed to answering RQs 1, 2, 3 and 5.
4. *A cross-country comparison* of care co-ordination mechanisms found in our NHS study sites with Swedish polyclinics, which have primary care co-ordination structures not found in the NHS. This comparison was made by means of constructing organisational case studies similar to item 3 above in selected Swedish polyclinics and systematically comparing them with the NHS case studies. This contributed to answering RQs 1, 2 and 4.
5. *Analysis and synthesis* of data using an 'inside-out' analytic strategy. Starting from patients' experiences of care co-ordination and continuity, we inferred how care providers' organisational structures and management had shaped those experiences (and what other factors had done so). We then traced how care networks (and other factors) had influenced the providers' organisation and management; and, finally, traced the ways in which the governance of local health economies had shaped the working of the care networks.

Inclusion criteria

1. Sites for organisational case studies, and (in England) studies of patient experiences, were a maximum-variety qualitative sample of sites, chosen to represent contrasting configurations of integrated organisation and care network. Study sites included professional partnership, corporate and publicly owned and managed primary medical care providers, and different configurations of organisational integration or separation of community health services, mental health services, social services and acute inpatient care.
2. For patients:
 - i. 65 years of age or older
 - ii. with complex health-care needs, defined as at least two of a list of chronic conditions
 - iii. receiving care for at least 1 year before the study from at least two provider organisations
 - iv. living in their own home or with family.

Data sources

1. Patient experience: patient interviews, data extraction from the same patients' general practice records.
2. Organisational case studies: key informant interviews, grey managerial documents, secondary administrative data, official websites.

Data validity was assessed by checking patient interviews against general practice records, triangulation (case studies) and comparison with other published studies. Data were synthesised using three nested framework analyses at cross-site level (England) and one at cross-country level. The original analytic framework and hypothesis were then reviewed in the light of the empirical findings.

Results

Starting from data about patients' experiences of care, we found that certain care co-ordination mechanisms were present in both the integrated organisations and the care networks we studied:

1. consultation model of care co-ordination.
2. interdisciplinary care teams (often several in parallel).
3. 'virtual ward' or 'hospital at home' models of care, although often with patchy coverage.
4. integrated electronic patient records to which different professions have read-write access (with varying degrees of access and duplication).
5. colocated services.

The main obstacles to care co-ordination within the integrated organisations were:

1. professional silos, with rivalries between occupational groups
2. discrepant information technology systems for different divisions (care groups) within one organisation
3. non-medical case management less developed in the integrated organisations we studied than within the networks.

Obstacles 1 and 2 were also present in care networks.

Within the care networks we studied, the following additional barriers to care co-ordination were identified:

1. information flows that were incomplete and often laborious to maintain
2. conflict between the referral, financial and information flows required by care pathways and those required by the consultation model of care co-ordination, particularly when patients were discharged from hospital
3. means tests for services, which created bottlenecks that obstructed care co-ordination
4. capacity mismatches between successive providers in the care process
5. weak or absent interorganisational links
6. mismatched financial incentives and managerial targets across organisations
7. the separate location of services whose collaboration was required for complex care.

Organisationally integrating services within one organisation aided care co-ordination by:

1. creating line-managerial accountability for care co-ordination and continuity
2. making patient transfer between professions, specialities, in-patient and domiciliary care, and between health and social care usually more easy, flexible and swift than equivalent referrals across interorganisational boundaries
3. collocating services by default (although the 'location' might be a locality with staff working across it), whereas in a network of independent organisations separate location was the default
4. removing information governance differences between organisations
5. making it harder for subunits or services to secede (in a network organisations can unilaterally decide to join or leave)
6. having one workforce provide both clinic-based [e.g. general practitioner (GP) surgery] and domiciliary services, which appeared to facilitate flexible, cross-sectional and longitudinal continuity of care
7. avoiding the administrative overheads of indirect referral routes and care network management in addition to management costs at provider level
8. aligning overall goals and external incentives across all services within the integrated provider
9. pooling provider income so that decisions about care pathway design within the integrated organisation were not, as in care networks, influenced by considerations of income allocation between organisations.

On balance, therefore, an integrated organisation appeared more favourable to producing continuities of care than a care network. With adjustments of detail, these findings also apply to the co-ordination of primary care with inpatient care.

For both integrated organisations and care networks, the simplest way, in the short term, to gain access to additional services for their patients was to either collocate or subcontract these services, for which a care network structure was suitable because it was more flexible. For longer-term and larger-scale access, extending an integrated provider organisation had the advantages outlined above.

Ownership differences in this sample of providers affected the range of services to which patients had direct access, primary care doctors' managerial responsibilities (relevant to care co-ordination because of its impact on GP workload) and the scope for medical innovation. Privately owned and/or managed primary care providers appeared to have greater informational continuity of care internally, but less externally (to patients and hospitals). Professional partnerships gave GPs flexibility to develop their own interests or specialisations. In Sweden, the integrated, publicly owned polyclinics gave patients direct access to a wider range of services than the English general practices did. Except for the clinic heads, Swedish polyclinic doctors had no equivalent to the practice-management workload of English partner GPs.

We found little difference between integrated organisations and care networks in terms of managerial discretion and performance. A larger difference was between NHS and Swedish primary care organisations, whose management in many respects resembled NHS practice some years earlier. Senior manager advocacy was a precondition for activities both to establish care networks and to amalgamate previously separate services. Clinician advocates were equally important for introducing and promoting projects and for maintaining close working relationships at senior medical management levels between organisations.

Conclusions

Because of the small scale and scope of general practice services, patients who require round-the-clock or multiple services have to be referred immediately from their general practice to other providers. Care network co-ordinating bodies exist partly as a workaround for the ensuing problems of care co-ordination. Our evidence (frequently evidence of its absence) suggests that a care plan, shared among providers and with the patient, is an important means of co-ordinating a patient's care and strengthening its continuity. Recording and sharing a care plan, however, requires information systems that capture this (and the supporting clinical) information and allow the relevant professionals to share in access to it. The balance of evidence suggested that an integrated organisation containing a wide range of services (above all, primary medical care) is more likely to favour the development of care co-ordination, and therefore the continuities of care, than a system of care networks. The structural options for organisationally integrated primary care providers include:

1. publicly owned polyclinics on (e.g.) the Swedish model
2. corporate primary care providers
3. polyclinics operated by a co-operative, clinician-owned or other 'third-sector' organisation
4. professional partnerships of larger scale and scope than is now usual in the NHS.

Any of the above could be managed, and where applicable owned, by doctors, nurses, other clinicians or a mixture.

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