Emergent themes in the sustainability of primary health care innovation

Beverly M Sibthorpe, Nicholas J Glasgow and Robert W Wells

ABSTRACT

- A synthesis of the findings of the five studies of sustainability of primary health care innovation across six domains (*political, institutional, financial, economic, client* and *workforce*) yielded three main themes. These were:
  - the importance of social relationships, networks and champions;
  - the effect of political, financial and societal forces; and
  - the motivation and capacity of agents within the system.
- The need for routine assessment of the sustainability of primary health care innovations is discussed.
- Given the dearth of literature on the sustainability of primary health care innovation, there is potential to develop a program of research directed towards a future synthesis of evidence.

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A recent comprehensive review of the literature on diffusion of innovation in service organisations exposed a "demon . . . [that is] . . . the near absence of studies focusing primarily on the sustainability of complex service innovations".[1] The Australian Primary Health Care Research Institute (APHCRI), based at the Australian National University, funded five research teams (called "spokes" within APHCRI's virtual institute "hub and spoke" model; Box 1) to work collaboratively to examine existing initiatives in one or more of its priority areas. The aim was to address the question "How sustainable are these initiatives?", using a common approach but diverse methods (*page S52*).[7]

The hub and spoke teams agreed to break down sustainability into six domains: *political, institutional, financial, economic, client* and *workforce*. In this article, we draw together the factors that the spokes identified as facilitating or inhibiting sustainability within these six domains,[2-6] and identify three common themes that emerge. We discuss the implications of this work for primary health care innovation and future research.

Common threads in six domains of sustainability

Political sustainability

At whatever level in the system primary health care innovation occurs, it has local, state/territory and national political contexts. Spokes identified facilitators of political sustainability as having individual champions locally and nationally (SHCI), existence of good linkages with regional health planning (RAISE), and the timing being in tune with national policy direction (SHCI).

Conversely, threats to political sustainability were uncertainty about the acceptability of the reform to policy makers (Panic/PEP), and the initiative lying outside mainstream primary health care in terms of both its approach and its focus on a marginalised minority client population (CPP).

Institutional sustainability

Institutional sustainability had two dimensions — between institutions and within institutions. For the former, facilitators of sustainability were about good relationships and the structures and processes that supported these. Thus, spokes identified established and productive relationships between local management and program champions (RAISE), partnerships with Area Health Services (SNAP), General Practice Division support for general practices (SNAP), and availability of and good communication between GPs and referral services (SNAP). Relationships were sometimes supported by specific structures such as "Management and Linkages Groups" (RAISE) and Memoranda of Understanding. Facilitatory processes included flexibility in implementation among the institutional actors to take account of local conditions (SHCI), and good information flows, both formal and informal, at national and local levels (SHCI). Not surprisingly, consistency with the missions of the partner organisations smoothed institutional support (RAISE).

Conversely, where partnership structures (such as Memoranda of Understanding) and processes (such as assessment and care-management tools and training) were incomplete or lacking, this was seen as a significant inhibitor of sustainability (RAISE). Different organisational cultures and processes were also seen as a threat (SHCI).

Within institutions, the SNAP initiative identified the inhibitors of sustainability centred around general practices, including lack of practice meetings and teamwork and lack of a business model to support the activity. On the other hand, good internal fit between the initiative and other activities at the Division level supported sustainability (SNAP).

Financial sustainability

Initiatives were dependent on both general and specific funds. As might be expected, general funding facilitated sustainability, as in the case of Panic/PEP, where remuneration of GPs trained in psychological strategies is financed under Medicare. In contrast, the uncertainties inherent for specific funding were a threat for SNAP, RAISE and SHCI. Even for Panic/PEP, financial sustainability remained an issue, as the interventions incurred costs not covered by Medicare, including training costs and non-GP costs that would have to be covered by states/territories or patients.

The RAISE group noted that lack of data limited managers' ability to argue the value of the program to establish a secure funding base — a not uncommon problem.

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1 The "spokes" of the Australian Primary Health Care Research Institute study

- SHCI: Sharing Health Care Initiative, Katherine, WA[2] (*page S64*)
- CPP: Care and Prevention Programme for HIV, Adelaide, SA[3] (*page S59*)
- RAISE: Regional Aboriginal Integrated Social Emotional Wellbeing Program, Northern and Far Western Region, SA[4] (*page S69*)
- Panic/PEP: Panic Online, and Primary Care Evidence Based Psychological Interventions, Melbourne, VIC[5] (*page S73*)
- SNAP: Smoking, Nutrition, Alcohol and Physical Activity in General Practice, NSW[6] (*page S54*) ◆

Economic sustainability

Two of the spokes had a particular focus on economic sustainability, one based on the experience of running the program over many years (CPP), and one using modelling techniques (Panic/PEP). Economic sustainability was the major issue for CPP. That research team has argued that income disadvantage, resulting from the interaction between funding mechanisms and the comprehensive model of care, is a serious threat to program survival.

The time and workload issues raised by the SNAP team are also closely linked to economic sustainability under our fee-for-service remuneration system, which currently lacks specific incentives for this kind of activity to be incorporated in routine general practice.

Client sustainability

Issues raised about client sustainability related to the resilience of the client base. Sustainability was seen to be enhanced if the setting was right in terms of where patients sought care (Panic/PEP), there was acceptance of the provider role (SNAP), or the service was embedded in its patient community (CPP). That there would be relatively small out-of-pocket costs for patients as long as GPs or public sector psychologists delivered the interventions was seen as facilitating client sustainability for Panic/PEP.

Inhibitors arose where the effectiveness of interventions remained to be determined (Panic/PEP) or where patient motivation to follow through with therapeutic approaches was at issue (SNAP).

Workforce sustainability

Workforce sustainability emerged as a key issue. It had three dimensions: staffing, skills and motivation.

Staffing

Lack of staff continuity was a common threat to sustainability for SNAP, RAISE, SHCI and CPP. Nowhere was the staff continuity such that it was seen as a facilitator of sustainability, which is a salutary finding. Simply having a workforce to meet demand was also seen as a threat for Panic/PEP.

Skills

Staffing was at least as much about the skills of the staff as their availability or continuity. Providing training to GPs in risk behaviours and motivational interviewing was seen as a facilitator for the SNAP initiative. The other sustainability workforce skill was characterised by one spoke as "diversity competence", which was relevant to CPP, SHCI and RAISE. Internal (to the initiative) lack of confidence in the skills of staff was an inhibitor, identified by RAISE as a threat to collective efficacy.

Motivation

Worker motivation also came into play. Providers' commitment to a "best practice" service delivery model, even though this was poorly supported by the system (characterised as "virtuous non-adaptability": CPP), a strong community development approach (SHCI) and worker acceptability of the intervention (Panic/PEP) enhanced sustainability. In contrast, resistance to change under high pressure to deliver clinical services (SHCI) and uncertainty about the effectiveness of the interventions (Panic/PEP) were seen as threats. The SNAP team identified the "good fit" of their intervention in general practice clinical encounters as a motivating force, but this had to be balanced against time and workload pressures that threatened sustainability.

Discussion

Themes

Three major themes emerged from the synthesis (Box 2). The first is the very human nature of organisational change. Consistent with the literature on diffusion of innovation,[1] the adaptability of complex systems[8-10] and the sustainability of primary health care programs,[11,12] social relationships, networks and champions emerged as critical for sustainability. The importance of these cannot be overstated. The review by Greenhalgh et al shows that social networks are the dominant mechanism for diffusion of innovation,[1] and therefore potentially of sustainability. The ability of complex systems to adapt is dependent on relationships.[8-10] Networks and champions are at once a strength and a source of vulnerability, as the agents in the systems that impinge on primary health care — from the government of the day to local managers and practitioners — can change at any time. Formalising relationships through partnerships, Memoranda of Understanding and shared protocols is part of the armamentarium of institutional responses to this vulnerability. They are necessary but not sufficient, as individuals still have to translate them into effective action.

The second major theme is the effect of the forces — political, financial and societal — that create the context within which primary health care innovators must work. Innovations are unlikely to survive without a solid policy footing, streams of funding that are ongoing, and enduring client demand (itself based on a constellation of interacting factors, including expectations, experience, perceived value and cost). Although it might be anticipated that a solid policy footing would ensure ongoing funding, this may not be the case. We can see from our studies that favourable policy environments can lead to time-limited funding from designated programs that are not ongoing. Innovation trials have a different set of threats to financial sustainability, as they are often testing models of care for which ongoing funding is not available, even if they prove effective. This is, of course, a "catch 22", as demonstrated effectiveness is needed to support claims for ongoing funding. However, such claims become part of an obscure

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maze of claims against health budgets that will be affected by distant deliberations about the allocative efficiency of the system as a whole and by the opportunity costs incurred at the service delivery level, even if these have not been explicitly considered. These and other factors often combine to make the claims unrealisable, regardless of the effectiveness of the innovation.

The third major theme is the motivation and capacity of agents to both adapt innovation and adapt to innovation so that it can be sustained in complex and ever-changing national, regional and local environments. The burden of flexibility and effort seems to fall disproportionately on workers at the front line. Our studies highlighted some of the factors that influence these workers. They include perceived client need, the adequacy of staffing levels and mix, staff training and skills, workload, compatibility of new with existing roles and tasks, institutional support, patient and community receptivity and support, perceived effectiveness, economic viability, and feedback of information. Again, these factors resonate with those identified in the literature on diffusion of innovation.

Given the primary health care literature's central concern with equity, there is an additional issue that we need to touch on briefly. It is perhaps no surprise that three of the five initiatives represent innovation in the delivery of care to marginalised populations with significant health disparities. Such groups have health care needs that particularly test the adaptability of mainstream financing arrangements and service delivery models, and highlight the need for innovation. The sustainability of organised efforts to respond to those needs will likely be influenced by the extent to which equity is in the foreground of national, state and local policy. But even if it is part of the policy landscape, its influence may be uneven. The reports on the RAISE and CCP initiatives suggest that equity considerations currently have greater salience in relation to Aboriginal people in remote Australia than to people with HIV in urban Australia.

Limitations

We can identify two main limitations of this work. The first relates to the methods by which the initiatives were selected. There was a fixed total amount of funding available to support this work and a maximum amount for each application, which meant that no more than five spokes could be funded. This limited the number of perspectives on sustainability sampled, possibly limiting the number of themes that could emerge, so this exploration of sustainability is not exhaustive. The second main limitation relates to the interrelationship between the common approach for considering the initiatives and the differing methods used within each of the initiatives. The five initiatives were very different in nature, and consequently adopted different methods in response to the common approach. Thus, the common approach guided at a high level the enquiry into sustainability rather than imposing a post hoc conformity on those methods. Because of this, we do not consider that methodological triangulation has occurred, despite the differing methods. We effectively have five case studies from which we have identified some common themes.

Implications for primary health care innovation

We think the most important policy question is whether there should be routine assessment of the sustainability of primary health care innovations. If so, what would this look like? There are clearly some minimal requirements for sustainability. These could be developed into criteria against which proposed or existing innovations could be systematically assessed, recognising that such criteria could only ever define the necessary but not the sufficient conditions for sustainability. Just as the review by Greenhalgh et al[1] and other studies[11] show there is no "recipe" for successful innovation, so there will never be a "recipe" for sustainability. The peculiarities of the factors and forces at play over time in any particular innovation will always be too complex to ever be assured of such an outcome. Complex adaptive systems theory helps us to understand why sustainability is difficult to predict.[8,10]

If routine assessments of sustainability were undertaken, how might they be framed and what methods might be used? The literature on complex adaptive systems tells us that sustainability ultimately comes down to ability to adapt, so the task might be framed along the lines: "What is the likelihood that this innovation has the capacity to continue to adapt to current and foreseeable system conditions?" Threats to sustainability could be identified and considered using qualitative methods, supported by quantitative data as appropriate. An example is the Hunter Urban Division of General Practice's assessment of the sustainability of its after-hours trial,[13] while Sarriot et al's[14] proposed methodological approach for sustainability assessment for developing-country programs offers some insights.

Implications for primary health care research

It is now widely accepted that synthesis of evidence from a number of studies is a more robust foundation for policy than is reliance on a single study.[15] Given the dearth of studies on the sustainability of primary health care innovation, there is the luxury of being able to build a synthesis program on sustainability from the ground up. A set of questions that the synthesis would need to answer could be developed, and the relevant studies undertaken, using appropriate methods. Economic analysis would be a critical component as system demands and constraints grow. The research reported in this Supplement has been a small initial step in this direction. It highlights the potential for an organised approach to researching a subject that will become increasingly important as pressures on the health care system increase and wasteful innovation becomes increasingly unaffordable.

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Competing interests

None identified.

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