

Making sense of integrated care in New Zealand

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Abstract

Integrated care is becoming a significant feature of New Zealand's current health system. Initiatives to date focus on service coordination or devolution of purchasing, which may be viewed as complementary approaches aimed at meeting a common goal of improving services. They are, however, likely to yield different benefits and pose different risks. This article outlines the background to current integrated care developments in New Zealand and offers a conceptual framework for distinguishing the approaches adopted. It also discusses a number of practical issues that will need to be addressed as such initiatives evolve, and considers some of the factors that need to be taken into account when considering where health care purchasing decisions are best made.

Introduction

For a number of years managers, clinicians, policy-makers and politicians have debated the feasibility and likely benefits of introducing new approaches to funding and/or delivering health services in New Zealand. At a national level these approaches initially went under the banner of 'managed care' (Marwick 1996) or 'coordinated care' (Ministry of Health 1995) but are now widely, and officially, grouped under the term 'integrated care' (Creech 1999, p 11). They share a common objective of seeking to deliver care more effectively within available resources.

Despite successive bouts of semantic redesign, however, it is still by no means clear that those within the health sector, not to mention the wider community, agree on precisely what integrated care actually is. Such uncertainty is potentially dangerous. It can provide opportunities for advocates or opponents of specific approaches to pursue their agendas under a veil of confusion and it poses the real risk of inappropriate generalisation (at the policy level) from the particular (at the operational level).

This article discusses the background to New Zealand's pursuit of integrated care. It then attempts to lift the current veil of confusion by outlining a framework for

describing integrated care initiatives by reference to the two separate but potentially complementary aspects of service coordination and devolution of purchasing responsibilities. The article describes how those aspects, in different combinations, can be found in both local and overseas initiatives. Finally, the article presents some more specific ideas around the issue of who is best placed to make purchasing decisions in respect of health and disability support services.

Why integrate?

Numerous developments in New Zealand's health services are currently taking place under the guise of 'integrated care'. These involve innovative approaches to the funding or delivery of services and typically share the common objectives of:

- fostering closer collaboration among different services, different professional disciplines and/or different provider organisations
- meeting all or some of the health and disability support needs of an identifiable population (typically defined by locality, disease/disability state or, in the case of Maori, iwi or tribal affiliation), and
- delivering improved outcomes within available resources.

Many initiatives are now emerging from the 'bottom-up' within the sector as a result of providers and the communities they serve striving to find better ways of delivering health care. This represents a marked (and to many, a welcome) change from past experience of health reform which has been described by the World Health Organisation as a 'political top-down process led by national, regional or local governments' (World Health Organisation 1997, p 3). As such, it is one example of the 'local solutions to local problems' advocated by New Zealand's former Minister of Health, Hon Bill English (Laugesen 1999, p C2).

Against this background it is not surprising that there is great variety in the range of organisational and operational approaches being adopted in order to achieve the above objectives. Such diversity is to be welcomed if it leads to the development of innovative and effective approaches to meeting health and disability support needs. It contrasts with the 'one size fits all' models which have dominated health systems for many years. It may be seen, in the words of Rudolf Klein, as part of the transition from health care as a church where 'experts...determine the need for health care, frame the appropriate priorities and implement their policies universalistically' to health care as a garage where 'the multiple preferences of consumers will inevitably create a pluralistic, multi-tier system' (Klein 1996, p 248; see Table 1).

Table 1: Health care as church and garage

Health care as church	Health care as garage
Paternalism	Consumerism
Planning	Responsiveness
Need	Demand
Priorities	Choice
Trust	Contract
Universalistic	Pluralistic
Single-tier	Multi-tier
Stability	Adaptability

Source: Klein (1996, p 248)

Diversity also brings with it a number of risks. ‘Integrated care’ may all too easily become a convenient umbrella term that encompasses a range of new approaches to the funding and delivery of services. If the differences among those approaches are ignored there is clearly a risk that initiatives that have been developed and applied successfully in one setting may be adopted in other settings for which they are less appropriate. Equally, simplistic attempts to evaluate the impact of integrated care and to assess whether it is unequivocally good or bad for New Zealand may fail to take adequate account of the many different forms it might take and environments in which it might be applied. We need a taxonomy of integrated care approaches that can reflect the diversity of forms those approaches might take.

Consideration of the range of integrated care initiatives that are currently under way in New Zealand suggests that they exhibit either or both of two key characteristics, namely:

- service coordination, and/or
- devolution of purchasing responsibilities.

The concepts of service coordination and delegation of purchasing responsibilities are broadly analogous to, respectively, the functions of ‘organisation and management of care consumption’ (OMCC) and ‘provision of care’ identified by Chernichovsky (1995). The third component of Chernichovsky’s conceptual model is ‘financing of care’. In the New Zealand context that continues to be largely a Government role. Since 1992–93 between 76% and 78% of annual health expenditure has been publicly financed (Ministry of Health 1999).

Service coordination

Service coordination involves providers working together, often across professional and organisational boundaries, to deliver services that are more comprehensive in nature. Such services seek to respond to different aspects of the user's needs in a coordinated and consistent manner, offering a holistic rather than a fragmented approach to meeting those needs.

This may be seen as appropriate responses to changing needs and expectations among users of health services. Such changes include:

- An ageing population, coupled with more effective treatments for many acute conditions in younger people, mean that an increasing proportion of health needs will stem from chronic, long-term conditions. People often live with such conditions for a significant proportion of their life. They usually cannot be cured in a single, one-off consultation but rather require ongoing interventions, often involving a variety of different service providers, working in different institutions, over an extended period of time. The traditional 'transactional' approach, based on episodic service delivery, is less relevant and models of care need to become more continuous or 'relational' in nature (Vuori 1985). Service coordination offers a means to respond to the changing long-term needs of chronically sick and/or disabled people.
- Technological developments and the desire to make efficient use of costly hospital facilities are leading to shorter lengths of stay. As a result, patients are coming to rely more and more on primary care and/or home-based services as complements (or even alternatives) to traditional inpatient care. Rather than having access to a variety of diagnostic and treatment services 'under one roof' in the hospital, patients may now need to make use of several different providers in the community setting. In such circumstances, service coordination can provide a means for health professionals to offer more seamless, community-based services.
- Consumer expectations are rising. Health care is, in many respects, part of the service sector and people will increasingly demand that the health system should be as user-friendly as they perceive other service industries to be. They will expect providers to have access to up-to-date information about all aspects of their current and past conditions. They will become annoyed if they are repeatedly asked to supply information about themselves and they will have a low tolerance for delays and queues. Health service 'production' will move from delivery of discrete and sometimes disjointed components of service and will focus instead on coherent processes of treatment and care. This is akin to the philosophy of 'business process re-engineering' popularised by Hammer & Champy (1993, p 51) who, when describing the process of order fulfilment in an electronics company, claimed that 'because this process involved so many handoffs, errors and misunderstandings were inevitable – all the more because no one individual or group had responsibility for, or knowledge of, the entire process'. They could equally well have been

describing many people's experience of health services. Better coordination among the various components that make up a typical health care episode offers one way to enhance the patient's experience of the system.

- There is growing recognition that health services are just one of many factors that impact on health; and that factors such as housing, employment and education can sometimes have as much, if not more, impact on health status than traditional treatment services (National Health Committee 1998). Adopting a population health focus can be the key to realising health gains in communities. Service coordination offers a means to bring a diverse range of skills together to deliver services that are responsive to the particular needs of a community. New Zealand's Strengthening Families strategy is one example of an initiative that 'aims to improve family health, educational attainments and reduce the incidence of persistent offending or abuse and neglect' in part through better coordination of services (Ministry of Education et al. 1999).

These changes were noted in a recent report which, in the course of reviewing the forces underlying health sector restructuring internationally, notes under the heading 'Blurring boundaries' that, 'demarcations between different forms of care are breaking down, and descriptions like 'primary', 'community' or 'acute' are no longer adequate' (King's Fund London Commission 1997, p 43). The same report then goes on to suggest that:

the roles of clinicians are changing too, with traditional distinctions between doctors, nurses and other clinicians subject to negotiation and change. Increasingly, the different elements and actors within the service system must be seen in terms of their contributions to programs of care for individual people or groups. (p 43)

Better coordination among diverse service providers can help to respond to the challenges posed by the above changes. Such coordination need not, however, involve providers surrendering their professional or organisational autonomy. Often all that is required is for providers to work together to share information and adopt common treatment protocols. Developments in information technology are doing much to support the former, while the growing guidelines movement (Eddy 1996) is encouraging health professionals to recognise that treatment processes can be formalised, documented and, where appropriate, shared among different specialised providers.

Service coordination does not imply that funding/contracting arrangements must change. There are numerous examples, including many of the integrated care demonstration projects announced by the Health Funding Authority (Ministry of Health & Health Funding Authority 1999), in which providers are working within existing contracting arrangements to offer services that are better coordinated. Pooling of funding among service providers is a separate aspect of integrated care which is discussed in the next section.

Devolution of purchasing responsibilities

The second common characteristic of integrated care, which may exist alongside, or independent of, service coordination is devolution of purchasing responsibilities. Rather than simply paying providers on an item of service basis for the services that they deliver, devolved purchasing seeks to bring financial and clinical responsibilities into closer alignment.

Many traditional contracting approaches offer providers few incentives to consider the financial impacts of their decisions. General practitioners (GPs) may arrange follow-up appointments for their patients or decide to prescribe more expensive pharmaceutical products without any consideration of the costs involved. Similarly, hospitals may increase their throughput and simply obtain additional payments for the extra patients treated, even if other forms of care might have been more appropriate. In such cases the funder bears all the financial risk associated with the provider's actions.

Devolution of purchasing responsibility leads from fee-for-service remuneration to capitated or 'block' payments whereby providers are paid a lump sum and required, in return, to meet all the needs of a defined population for a specified service (or services). In its simplest form, this may simply mean a shift to capitated funding of a single provider such as a GP (for delivery of primary medical services).

A more common interpretation of devolved purchasing arises when a provider is funded to arrange and pay for access to services delivered by one or more other provider(s). In so doing, they are in effect performing the rationing/prioritisation role that lies at the heart of conventional purchasing activity.

This occurs, for example, in the case of:

- GPs who hold a budget for the pharmaceuticals they prescribe
- a midwife acting in the role of lead maternity carer who effectively sub-contracts with a GP or other health professional to deliver some components of care to her client, or
- a disability support service coordinator who holds a budget for the disability support services used by his/her clients.

The development of fundholding in the British National Health Service is possibly the best-known example of devolved purchasing in a taxpayer-funded health system that is similar to that of New Zealand. The scheme began in 1991 with a relatively small number of GP practices holding budgets to purchase a limited range of elective surgical procedures for their patients from hospitals. It subsequently developed to a point where, in 1996, a number of GP-led 'total purchasing pilots' were set up to purchase a comprehensive range of health services for their populations from a wide variety of providers (Mays & Mulligan 1998).

Another familiar example of devolved purchasing is offered by health maintenance organisations (HMOs) and other forms of managed care organisations in the United States of America (US). Despite the many different forms such organisations can take,

most of them seek to use a fixed allocation of funds (in effect, a capitated budget) to purchase health services for their members. Although US-style HMOs and other managed care organisations do not receive their funds from government, many of the challenges and constraints they must address are the same as those confronting British fundholders and budget-holding GP practices in New Zealand.

Equally, the roles fulfilled by HMOs might also be vested in publicly-owned agencies. In New Zealand, between 1993 and 1997, the four Regional Health Authorities were responsible for purchasing comprehensive health care for their resident populations. They were thus, in effect, a form of publicly-owned HMO.

Of course, devolved purchasing need not be an 'all or nothing' matter. Partial devolution of purchasing may occur when, for example, a devolved purchaser accepts only a portion of the total financial risk. The initial wave of fundholding GPs in the United Kingdom were only expected to purchase a defined range of elective surgery and other non-emergency services and their risk in respect of any single patient was capped at a fixed sum. Similarly, some budget-holding primary care practices in New Zealand have contracts which allow them to share all or some of their possible 'down-side' financial risk with the funder.

Devolved purchasing in support of service coordination

Although devolved purchasing arrangements such as capitation and budget-holding are neither necessary nor sufficient to bring about service coordination they represent two facets of integrated care that are clearly complementary.

As discussed above, coordination of services across two or more providers can offer significant benefits to users. In many cases, however, the realisation of those benefits will require a degree of flexibility as to which provider(s) offer which component(s) of service. For example, while simply coordinating services across the primary/secondary boundary may yield some benefits for users, those benefits will probably be limited unless some services that were previously delivered in the secondary setting are actually transferred to the primary setting (or vice versa). Information sharing and joint protocols are of only limited value unless they actually change practice in some meaningful way.

Unfortunately, traditional purchasing arrangements can provide a strong disincentive for providers to agree to such transfers since they are likely to have adverse financial implications for some of the parties involved. Consider, say, a service coordination initiative that sought to reduce hospital admissions among a particular population by introducing treatment protocols that saw a greater emphasis on primary care. Such an arrangement would most likely be very attractive to the funder (assuming primary care services are cheaper and no less effective than the equivalent secondary services) and beneficial to the patient (who would avoid the inconvenience of a hospital admission). In an environment where both secondary and primary care providers are paid on an item-of-service basis, however, it could also create conflict. The primary providers involved in such an initiative might reasonably be expected to welcome any resultant

increase in their incomes. For the secondary provider, however, the accompanying loss of revenue might make the arrangement less appealing.

If such an initiative were to be operated by a third party (which might in fact be a joint venture involving both primary and secondary providers) then the potential conflicts outlined above would be avoided. The third party could receive payment on a per capita basis for each patient using the service and would then make payments to whichever provider (primary or secondary) was best able to deliver the service required. While providers would still have an incentive to maximise their own revenues, the third party should be able to focus more clearly on what is best for each individual patient (and, under the joint venture model, any financial surplus could be shared among the providers concerned). The third party would, in effect, operate as a devolved purchaser of the various service components involved.

Integrated care in New Zealand

The Health Funding Authority's ten integrated care demonstration projects, which were announced on 4 August 1998, are the most conspicuous current examples of integrated care in New Zealand (see Table 2). Although a number of the projects are seeking to evolve towards capitation funding and/or budget-holding, most appear to be focusing at this stage on service coordination as the key to their integration plans.

Table 2: Integrated care demonstration projects

Service	Description
WestKids Waitakere Child and Youth Integration Project	This pilot involves the integration of two separate but related initiatives focusing on services for children aged 0–17 in West Auckland.
Manger Health Resources Trust and Comprehensive Health Services	This project (covering South and North Auckland) is designed to demonstrate the value of an integrated, coordinated and structured approach to the management and public awareness of diabetes undertaken by primary providers and supported by secondary and public health specialists.
South Med Chronic Obstructive Pulmonary Disease	Improve the level of patient self-management to avoid the number of admissions to hospital and readmissions, reduce the average length of stay and develop more effective prescribing. The target will be people in the South Auckland area referred for admission to Middlemore Hospital by ProCare South Independent Practitioner Association (IPA) and South-Med IPA between May 1996 and December this year.
New Traditions – Integrated Child Health Services, Hamilton	The project is designed to facilitate integrated services and service networks for children at a number of levels with particular reference to primary and secondary services.
Tairawhiti Health (reproductive health)	‘Integrating the Management of Women’s Reproductive Health in Tairawhiti’ is a project to explore the development of an integrated care organisation for community budget-holding services to improve women’s sexual and reproductive health.
ElderCare Canterbury	A number of secondary, primary and community care providers are working together to explore ways of improving services for older people (75+) through greater integration of funding and services.
Managing Congestive Heart Failure, Christchurch	A collaborative trial of best practice guidelines for heart failure treatment involving two Christchurch health centres; the cardiology department at HealthLink South hospital; and district nurses.
Kaipara Care	An incorporated society representing a wide range of organisations which is investigating the development of more structured systems for multidisciplinary management of diabetes, childhood asthma (under 14 years of age) and the care of frail elderly in a rural bicultural environment in Northland.
Procure Asthma	The pilot involves GPs (ProCare IPA) and Starship Hospital in developing integrated asthma services and assessing this with a randomised control trial.
Auckland Healthcare Community Mental Health Centre and Procure Mental Health Service	The Mental Health Integration Task Force pilot based in Auckland is designed to test the effectiveness of ‘liaison attachment shared care’ with an increased emphasis on integration compared with existing models of community mental health care.

Source: Adapted from Ministry of Health & Health Funding Authority (1999)

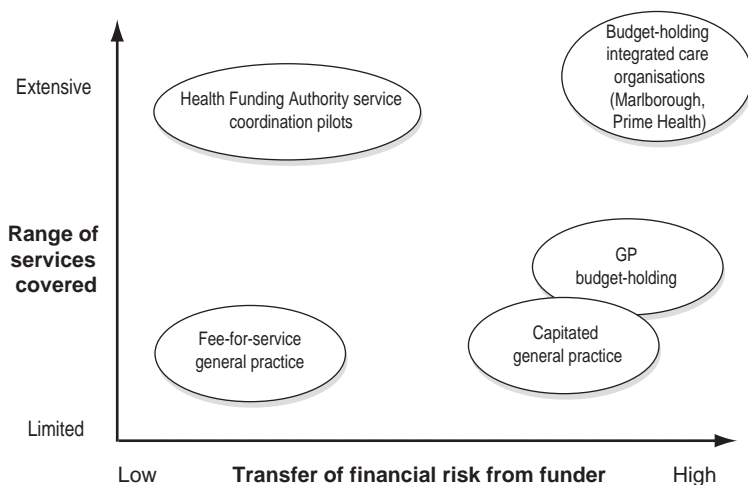


Figure 1: Contrasting approaches to integrated care

Progress to date in relation to devolution of purchasing responsibilities has largely been restricted to capitation of GPs. According to Ministry of Health data (1998, p 25), 15.1% of GPs had entered into capitation (or block) contracts at 30 June 1997 and anecdotal evidence suggests that proportion has since grown. (A survey undertaken for the Royal New Zealand College of General Practitioners (Kljakovic 1998) indicates that 12% of practices surveyed were capitation-funded. The higher proportion of individual capitated GPs may suggest that capitation is more common among larger practices.) At 30 June 1997, 72.3% of GPs were involved in some form of budget-holding, typically for pharmaceuticals or laboratory tests. The arrangements in place at that time were, however, reported as having little or no ‘down-side’ risk for the GPs concerned. GPs were not required to cover any spending in excess of the sums budgeted although some or all of any savings against the budget did accrue to the GPs and could be spent on ‘administration costs, improved services, to buy more services, and in some cases to increase access by reducing the user contribution required’ (Ministry of Health 1998, p 26).

The other main area where purchasing responsibilities have been devolved is in maternity services where the lead maternity carer is paid a fixed sum per client and is required to meet the costs of any referrals to other providers from within that sum.

Beyond the examples cited above there has been little progress in introducing larger scale devolved purchasing arrangements. Recent initiatives in Marlborough and the Western Bay of Plenty sought to have responsibility for purchasing on behalf of local populations devolved to locally-based purchasing organisations. (In 1998 the Marlborough Health Trust and PrimeHealth Ltd submitted proposals to the Health Funding Authority to purchase an extensive range of health and disability support services for the residents of Marlborough and Tauranga respectively.) Despite significant efforts in both areas, however, the final proposals were not accepted by the Health Funding Authority.

A framework for understanding integrated care

The discussion above highlights the fact that New Zealand-style integrated care currently encompasses a diverse and evolving range of initiatives which cover both service coordination and devolution of purchasing responsibilities. While all such initiatives share a common goal of improving services in a changing environment (as described above) they are clearly adopting different means to achieve that goal. Accordingly, they are likely to yield different benefits and pose different risks and hence require different approaches to management and evaluation. It is important, therefore, to have a clear, common understanding of the various approaches to integrated care.

Figure 1 shows how a number of different approaches to integrated care offer differing degrees of service coordination and devolved purchasing. The vertical axis represents the extent of service coordination, with providers who deliver a single component of service being located lower down the scale. The horizontal axis represents increasing levels of devolution. Providers towards the left are simply paid for what they do, and are exposed to no financial risk, while those further to the right are subject to a progressively greater degree of financial risk.

Figure 1 highlights five specific combinations of service coordination and transfer of risk:

- ‘Traditional’ fee-for-service general practice covers a single service (primary medical care) and thus offers limited coordination while the nature of fee-for-service payment means that the funder continues to bear full financial risk (and there is thus no real devolution of purchasing responsibilities).
- Capitated general practice still covers a single service (hence limited coordination) but, by requiring providers to deliver services within a fixed (capitated) budget, it allows a significant shift of financial risk from the funder to the provider.

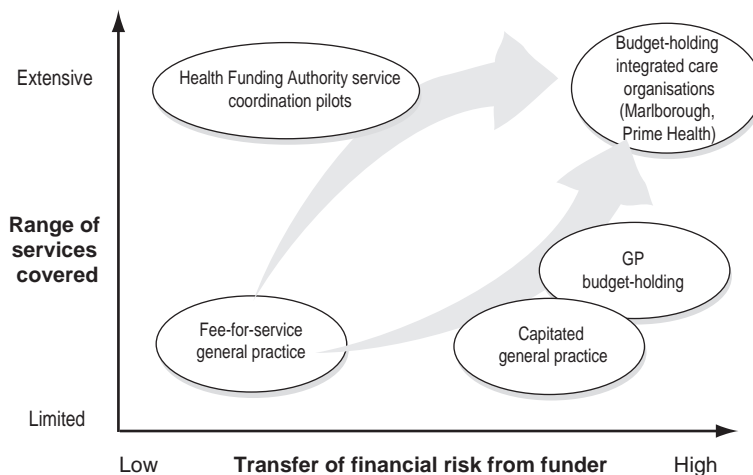


Figure 2: Paths for development of integrated care

- Extending GP capitation to cover budget-holding for pharmaceuticals and/or laboratory services allows providers to make trade-offs between a range (albeit a limited range) of alternative interventions and thus allows for a slightly higher level of service coordination. Including the additional costs of pharmaceutical and laboratory services in the GP budget also means that slightly more financial risk is transferred from the funder to the provider.
- As noted above, most of the Health Funding Authority's current service coordination pilots focus on joint working among providers without any significant transfer of financial risk. Funding and contracting arrangements have not altered significantly; although the use of an elongated ellipse in Figure 1 is intended to suggest that this may be beginning to happen.
- Budget-holding integrated care organisations (such as the schemes proposed by PrimeHealth and Marlborough Health Trust in 1998) together with Britain's now-abandoned 'total purchasing pilots' and its planned primary care trusts (to be established from 1 April 2000) and US-style managed care organisations offer the potential for much more comprehensive approaches to service coordination combined with transfer of full financial risk from the funder to the devolved purchasing agencies.

The examples shown in Figure 1 are merely illustrative. In practice, both axes are continua so there are potentially a wide variety of alternative models which might emerge to offer different combinations of service coordination and devolution of purchasing responsibilities. The ability to 'locate' such models in the two-dimensional space shown in Figure 1 may help to eliminate ambiguities and misunderstandings both about what they offer and about what they are seeking to achieve.

Figure 2 uses this framework to suggest two distinct approaches to the development of integrated care:

- efforts may initially focus on improving service coordination with an expectation that, over time, some providers will seek to develop a growing role as devolved purchasers, or
- initial moves to capitate GP services may subsequently extend to cover budget-holding for (and hence coordination of) an increasing range of referred services, up to and including secondary care.

Both these development paths could lead to the same end point, namely budget-holding integrated care organisations, if that was considered to be desirable. In the United Kingdom, where GPs have been capitated for many years, the latter approach was clearly favoured and resulted in the development of GP fundholding (and subsequently the move to establish primary care groups/trusts). In New Zealand both paths are currently being followed; the former via the Health Funding Authority's pilot projects and the latter via the growth of capitation and (limited) budget-holding arrangements in primary care.

Practicalities

The focus of the analysis above is on the nature of integrated care, as opposed to its practical operation. Before service coordination or devolved purchasing can become realities, however, there are a number of practical challenges that will also need to be met. These include:

- **Establishing ‘affiliation’**

New Zealand, with its history of ‘transactional’ dealings between consumers and health care providers has never needed to establish a formal system of registration or enrolment at either the national or provider level (despite having a system of unique patient identifiers that is the envy of many overseas health systems). For coordination of services to be effective, providers need to have a shared understanding of the service users for whom they are responsible. A clear affiliation between individuals and devolved purchasers is arguably even more fundamental to the operation of capitation-based funding approaches. Some form of enrolment (coupled with arrangements which allow for people to change their preferred provider) is, therefore, likely to be a prerequisite if integrated care is to succeed.
- **Defining services**

Specification of a common benefits package will be essential if devolved purchasers are to be required to offer a uniform minimum package of services in terms of range, quality, ease of access and cost. New Zealand has already made attempts to define a national ‘core’ but has now diverted efforts towards the development of best practice guidelines to support prioritisation decisions. Other countries too have struggled with the challenges of specifying with any degree of precision which services should be publicly-funded and under what conditions. Moves are now under way on the part of the Health Funding Authority to develop and promulgate a national specification of publicly-funded services (Health Funding Authority 1998) but it will be some considerable time before that specification is sufficiently robust to underpin the sort of contractual relationship that might be expected to exist between a funder and a devolved purchaser.
- **Risk-rating**

Devolved purchasers might have an incentive to deter (by overt or covert means) ‘high-risk’ people from joining their schemes since such people are likely to incur higher than average costs. Such ‘cream-skimming’ (or adverse selection) can be countered by regulations which require devolved purchasers to accept anyone who wishes to enrol. However accurate risk-rating of capitation payments, which aligns funding more closely to expected costs, is likely to be a more effective approach in the medium to long term.
- **Monitoring performance**

Today’s approaches of counting (and paying for) items of service may not be appropriate in an integrated care environment. It may be preferable to focus instead on the outcomes achieved by devolved purchasers and require them to deliver

defined improvements in health status among the people they serve rather than requiring them to purchase a specified range of services. Outcomes research has some way to go before that will be possible, but it may be more effective than continuing efforts to define benefits packages in delivering useable results more rapidly. In the United States, the National Committee for Quality Assurance (1999) has developed a particular expertise in defining, monitoring and reporting on the performance of integrated care-type organisations using both clinical and consumer satisfaction measures.

It is also important to note that these practical challenges apply, to a greater or lesser degree, to all integrated care arrangements including for-profit managed care schemes, commercially-orientated integrated care organisations and any organisation that seeks to offer coordinated services or to purchase services on a devolved basis, including local, publicly-owned, integrated health care bodies (such as English Health Authorities).

Devolution to whom?

When considering devolution of purchasing responsibility it is also important to assess to whom purchasing responsibilities might best be devolved. The horizontal axis in Figure 1 is intended merely to indicate the extent to which purchasing responsibilities (hence financial risk) are devolved. It does not consider at what level, and by whom, purchasing decisions should be made.

In New Zealand, management of financial risks is devolved (or has been devolved) to a number of levels. For example,

- all adult New Zealanders must meet some of the costs associated with GP visits so, in a real sense, financial responsibility is wholly or partially devolved to the individual level
- in cases where GPs hold budgets for pharmaceuticals or laboratory tests then financial responsibility has effectively been devolved to them
- the four former Regional Health Authorities (which operated from 1993 to 1997) were expected to use a fixed budget allocation to purchase a full range of services for their populations, and
- the Health Funding Authority currently contracts with providers throughout the country to secure access to appropriate services for all New Zealanders.

The examples listed above present a broad spectrum of levels of devolution, ranging from the individual to the national level. Most have equivalents in other countries' health care systems. English primary care groups/trusts, GP fundholders and US-style HMOs are all functionally similar to New Zealand's former Regional Health Authorities in that they purchase on behalf of a defined sub-national population. In those cases, though, the population concerned is one which has either joined a purchasing organisation (in the case of an HMO) or registered with a particular purchaser (in the

case of GP fundholders and primary care groups/trusts). Regional Health Authority populations, in contrast, were assigned to their local purchaser on the basis of geography.

It is not immediately clear at what level purchasing decisions are best made. In some cases, individuals may be best placed to decide what health services they wish to obtain and to choose when and from whom they wish to obtain them. For other services, however, it may be more appropriate for purchasing decisions to be taken at a 'higher' level; possibly because an individual may not know what service is needed, because the cost of the service is so high that it needs to be shared more widely or because of a need/desire to limit total service volumes (and hence costs).

A number of factors may thus influence the decision of 'who purchases'. They include:

- knowledge of personal needs and circumstances – purchasing decisions should, ideally, be sensitive to the preferences of the individuals for whom services are being purchased, subject to any overriding imperatives to avoid harm or allocate resources effectively
- knowledge of the most appropriate service for an individual – while the individual may have some idea what service(s) he/she requires, the nature of much health care

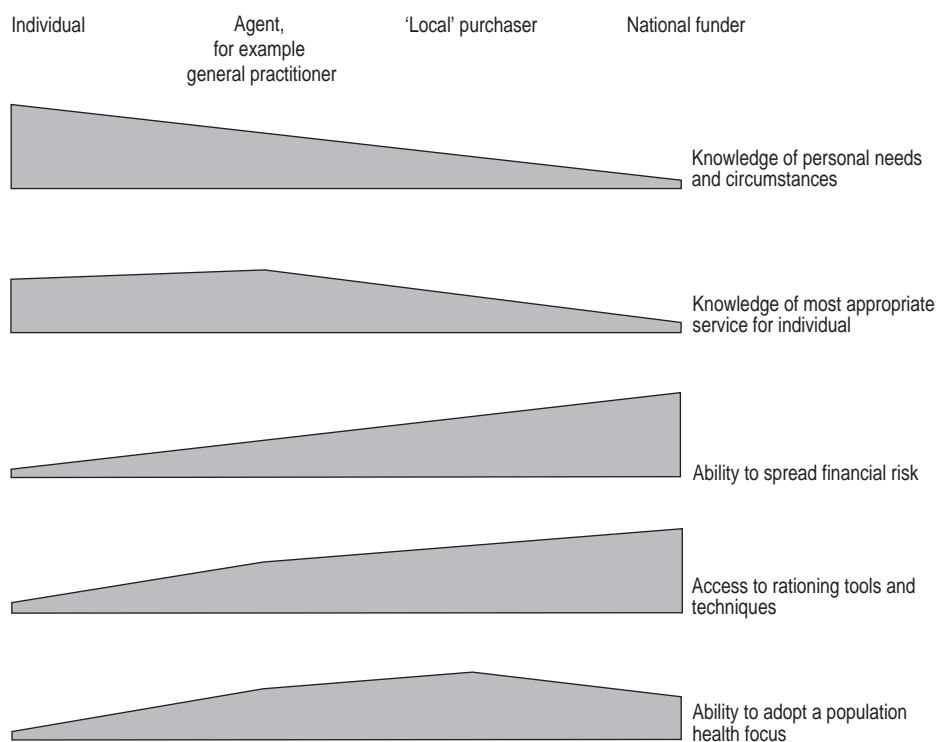


Figure 3: Who purchases?

means that decisions regarding access to services often need to be informed by expert knowledge

- spreading risk – when the costs of services are high and utilisation by any single individual is unpredictable purchasers need to be able to spread financial risk across a larger population
- ability to ration/prioritise – purchasers require skill and information if they are to ensure that limited resources are used effectively and that access to services is equitable
- population focus – purchasing decisions that are optimal for individuals or small groups may be less than ideal for the wider population, but equally the concept of a ‘population’ may itself become meaningless if purchasing decisions become too centralised.

Figure 3 suggests a number of points along a spectrum of increasing ‘centralisation’, namely:

- purchasing by individuals – people responsible for controlling their own access to services
- purchasing by agents – such as GPs who might be expected to be familiar with, and make purchasing decisions on behalf of, a group of people while also bringing superior clinical knowledge to bear on those decisions, thus overcoming some of the information problems inherent in individual purchasing and allowing a limited degree of risk-sharing
- ‘local’ purchasers – Regional Health Authorities, primary care groups/trusts and Maori groups which purchase services on behalf of a defined population, or HMOs which purchase services on behalf of their members (although HMOs may not necessarily purchase on behalf of a geographically-delineated population, their members can be thought of as a local ‘constituency’ and so the purchasing role of an HMO has much in common with that of a New Zealand Regional Health Authority or an English primary care group/trust), and
- a national funder – this is the model currently applied in New Zealand where the Health Funding Authority is, in effect, a monopsonist, tasked with purchasing services on behalf of the entire population.

Figure 3 also suggests how well purchasing undertaken at different levels of centralisation might perform in relation to each of the above criteria.

Effectiveness is indicated by the height of the shaded bar. Thus, individual purchasing is seen as the best approach in relation to the criterion of ‘knowledge of personal needs and circumstances’ but is inferior to purchasing by an informed agent when the criterion ‘knowledge of the most appropriate service for the individual’ is applied.

The national funder model, in contrast, provides probably the most effective means to spread financial risk and is likely to make best use of rare, specialist skills needed to

ration/prioritise services on a fair and equitable basis. It is less strong, however, in relation to knowledge of individuals' or local populations' needs and preferences.

Approaches that rely on agents or local purchasers to make purchasing decisions might reasonably be expected to offer a compromise between the responsiveness of individual purchasing and the risk-sharing and technological strengths of the national model. In practice though, use of agents can, as noted above, offer better information on which to base purchasing decisions than is available to individuals acting independently. On the other hand, local purchasers, which serve a defined 'constituency', should arguably be better able than a national funder to apply a population focus in their purchasing decisions given the inevitable heterogeneity of the population served by the latter.

It is important to note that, with the exception of purchasing by individuals, none of the models described above assume a particular form of ownership of the purchasing body. In the current New Zealand context most 'agents' (typically, though not universally, GPs) operate as privately-owned, for-profit enterprises, while local purchasers and national funders have historically been (and continue to be) publicly-owned. It would, however, be entirely possible to establish publicly-owned agents who might purchase on behalf of groups of people, or to set up privately-owned purchasers at either the local or national level. The focus of this analysis is on the effectiveness of purchasing at different levels, not the impact of alternative ownership arrangements.

Figure 3 suggests that there is no single optimal level of purchasing and that different levels are likely to be more effective depending on the particular evaluation criterion considered. Rather than seeking to allocate all purchasing decisions to a single level, then, it may be more appropriate to purchase at different levels, depending on the characteristics of the service(s) concerned.

In effect, the nature of the specific service(s) being purchased will determine which of the evaluation criteria in Figure 3 should be considered to be the most significant in determining who should purchase.

In the case of low-cost and relatively predictable primary care services, for example, the ability to spread financial risks or to adopt sophisticated prioritisation techniques is of little importance, and purchasing by individuals or their agents is likely to be most effective. Where government is involved in purchasing such services its key role is thus more likely to be one of effecting transfer payments to facilitate access by the less well-off than one of intervening to spread financial risk or ration access.

The case of high-cost services which individuals are likely to use rarely, if at all, presents a contrasting case. More centralisation of purchasing responsibility is needed to ensure that no one person or family is faced with the full cost of utilising such services (risk-sharing) and also to direct resources to those who will benefit the most (rationing/prioritisation).

A 'mid-point' example might arise in relation to chronic disease management (for example, asthma, diabetes). In such instances costs are moderate and prevalence is relatively high (hence there is less need to spread financial risk). There is, however, a

need to achieve a population focus; and individuals are likely to need assistance to identify the best approach to treatment. Figure 5 suggests that agents or local purchasers might be best placed to purchase such services.

Conclusion

Integrated care, defined to encompass service coordination and/or devolution of purchasing responsibilities, is becoming a significant feature of New Zealand's current health system.

Service coordination is a response to the pressures of an ageing population, technological developments, rising consumer expectations and the growing recognition that health services are just one of many factors that influence health status. Devolution of purchasing is neither necessary nor sufficient to achieve better coordination but it can play a key supporting role.

To date, most integrated care initiatives in New Zealand have focused on service coordination rather than devolution of purchasing, although general practitioners and lead maternity service providers are involved, to some degree, in budget-holding for other services.

Experience in New Zealand and the United Kingdom suggests that there are different routes towards 'full' integration (combining both service coordination and devolved purchasing) but there are also a number of practical implementation issues that will need to be addressed before such initiatives can become a reality.

The issue of who purchasing responsibilities should be devolved to requires careful thought. There is unlikely to be a single, 'best' level. Different services have different characteristics in terms of the knowledge required to purchase appropriately, the importance of spreading financial risk, reliance on rationing tools and techniques and the ability to adopt a population health focus. The choice of a preferred purchasing level should reflect the relative importance of such factors to the particular service under consideration.

The ideas presented in this article are offered in the belief that they will help to facilitate more informed discussion on matters relating to integrated care in New Zealand so that people in the sector and in the wider community can decide if and how they wish such initiatives to progress.

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Commentary

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Making sense of integrated care

Integrated (or coordinated) care is one of the great health policy solutions of our times. It covers a multitude of activities in a variety of countries. It crosses public and private sectors and covers social and medical models of care. But what do we mean by integrated care? From the policy-maker's perspective (and Philip Davies is Deputy Director-General of the New Zealand Ministry of Health) two questions arise: what activities comprise this integrated care and does it contribute to key health service goals?

A recent summary of general health service goals is contained within the World Health Organisation's Annual Report 1999 (World Health Organisation 1999). The goals include improving health status, reducing health inequalities, enhancing responsiveness to legitimate expectations, increasing efficiency and protecting individuals, families and communities from financial loss.

Philip Davies' article sets out to provide a taxonomy for describing integrated care. The term has a variety of meanings and refers to organisational types as well as patterns of care and treatment. Making progress requires that we move towards a shared understanding of the term and its major component dimensions. Davies then identifies two routes by which New Zealand might make progress towards his ideal of budget-holding integrated care organisations. Thirdly, he asks a question of particular interest to the policy-maker: who is best placed to make purchasing decisions?

The selection of dimensions for a taxonomy is always a difficult business and Davies alights on two: service coordination and devolution of purchasing. The indicator for service coordination is the range of services and the indicator for devolution of purchasing is the extent of transfer of risk from funder to provider. These indicators are essentially descriptions of structure. The range of services does not tell us about the process of coordination, how care is coordinated, or whether services are substituted on the basis of evidence, price or some other factor. The second, transfer of risk, does not tell us how providers respond to increased levels of risk.

The taxonomy does permit useful distinctions to be made between fee-for-service general practice (low range of services and low transfer of risk to provider) and the New Zealand Health Funding Authority pilot studies in which service range is increased but

there is no change to financial arrangements. The general practitioner capitation and budget-holding arrangements are seen to transfer risk to the provider while maintaining a relatively narrow range of services. The ideal position in the taxonomy is the budget-holding integrated care organisation. Here we have devolution of responsibility to a local purchasing organisation which is able to access a wide range of services. It seems unfortunate that the only New Zealand example, Prime Health and Marlborough Health Trust, was strangled at birth by the Health Funding Authority. International examples include particular sites in Australia's coordinated care trials (as yet not evaluated) and the United Kingdom's primary care groups (as yet barely implemented).

Davies goes beyond mere taxonomy to suggest two routes towards the integrated care organisation ideal, recognising the importance of context and history. Route 1 passes via capitation and general practitioner budget-holding, noting the importance of developing appropriate attitudes, incentives and capabilities if general practitioners are to play a full role. United Kingdom experience suggests that the current development of primary care groups goes back to developments such as the 1974 National Health Service reorganisation and progress since then has been incremental. The current primary care groups are fragile and it is not clear that progress can be sustained or active interest of general practitioners maintained to enable independent purchasing of a wide range of services. Even if progress is maintained it is not clear that general practitioners are necessarily the most appropriate purchasers of health services. Route 2 suggests the growth to maturity of the Health Funding Authority projects listed in the paper. An obvious observation, which also holds for the Australian coordinated care trials, is that the range of activities is very broad and it may prove difficult to identify specific lessons for service development or generalisation to other contexts (Department of Health and Family Services 1999). Route 2 implies that the projects will move from a concern largely with the range of services to include an acceptance of financial risk.

Returning to the role of the policy-maker, Davies asks a key question: to whom should purchasing be devolved and what principles inform such decisions? The criteria he identifies are sensible and uncover a series of deeper tensions:

- Should services be purchased for individuals or for populations?
- Which services require integration at a local level (for example, home care services) and which require integration at a higher level (for example, cancer services)?
- How can questions of service efficiency be balanced with issues of equity and access, especially in areas of dispersed population?
- Who has the necessary perspective and skills to purchase integrated services?

The paper does not ignore important practicalities of integrated care such as the significance of patient enrolment. This is common practice in the United Kingdom with general practitioners, in the United States with health maintenance organisations, and is increasingly common in New Zealand. It is largely unknown in the Australian public sector. The definition of service packages implies consistent patient assessment, clear and agreed protocols and reliable methods for communication between agencies and

practitioners. Skills in risk assessment will need to be developed and those who share in financial risk will need to be convinced of the fairness of the risk assessment and subsequent resource allocations. Monitoring performance is perhaps the biggest practical difficulty. The Australian Government allocated A\$8 million for the evaluation of first-round coordinated care trials and is budgeting A\$33 million to fund a second set of trials. This suggests that answers from the first round will not be straightforward.

Davies has given us a good start proposing a structural taxonomy which addresses the question of integrated care from a policy-maker's perspective. If integrated care is to warrant its current attention we have to move on to some tricky questions:

- What implications do various integrated care approaches, particularly integrated care organisations, have for individual or population health status?
- Can we use these organisational forms to address significant health inequalities?
- Will integrated care organisations be more responsive to the legitimate expectations of consumers?
- Can we increase micro-efficiency through this organisational form or at least recoup the costs of integration without sacrificing quality or volume of services?
- Can we ensure that the normal expectations that individuals, their families and communities will be protected from financial loss are maintained?

In each of the countries mentioned above some form of integrated care is proposed as a structural solution to the key problems facing the health system. Policy-makers are concerned with structure and accountability and so it is not surprising that Davies focuses on these important issues. In moving forward we will need to address a complementary question: whether integrated care benefits the patient and the relevant population. Perhaps it is now time to look more closely at the processes of integrated care so that we can begin to measure outcomes and learn more about the effectiveness of such 'obvious' solutions.

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