From coordinated care trials to medicare locals: what difference does changing the policy driver from efficiency to quality make for coordinating care?

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Abstract

The terms coordination and integration refer to a wide range of interventions, from strategies aimed at coordinating clinical care for individuals to organizational and system interventions such as managed care, which contract medical and support services. Ongoing debate about whether financial and organizational integration are needed to achieve clinical integration is evident in policy debates over several decades, from a focus through the 1990s on improving coordination through structural reform and the use of market mechanisms to achieve allocative efficiencies (better overall service mix) to more recent attention on system performance to improve coordination and quality. We examine this shift in Australia and ask how has changing the policy driver affected efforts to achieve coordination?

Care planning, fund pooling and purchasing are still important planks in coordination. Evidence suggests that financial strategies can be used to drive improvements for particular patient groups, but these are unlikely to improve outcomes without being linked to clinical strategies that support coordination through multidisciplinary teamwork, IT, disease management guidelines and audit and feedback. Meso level organizational strategies might align the various elements to improve coordination.

Changing the policy driver has refocused research and policy over the last two decades from a focus on achieving allocative efficiencies to achieving quality and value for money. Research is yet to develop theoretical approaches that can deal with the implications for assessing effectiveness. Efforts need to identify intervention mechanisms, plausible relationships between these and their measurable outcomes and the components of contexts that support the emergence of intervention attributes.

Keywords: health-care system, health policy, health system reform

Introduction

The terms coordination and integration have taken on a wide range of meanings in the literature on primary health care (PHC), from interventions aimed at achieving better coordination of clinical care for individual patients to organizational and system interventions such as managed care arrangements that contract a variety of medical and social support services [1–4]. Integration is often equated, for example, with managed care in the USA, shared care in the UK, transmural care in the Netherlands and with a range of clinical interventions such as comprehensive care and disease management [2]. These different interventions operate at micro, macro and meso levels of the health system and involve a large number of programs and mechanisms [5]. There is ongoing debate about the degree to which financial and organizational integration is needed to achieve clinical integration, and there is no agreement about who should be in charge of integration, whom it should target, what supportive structures are needed or what to call it [3]. This conundrum is evident in the major policy efforts of organisation for economic co-operation and development (OECD) countries over several decades, from a focus through the 1990s on structural reform and the use of market mechanisms to stimulate coordination and achieve allocative efficiencies (improved overall service mix) through to more recent attention on managing performance for improving quality.
In this paper, we examine the shift in focus from efficiency to quality in Australian primary care, and ask how has changing the policy driver affected efforts to achieve coordination? We trace this policy shift from the evaluation of national Coordinated Care Trials in the late 1990s to the recent formation of Medicare Locals and draw on evidence from coordinated care trials and systematic reviews of more recent efforts to improve quality to reflect on lessons learned.

Health-care policy through the 1990s

Throughout the 1990s, Australia's approach to health-care reform reflected ideas that were common to international health policy debates of the time [6] and which adopted the view that a stronger market approach to health financing and delivery would provide an effective solution to perceived underperformance of the health-care sector [7]. Historically, systems in many OECD countries had achieved relative success in overall cost control and had typically produced social equity and low cost health care, but at the cost of overcentralization, rigidity and inadequate responsiveness to consumer demands [8].

In Australia, problems such as program proliferation, fragmentation and inflexibility, overadministration and cost shifting [9, 10] had arisen in the context of a system characterized by the division of responsibility for planning, funding and delivery between three levels of government, an uncapped fee-for-service system for medical and pharmaceutical services outside hospital, a dominant private sector for GP services and a reliance on supply side strategies for achieving cost containment [11]. Medicare is Australia's nationally funded universal health-care system that guarantees free public hospital treatment based on clinical need for all Australians (allowing individuals to purchase private health insurance for private hospital care and some private specialist or allied health services) and provides rebates for part of the cost of services provided by GPs operating in private practices on a fee-for-service basis. Public hospitals and community health services are managed by state governments, despite receiving much of their funding from the commonwealth government. Pharmaceuticals are subsidized under the Pharmaceutical Benefits Scheme that includes fixed levels of copayment per prescription with lower copayments for people on low incomes. Other health services (e.g. dental) are mostly privately provided and can be covered by private health insurance.

In this context, rising trends in health expenditure, driven by increasing use of medical and pharmaceutical services [6, 12], were explained in terms of these major system inefficiencies [13], leading health economists to argue that optimum health outcomes could not be achieved without the fundamental reorganization of key financing and program structures and a new set of incentives deemed capable of improving efficiencies and inducing a more integrated system of health service delivery [9].

As in other countries, this led to experimentation with forms of managed competition [6], characterized by a trend toward the use of competitive processes between providers, a strengthening of primary care to secure a stronger gatekeeping role to secondary services and contracting between third-party purchasers and providers of health care [7]. Dubbed by Scotton [9] as 'competitive integrated models', various arrangements were implemented in Australia and within publicly funded national health insurance schemes similar to Medicare in countries that had previously relied on bureaucratic and administrative methods for achieving cost control. In Australia's fragmented system, this took the form of a series of trials, rather than a widespread process of health system reform as occurred in the UK and New Zealand (NZ).

Coordinated care trials

Two rounds of coordinated care trials were initiated by the federal government; from 1997 to 1999 and from 2002 to 2005. The first and most widely reported were a series of nine trials that tested whether coordinating care for people with multiple service needs where care was accessed through individual care plans and purchased from funds pooled from existing programs would result in improved health and wellbeing within existing resources [12]. All trial models incorporated pooled funds, devolved purchasing and formal care coordination. It was hoped this combination of interventions would improve coordination by removing the program barriers to clinical integration and strengthen the role of doctors as gatekeepers to diagnostic and specialist services so that a better mix of services, including a reduction in unnecessary hospital admissions, could be achieved.

Despite significant effort and major investment, the trials did not achieve their anticipated benefits. The national evaluation found that outcomes were not improved and that significantly higher health service use and costs were incurred [14]. Although mean quality of life of patients did not improve, some clients reported a positive experience, some care coordinators perceived that the trial was of benefit to clients. This limited success was explained in the final evaluation report as a consequence of the short timeframes that prevented the trials from being able to achieve their intended outcomes, the inappropriateness of the outcome measures that were too blunt to have detected change, a client group that did not all meet the identified criteria so could not have benefited, levels of unmet need that were uncovered and problems associated with running a trial within a context that retained elements of a universal system [14]. More widely, it was debated in terms of a failure of implementation or program design, or a combination of both [14–19].

In one site, evaluators argued that although elements of an integrated model had been put into place, preexisting relationships and structures prevented them from being fully operationalized, and the incentives provided were insufficient for motivating behavior change [15]. This impeded efforts to establish and develop linkages between care planning, purchasing and fund pooling that were required to manage the fund pool and strengthen the role of GPs as gatekeepers to secondary services. Others [19] argued that there were
failures in both design and implementation, including fund pooling arrangements that provided limited possibilities for service substitution, inadequate training of GP care coordinators, limited focus on clinical guidelines or consumer empowerment and that trial design and expected outcomes were unrealistic. Reflecting on the trial experiences, they argued that a more effective means to address problems of care coordination and an inflexible supply system ought to include health services planning at the regional level, based on large populations, in combination with funds pooling.

From efficiency to quality: policy focus post coordinated care

A subsequent shift away from the use of market mechanisms as the primary tool for achieving integration has seen the development of a stronger focus on the management of PHC, more outwardly focused on achieving quality than efficiency. In Australia as in other countries, this has taken a variety of forms, most notably in the pursuit of performance management systems and with models that operate at multiple levels to improve the quality and clinical integration of care.

At the micro level, there has been experimentation with various models of care planning, patient self-management, case management and quality improvement processes that seek to improve the delivery of services in accordance with recognized best practice. At the macro level, structural developments include strengthening accreditation, providing financial incentive payments to general practices to improve adherence to best practice for certain services, improving complaints mechanisms, establishing a national quality and safety commission and strengthening accountability of health-care providers through the introduction of a National Health Performance Framework, a National Quality and Performance system for Divisions of General Practice [20] and national targets for Indigenous health [21]. At the meso level, efforts to improve integration for particular populations through the development of regional bodies have been less successful in Australia. Although Divisions of General Practice have played a role in strengthening the capacity of general practice through support for systems development, practice nurses, education and training and improving access [22], perhaps the best examples of integrated purchasing and provision arrangements following coordinated care trials were the Primary Health Care Access Program (PHCAP) that sought to expand delivery and improve regional planning for services for Aboriginal populations, and the Victorian (state government initiated) Primary Care Partnerships program that aimed to coordinate collaborative care at a regional level between GPs, community based health providers and patients. Although evaluations of the Partnership program indicate some success [23], the demise of the promising approach embedded in PHCAP was largely associated with the lack of development of information and purchasing models that could support it [21].

There have been developments based on similar principles in the UK and NZ, through the establishment of the Quality and Outcomes Framework in the former and the primary health organizations Performance Management Program in the latter. In Australia, the focus on performance is now enunciated in the national policy objectives outlined in the key building blocks and priority areas of the National Primary Health Care Strategy, in the Council of Australian Governments Whole of Government performance framework and in meso level strategies through the proposed establishment of Medicare Locals. These new regional organizations will have a role in coordinating, planning and integrating primary health-care service delivery. Below, we draw on evidence from recent reviews to consider the effectiveness of strategies for improving coordination in an Australian context.

Evidence from systematic and other reviews

We identified 12 separate reviews [24–34] that evaluated evidence and synthesized their relevance in an Australian context for the various reforms outlined above. These include reviews of care coordination, patient self-management and quality improvement at the micro level, development of regional organizational bodies at the meso level and accreditation, clinical governance, funding models and financial incentives at the macro level. Nine of these are systematic reviews and three report on studies that incorporate literature reviews.

Table 1 summarizes the key findings and the authors’ assessment of implications for Australian policy. Although the reviews evaluated evidence for strategies at the three different levels of organization, some remarkable similarities in their findings emerge. Firstly, a number of authors note the lack of agreed definitions for many interventions. Most were found to be multifaceted entities that involve a number of complex interventions. Interventions that relied on multiple strategies to achieve coordination were generally found to be more effective than those relying on a single strategy. Many of the same impediments to operationalizing interventions were identified, whatever the level of implementation, suggesting that interventions at one level of organization are dependent on those at the next. At the micro level for example, the absence of patient enrollment, automated data extraction and feedback processes to support the use of data and quality improvement processes by practitioners has impeded efforts to coordinate care. This has further been impeded by inflexible payment arrangements, reliance on fee-for-service and incentive payments that fail to reward a population approach and team care, thereby providing a poor base for changing practices, improving teamwork and developing different provider roles. In the absence of such mechanisms for funding and commissioning, meso level strategies that may otherwise be able to induce change have limited leverage. Reforms in governance, funding and patient registration in PHC are therefore recommended as necessary to provide a stronger base for effective coordination.

Taking this evidence as a whole, we conclude that the research evidence from these reviews suggests that integration
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<td>Clinical governance</td>
<td>Systematic review</td>
<td>No agreed definition of clinical governance exists but multiple programs employing a combination of strategies such as benchmarking, collaboration, feedback, quality management and incentives. Most successful programs are multifaceted rather than single approaches; those that recognize professional leadership are perceived as locally relevant, support a process of reflecting on practice.</td>
<td>If clinical governance is to support improvements in health care, efforts must be driven at the local level, supported by practice software packages that facilitate automated data extraction and feedback processes, and such activities need to be supported by a regional network and national reforms that provide funding for time for clinical governance.</td>
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<td>PHC financing</td>
<td>Pay-for-performance</td>
<td>Pay-for-performance schemes are multifaceted entities involving complex interventions, including accreditation, education, quality improvement, investment in information technology and data collection systems, professional support and regional structures. These are all required to link financial incentives to quality of care.</td>
<td>Impediments to pay-for-performance in Australia include lack of development of disease registers, patient enrollment, automated data extraction at the practice level and incentive payments that reward team care and are based on completed annual cycles of care.</td>
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<td>Systematic review</td>
<td>Accreditation</td>
<td>There is a mixed set of views among providers about the benefits of accreditation and insufficient studies of patient views. Accreditation is associated with promoting change and professional development, particularly in relation to inducing reflection that can lead to policy changes within organizations, improved safety and changes to nursing organization. Impact of accreditation on achieving improved performance on quality indicators is weak.</td>
<td>The organizational impact of accreditation programs remains unclear.</td>
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<td>Systematic review</td>
<td>Workforce</td>
<td>Workforce models are primarily designed to enhance access and have involved the introduction of new roles or redeployment of existing workers within PHC, or to increase access to services provided in the private sector. Organizational structures are more effective in changing local service delivery when they control funds through contracting or commissioning. Most models include clinical and practice capacity building strategies, but they are difficult to implement within a context of workforce shortage.</td>
<td>Funding models could usefully be used in the Australian context in areas of need; comprehensive performance frameworks for achieving quality and access such as the quality and outcomes framework could be trialed and workforce models should be used to address unmet areas of need and involve the substitution of roles within practices.</td>
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<td>Meso Funding models</td>
<td>Organizational models can achieve change in the organization and delivery of PHC, but are reliant on the levers available to them to induce change, primarily funding and commissioning. Evidence on impact of incentive payments on quality and outcomes is weak. Although unintended consequences have been documented in many models, devolution to the primary care organization level is possible and may offer flexibility but requires increased levels of accountability.</td>
<td>Limited evidence on organizational interventions for fundholding, purchasing or regional planning is available from systematic reviews that can be applied in the Australian context. Difficulties of developing an effective system for Australia include the absence of patient enrollment. Capitation for a practice population may provide greater opportunities for development of different provider roles.</td>
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<td>Organizational and PHC funding models</td>
<td>PHC reform mechanisms primarily target three key relationships to change primary care provider behavior. These relationships are between general practitioners/clinician and their patients, general practitioners and other health professionals, third party primary care funders and primary care providers.</td>
<td>Four key domains for potential policy reform in Australia were identified: flexible GP funding, quality frameworks at a practice level, meso level primary care organizations and investment in practice infrastructure.</td>
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<td>Organizational governance</td>
<td>Three governance models were identified, and 10 key enablers required to achieve optimal governance include a patient-centered view, infrastructure support, flexible structures, financial mechanisms, clinician involvement in decision making, team-based approach to delivery and data collection for evaluation and review.</td>
<td>Requirements of optimal governance arrangements include: a clear separation between governance and operational management, priority setting for strategic goals, membership composition, obtaining and managing resources and providing measurement of the process, impact and outcomes of activities.</td>
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<td>Micro Coordinated care</td>
<td>Six types of strategies used to coordinate care at the patient/provider level were identified. These strategies address communication and support for providers and patients or provide structural arrangements to support coordination. In more than 50% of studies, interventions were associated with improved health or patient satisfaction. Interventions that used multiple strategies were found to be more effective than those relying on single strategies.</td>
<td>Efforts for coordinating care in Australia have exacerbated existing structural problems and reforms in governance, and funding and patient registration in PHC would provide a stronger base for effective coordination. Alternative models for cashing out fee-for-service payments, such as the PHCAP and Coordinated Care trials are required to permit more flexible and locally appropriate service development. This should occur within a framework of more fundamental reforms of overall governance of the PHC sector that articulate relationships between patients and providers, provides flexible incentives and more effective tools to support care coordination.</td>
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**Chronic disease management**

**Systematic review**

Self-management support, in particular, patient education and motivational counseling, improves physiologic measures of disease and patient quality of life, health and functional status, service use and satisfaction. A multidisciplinary team approach is effective in improving physiologic measures of disease and adherence to disease management guidelines. Decision support, including evidence-based guidelines, educational materials and meetings, and audit and feedback improve professionals’ adherence to disease management guidelines and patients’ disease measures.

**Incentives for teamwork**

**Systematic review**

No agreed definition of teamwork or incentives but methods for incentivizing teamwork include blended payments, fee-for-service and practice level payments. Fee-for-service is a barrier to teamwork. There is limited empirical evidence on the impacts of blended payments on promoting teamwork. Practice level support together with e-health can support teamwork, patient feedback can stimulate teamwork.

**Quality improvement**

**Reviews**

Quality improvement initiatives are feasible strategies for refocusing PHC from an episodic to a more systematic and coordinated model of service delivery for chronic disease in indigenous PHC services. Organizational and clinical leadership, efficient administrative and information systems, regional supports and a practice-based quality improvement network for supporting the development of expertise, transfer of skills and resources for implementation support uptake in indigenous health settings. Collaboratives, managed clinical networks and collaborative care have been tried successfully in Australia and can reduce the inequity in health outcomes attributed to rurality or remoteness.

Multilevel strategies for implementation of each of these domains are proposed. These include training for practitioners and patients at the micro level, regional support at the meso level through organizations such as (then) Divisions of General Practice now (Medicare Locals), extension of financial incentives to support team involvement and increased use of practice infrastructure such as disease registers and data extraction tools.

While regional organizations can enable and support teamwork, they require the alignment of funding, organization development and regulatory systems to support it. Workforce reforms that aim to promote teamwork should focus on interprofessional learning, career development, autonomy and leadership and financial rewards.

Regional information platforms, automated data extraction of clinical data at service level, further development of systematic audit processes and tools, alignment of quality improvement and performance reporting indicators, and the data collection routines and reporting processes that underpin these in services are required to achieve sustainable quality improvement over time. Collaborative care is difficult to implement in the Australian health care system. Future research should include studying the contributions of leadership, teamwork, collaboration, culture to improving integration and coordination of care.
of financial and organizational strategies will be needed to maximize the potential for achieving a better and more appropriate set of services that represent coordinated, high quality care for patients. Macro level strategies such as pay for performance and financial incentives may be used to drive improvements in coordination for particular patient groups, but these are unlikely to improve outcomes on their own without being linked with micro strategies at the clinical level that support coordination through multidisciplinary teamwork, use of IT, best practice guidelines for disease management and audit and feedback of information. Meso level organizational strategies for integration might align the various elements of micro strategies with financial and other incentives to achieve coordination. In the current Australian context, attention to providing support for leadership and teamwork is also needed, and aligning performance indicators for quality improvement with those used for reporting on government programs will reduce burden and focus effort on supporting improvement and accountability. It is also notable that most micro level strategies for improving coordination have focused on inducing changes in provider behaviors to the exclusion of demand-driven strategies that incentivize consumers. Although research suggests that supply side strategies such as case management can be effective in improving coordination, there is increasing evidence that patient care budgets are promising interventions for improving care for some patient groups [35]. Such interventions could also be trialled under future arrangements in Australia.

Discussion and conclusions

In Australia, Medicare Locals will aim to coordinate, plan, integrate and potentially hold funds for some primary healthcare services at a regional level. The evidence presented above suggests that care planning, fund pooling and purchasing for populations are still important planks in achieving coordination of care, but there is limited evidence on how a regional organization with population planning and purchasing functions might align the various elements of micro strategies with the use of financial and other incentives to achieve coordination. Although significant advances have been made since Coordinated Care Trials in relation to developing roles and responsibilities such as nurse practitioners, performance indicators, best practice guidelines, data extraction systems and quality improvement tools and processes, many elements of the system remain ill-adapted for use at the professional level. Best practice guidelines rarely stimulate improvements on their own [36], Medicare benefits schedule items do not support team care with nursing and Aboriginal health worker involvement [31], and interventions to support teamwork and leadership are in their infancy [37]. There is limited infrastructure and support for using practice data for improvement purposes, rather than for reporting [38], and without a patient identifier to date, IT systems cannot provide a complete set of records for a single patient. Cost shifting and the maldistribution of GP and allied health services remain significant barriers for achieving quality [39]. The role of networks in supporting coordination and the scales at which supports must be provided remain uncertain.

Changing the policy driver from efficiency to quality has refocused research and policy efforts over the last two decades from a primary focus on achieving allocative efficiencies to one on achieving quality and value for money. Research suggests that improving clinical outcomes through coordination will require the integration of financial and organizational strategies for particular population groups. Assessing the effectiveness of these complex interventions throws up new challenges for implementation research. Theoretical advances such as those proposed by Pawson and Tilley [40], which aim to explore the dynamic interaction between context, mechanism and outcome are needed. In the case of complex multilayered interventions, an understanding of key mechanisms, their relationship with realistic and measurable impacts and outcomes and the conditions under which these emerge is needed. To be of value in the practice world, the organizational scale at which supports are required to achieve this should be considered.

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