Fundholding: learning from the past and looking to the future

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ABSTRACT

- Australian trials of healthcare initiatives that included fundholding models have not produced convincing quantitative evidence of health gains, but there is qualitative evidence of improved patient well-being and significant changes in service mix, which may produce longer-term health gains.
- Fundholding is most likely to improve patient outcomes when implemented within a broader healthcare initiative that has the potential to be more effective if financed outside existing funding structures.
- The most appropriate fundholder organisation depends on the nature of the initiative and the type of stakeholder engagement required, but technical and organisational skills will always be needed for balancing financial viability and additional patient services.
- Stakeholders' willingness to engage in fundholding depends on the anticipated budget impact, how they will use the savings generated, and whether workforce needs will be fulfilled.
- Before including fundholding in healthcare initiatives, there must be realistic prospective analyses and community debate. Monitoring and evaluation frameworks must also be in place to provide ongoing evidence of quality of care, health and well-being outcomes and financial implications for fund contributors.

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AUSTRALIA HAS BEEN experimenting with fundholding in primary care for nearly a decade. When the concept was floated in 1992,[1-4] the debate was heavily influenced by the problems experienced in the United Kingdom with fundholding in general practice, including lack of measurement of improvement in quality of care.[5] Fundholding still engenders disquiet because of its potential for a primary focus on cost savings, increased control of clinicians by management,[6] and a reduction in quality of care[7] and equity of access.[8]

Over the past five years, there have been 14 trials in Australia that included a fundholding model:

- nine General Coordinated Care Trials (GCCTs) (one of which comprised four subtrials) (Box 1);[9-17]
- four Aboriginal and Torres Strait Islander Coordinated Care Trials (ATSI CCTs) (Box 2);[18] and
- the Maitland After-Hours Care Trial (MAHT) (Box 3).[19]

Such trials are expected to continue, and the debate about the impact of fundholding on patient outcomes remains unresolved. It is therefore an appropriate time to review the Australian experience of fundholding in primary care. Here, we present the results, focusing on the question: Does the Australian experience of fundholding thus far provide evidence of improved patient health and well-being?

Key concepts

Fundholding

For this article, fundholding is defined as a framework within which specified resources, agreed prospectively, are made available for a defined period, and from which a range of services are provided to a specific group of patients. It is a framework for funding a healthcare initiative rather than an initiative in itself. It overcomes the constraints that the existing funding structure and availability of funds impose on a healthcare initiative by introducing flexibility within an overarching healthcare system in relation to the fundholder(s), the funds pool (budget), and the economic benchmark.

The fundholder

The fundholder is the organisation holding the funds. It may be established specifically for that purpose or be part of an existing regional body. Typically, the fundholder considers a broader range of patient management factors than would be possible under existing structures. The role and objectives of the fundholder are critical to the success or otherwise of fundholding. Compared with existing fundholders, a new fundholder may bring a very different perspective to the healthcare of a group of patients.

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The funds pool

The funds pool comprises the resources managed by the fundholder to support the services and infrastructure otherwise financed by more than one program or budget (eg, Medical Benefits Scheme [MBS], Home and Community Care [HACC], hospitals, and Pharmaceutical Benefits Scheme [PBS]).

The economic benchmark

The economic benchmark is the guide to "how much" ought to be contributed to the funds pool by the various financial stakeholders. In the Australian trials, the benchmark was

1: General Coordinated Care Trials (GCCTs)*[9-18]

The initiative

The first round of GCCTs comprised nine trials between June 1997 and December 1999. The overall objective was to improve health and well-being through improved coordination of care and care planning. The intended target group was people with chronic illness and/or complex needs; however, people actually enrolled included those currently without such needs, but with historical or anticipated needs for greater care, particularly before and after hospital admissions. The trials involved 5580 control and 10 953 intervention clients (individuals enrolled in the trials were referred to as clients rather than patients) and a range of healthcare professionals providing, in addition to the usual services, care planning, care coordination and service coordination. The trials developed a range of models of care coordination, all of which involved a GP in developing the medical component of the care plan. Beyond this, the role of the GP varied across the models, with most trials employing care and service coordinators.

Fundholding model

The objectives of fundholding were:

- to remove those barriers patients and providers have in accessing appropriate services created by the program-based funding structure — referred to as "removing labels from dollars"; and
- to ensure savings generated by the efficiency gains of care coordination were used to fund services for clients or infrastructure for the initiative (eg, if care coordination reduced the need for a hospital admission, these savings were made available to the trial).

The economic benchmark for the fund pool was usual care (ie, the dollar value of care patients were expected to access during the trial). The estimates of the funds pool for each trial were based on historical use (Medical Benefits Scheme [MBS], Pharmaceutical Benefits Scheme [PBS], community services and hospital inpatient costs), adjusted for the expected effects of ageing and increased illness severity and expected risk of hospitalisation. The range of services pooled varied, but always included MBS, PBS, and hospital inpatients. Some trials included Health and Community Care (HACC), Department of Veterans' Affairs and Royal District Nursing Service (RDNS). The fundholders varied across trials and included the Department of Human Services in one State, regional health services and specially constituted trial organisations. In two cases, Divisions of General Practice were fundholders for part of the overall budget relating to payments to GPs for care coordination services and strategies involving GPs.

Outcomes

Care coordination and care planning outcomes: There was general consumer satisfaction with care coordination services and care planning, and this tended to be higher for consumers who had a greater need for coordination of their services. The highest exit rate was from a trial that enrolled people with limited potential to benefit. No trial had a "meaningful" gain in health and well being as measured by the SF36, for intervention compared to control, although three subtrials showed small gains (see Chapter 11 — Client health and well-being).[9] There was limited evidence of a reduction in hospital admissions, with reasonable evidence from only one trial with a randomised control (see Chapter 18 — Impact on service utilisation and expenditure).[9] Trials that directed a substantial portion of their budgets to increased RDNS and HACC services to clients who could benefit from these reported that there was an improvement in client well-being.

Fundholding as a contributor to the effectiveness of care planning and coordination: Fundholding allowed trials to fund strategies and infrastructure that would otherwise not have been possible. Clients' community service use increased for trials that pooled such services. At the conclusion of the GCCTs, there was limited evidence that there had been reduced use of hospitals, MBS and PBS. There was limited evidence that trials met the expectation that they could generate sufficient savings in some areas (eg, PBS and hospital admissions) to fund coordinated care activities and additional community services (see Chapter 16 — Financial and economic experience; and Chapter 18).[9] (Some trials made savings in relation to specific programs [eg, PBS], but this was often because the initial contribution was an overestimate of expected use.)

Fundholding as a funding model: The funds pool for each trial varied from $7.5 million to $28.4 million. This comprised infrastructure (range, 23%–42% of total) and service income. The variation across trials was a result of client numbers, their rates of leaving the trials, the range of services pooled, whether the enrolled clients were high or low users of services, and the extent to which infrastructure funding could be attracted from outside the core Commonwealth grants. Three trials did not have an operating loss, partly as a result of overestimates of usual care and the subsequent funds pool size, as well as infrastructure contributions. Funds pool estimates were generally poor (between plus or minus 25% from the best estimate of usual care). In a number of trials, it was very difficult to obtain an estimate of what the costs of care would have been in the absence of coordinated care.

* *Caveat:* There were nine distinct trials (one of which contained four subtrials) and the generalisations made in this summary are not necessarily representative of the experience of each trial. For more details, see the local evaluations of each trial or the national evaluation.[9-18]

usual care, or usual care plus a specified additional payment (eg, ATSI CCTs[18] and MAHT[19]). It is also possible to base the economic benchmark on the resources required for a specified group of services (eg, in relation to a care protocol for a patient recently diagnosed with diabetes, or best-practice antenatal shared care).[20]

Review of the Australian experience

In Australia, a dominant feature of fundholding discussions is that improved health and well-being of patients, rather than cost containment, should be guiding its implementation. Initiatives so far in Australia have included:

- care planning;
- care coordination;
- after-hours care;
- care for people with chronic and complex needs;
- hospital admission prevention or improved discharge programs; and
- Aboriginal community empowerment.

All these initiatives were aimed at improving the care offered to the people enrolled. The GCCTs[9] and ATSI CCTs[18] were underpinned by care plans and evidence-based guidelines, and the MAHT by improved patient access and satisfaction.[19] It is worth noting that care coordination was originally intended to be undertaken by a skilled professional, not necessarily a GP. The change in federal government in 1996 resulted in a decision by the new health minister that these trials should involve GPs in the care-coordination models, as they were the "central focus of primary health care" (see Chapter 5 — Care planning and coordination).[9]

2: The Aboriginal and Torres Strait Islander Coordinated Care Trials (four trials) (ATSI CCTs)[18]

The initiative

These trials were established to "achieve a more coordinated approach to the delivery of health care services to people with a diverse range of complex health needs".[18] In contrast to the GCCTs, these trials had another series of aims related to community empowerment and capacity building, with the aim of improving the health status of Aboriginal communities.

Fundholding model

The four trials ran from 1997 to 1999. The actual trial sites are given below.

Trial	Clients	Fund pool (in millions)	Infrastructure and sponsorship funding (in millions)
Katherine West (NT)	2012	$5.6	$1.1
Tiwi Islands (NT)	1818	$7.6	$1.4
Wilcannia (NSW)	780	$4.7	$1.5
Bunbury/Perth (WA)	1990	$5.6	$1.2

The fund pool included Commonwealth-equivalent MBS/PBS funding, existing local health services and, in some cases, hospital resources. Importantly, additional funds above usual care were provided in the form of Commonwealth-equivalent MBS/PBS funding. Each trial received $599.70 per client, either enrolled or in a specified community. This represented per capita (Australia-wide) use of MBS and PBS which was significantly greater than historical use in these regions. The fundholder varied from community-based boards to the Health Department of Western Australia and a local Health Service. The policies and strategies of the latter group were determined by a "community working group".[18]

Outcomes

Care coordination and care planning outcomes: There was improvement in service access and flexibility (by the use of the funds pooling) and improved appropriateness of service provision (by the use of care coordination).

Fundholding as a contributor to the effectiveness of care planning and coordination: There was development of the organisational structures required to implement fundholding; evidence that fundholding could be an effective mechanism for allocating "new" resources in the MBS/PBS equivalent funding; and improved individual and community empowerment. There was an opportunity to develop substantial infrastructure, including financial infrastructure and information systems.

Fundholding as a funding model: All trials operated within their financial budget, and all had unexpended funds as a result of several factors, including the delay in recruiting program staff required to implement agreed strategies, and the cautious approach to expenditure adopted by the fundholders.

MBS/PBS = Medical Benefits Scheme/Pharmaceutical Benefits Scheme

Review

In reviewing the evidence for improved patient outcomes with fundholding, we consulted both published and unpublished reports of the trials, and also interviewed organisations and individuals involved in the trials themselves or in their evaluation as trial managers, trial sponsors, financial stakeholders or evaluators.

Boxes 1, 2 and 3 summarise the trials — the healthcare initiative, the fundholding model, and the outcomes. Given the complexity of the trials, it was not possible to attribute any gains in patient outcomes directly to fundholding. Thus, our review distinguished between three types of outcomes:

- The outcomes of the initiative itself (eg, did improved coordination of care lead to improved patient health and well-being?);
- The effectiveness of fundholding's contribution to achieving these broader program initiatives (eg, did fund pooling contribute to improved coordination of care?); and
- The operational outcomes of fundholding (eg, was the program in operating surplus or loss at the end of an agreed period?).

Findings

Our findings suggest that fundholding has a role in overcoming the constraints imposed on specific healthcare initiatives by the Australian healthcare system. However, the relationship between fundholding and patient health and well-being is largely dependent on the objectives and effectiveness of the overall initiative. Four main themes emerged with regard to evidence of the relationship between fundholding and patient outcomes: evidence of impact on patients, role of fundholders, institutional acceptance, and information systems.

Evidence of impact on patients

There was limited quantitative evidence of reduced morbidity and fewer admissions to hospital. Although it would be inappropriate to attribute health gains across each of the components of the coordinated care intervention (care plans, care planners and fundpooling), some important service provision changes were facilitated by fundholding, and, supported by the qualitative evidence, had significant implications for patient well-being.

In the GCCTs, community service use increased for the trial clients in trials pooling these services. (Individuals enrolled in the trials were referred to as clients rather than patients.) There was also limited evidence of improvements in well-being, as assessed by SF36 (36 questions covering eight domains of mental and physical well-being),[21] and some evidence of reduced hospital admissions and readmissions.[9] In the MAHT, there was an increase in after-hours access to medical care.[19] In the ATSI CCT, improved access to coordinated services,[18] and a more coordinated approach for patients with complex needs, was accompanied by community empowerment and capacity building.[18] Additional money (Commonwealth-equivalent MBS/PBS funding) led to significant improvements in the range and quantity of services available to the communities.

Role of fundholders

The types of organisations acting as fundholders varied across the trials. In the ATSI CCTs, community-controlled boards determined how the pooled funds would be used,[18] and in MAHT the GP Division managed the funds.[19] In the

3: Maitland After Hours Primary Care Trial (MAHT)[19]

The initiative

In response to an identified and quantified need for improved after-hours care in the Maitland area of the Hunter region, a comprehensive trial with four elements was established in October 1999.

- An after-hours triage service;
- A service provided by GPs (Maitland After Hours GP Service [MAGS]) in the Maitland Hospital Emergency Department
- A funded transport service; and
- A home visiting service.

The two main needs met by MAGS were to ease the patient burden on the Maitland Hospital Emergency Department, and to lessen the difficulties faced by local GPs in meeting patients' after-hours care. A key element was organising the after-hours GP workforce more effectively.

Fundholding model

The trial involved pooling funding from two Commonwealth sources (Medical Benefits Scheme, Practice Incentive Payment [$457 000] and Commonwealth infrastructure funding [$279 000]) and the Maitland Hospital (staff, pathology, investigations, pharmaceuticals and consumables [$200 000]), making the total fund about $936 000. The economic benchmark was estimated usual after-hours care for the region across GP and Maitland Hospital Emergency Department services, with an additional contribution by the Commonwealth to fund the program's establishment. The fundholder was the Hunter Urban Division of General Practice, but the Board of Management for MAGS included Area Health Service personnel.

Outcomes

After-hours care service: Overall, the GPs and all stakeholders were very happy with the service and wanted it to continue. In all, 11 315 patients were seen at MAGS, 2093 telephone calls were handled and 103 home visits completed. There was a 61% decrease in Category 4 and 5 patients (the two least urgent triage categories) seen by the Emergency Department staff during the time MAGS was operating.

From a survey in February – April 2000 of 81 users of the service (34% response rate), 79% rated the "overall quality of the service as excellent or very good (5% said it was fair/poor), 91% said they would return to the service for medical care, and 89% would recommend it to their family or friends". At a follow-up interview in August – September 2000 of 422 people who had used the service, 89% agreed they were able to get the care they wanted, 84% were happy with the doctor they saw and 35% felt they had to wait a long time. There were 12 formal complaints.

Fundholding as a contributor to the effectiveness of an after-hours service:

- Fundholding provided an alternative model for paying GPs (salaried rather than fee-for-service);
- It provided the additional funding above usual-care costs to establish and maintain the alternative model; and
- It engaged stakeholders in the process of changed models of care, partly as a result of the transparency of the model in terms of its financial and patient-load impact on the various providers.

Fundholding as a funding model: The model was financially viable (ie, within budget). Payments were timely and initial infrastructure funding was sufficient for startup. A key to successful implementation was that the Area Health Service remained committed to the trial and facilitated dealings with Maitland Hospital. This was important, as the reduction in patient load clearly had resource implications for Maitland, but the exact extent of the impact on Emergency Department resources was difficult to estimate, partly owing to the cost structure of emergency departments.

GCCTs, the fundholders included the Department of Human Services in one State, regional health services, and specifically constituted organisations.[9] There is substantial evidence of the significant role the fundholder played in the GCCTs and ATSI CCTs. In the ATSI CCTs,[18] the fundholders, mostly community representatives, replaced government organisations as key decision-makers for funds covering a broad range of services.

The fundholder had three main responsibilities:

- the financial viability of the program (ensuring there was no operating loss);
- engaging stakeholders in the process (both providers and fundholders); and
- achieving the objectives of the overall initiative (eg, patients' health and well-being).

A critical role for fundholders was balancing the trade-offs between additional services for patients and the program's financial position. The evidence from these 14 trials is that future fundholders will need training and skills to manage this difficult and critical task. The most appropriate fundholder organisation will depend on the nature of the initiative and the type of stakeholder engagement required.

Institutional acceptance

Stakeholders' willingness to engage in fundholding varied across the trials and stakeholders and was influenced by at least three factors.

- *Shifts in resources* — the pooling of financial stakeholders' resources in one budget leads to increased engagement across institutions in resource-allocation decisions, but shifts in resources away from a contributor's institution as a result of fundholding can reduce willingness to participate.
- *Availability of savings* — in most fundholding frameworks, providers of care are encouraged to make decisions leading to financial savings (efficiency gains). There is a greater likelihood of providers generating these efficiency gains if the savings remain available to the initiative.
- *Workforce implications* — ensuring that the workforce implications of changing the mix of patient services are considered requires broader institutional engagement than can be achieved through fundholding alone. In the ATSI CCTs, it was noted that, without additional workforce expansion and training, fund pooling alone would not bring sustainable health system change.[18]

The role of information systems

Information technology (IT), in particular the timely availability of accurate data on patients' service use, care plans and associated expenditure, played a significant role in the effectiveness of fundholding in the GCCTs. These data included both historical data on service use by patients (used to estimate the size of the fund pool) and service use throughout the trials. Unless it was clear to fundholders which services were being used by the trial patients, it was difficult to monitor quality of care and ongoing financial trial viability. The data collection and information technology (IT) framework for monitoring the funds pool, establishing the economic benchmark and evaluating the trials, was time

consuming and expensive. If fundholding is to successfully improve patient care, the most efficient fundholder is unlikely to reach these goals without excellent IT systems, and the second round of the GCCTs has recognised IT system development as a key requisite for effective care coordination and fundholding.

Next steps

We identified three necessary steps before fundholding can be adopted more widely:

- More formally evaluated trials of a greater range of initiatives focused on specific health and well-being outcomes;
- Improved prospective analysis of the likely effectiveness of fundholding on both a general and case-by-case basis; and
- Informing the broader health community.

It is important that future trials, including the second round of CCTs and their evaluation, are designed to provide evidence of the impact on patient health and well-being and the role of fundholding in facilitating any such gains.

Also needed are rigorous analyses of how a particular initiative could be improved by including a fundholding framework. Such analyses were completed by participants in the GCCTs and informed decisions about funding of the trial initiatives, the contributions to the funds pool, and the ongoing viability of fundholding. The simulations supporting the second round of CCTs are more accurate, as these trials have access to improved data sources and better estimates of costs per patient (capitation rates). Despite these improvements, the estimates of possible efficiency gains in coordinated care (eg, reductions in hospital admissions and MBS service use) seem too optimistic. Preliminary work on the application of such simulations has begun with Shared Care Obstetrics[20] and GP fundholding.[22] Evidence from other countries[23,24] can inform the debate, but should be analysed from an Australian perspective.

Informing the broader health community of the potential benefits and limitations of fundholding is important. Time and patience are needed for some clinicians and managers to change their perspective and embrace the concept.[25] In MAHT, there was a need to foster relationships with existing providers (eg, emergency physicians) and manage the change in these relationships.[19] In both the ATSI CCTs[18] and the GCCTs,[9] appropriate engagement of the community was crucial to develop transparent and accountable processes for allocating the funds and establishing relationships with service providers.

Competing interests

Justin Beilby was involved in the local evaluation of Health Plus, a South Australian Coordinated Care Trial. Brita Pekarsky was involved in the national evaluation of the General Coordinated Care Trials, the Aboriginal and Torres Strait Islander Coordinated Care Trials and the Maitland After Hours Trial while employed by KPMG.

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