

Developing and Implementing High Impact Changes for Primary Health Care in New Zealand



DHBNZ

Primary Health Care Strategy
Implementation Work Programme
2008



Developing and Implementing High Impact Changes for Primary Health Care in New Zealand

Discussion document prepared for District Health Boards New Zealand

Judith Smith, Janet McDonald and Jacqueline Cumming

Health Services Research Centre
School of Government
Victoria University of Wellington

August 2008

CONTENTS

Introduction	1
Project approach.....	1
What are high impact changes?	2
What do we know about the implementation of high impact changes?	5
How does this relate to the wider literature about change in primary health care?	6
What are the specific issues facing New Zealand primary health care?	13
What might make sense in relation to an approach to implementing change in the next phase of primary health care development in New Zealand?	17
References	21

INTRODUCTION

In February 2008, the Health Services Research Centre (HSRC) at Victoria University of Wellington was commissioned by District Health Boards New Zealand (DHBNZ) to carry out a project exploring issues associated with identifying and implementing high impact changes that could contribute to service improvement in New Zealand primary health care over the next five years. The project forms part of the joint District Health Boards New Zealand and Ministry of Health work programme on the implementation of the Primary Health Care Strategy.

This project draws on international experience of the development of a set of high impact changes that are intended to enable a strategic and prioritised focus on quality improvement activities for the whole health care system, or for parts of that system. In particular, an examination has been made of research evidence available about bringing about changes to service delivery in primary health care, and the experience of using the high impact changes approach within primary health care in England.

In this paper, the findings of the literature review and data gathered in a set of interviews with twelve national primary health care stakeholders are used as the basis for a discussion about how a high impact changes approach might be re-interpreted for the specific context of the New Zealand primary health care system.

PROJECT APPROACH

An advisory process was established for the project, in order to offer guidance and support for the research team. This took the form of the Ministry of Health's Primary Health Organisation (PHO) Taskforce Group (now known as the Primary Health Care Advisory Council), along with a panel of international experts in the issues involved in identifying and implementing high impact changes (Dr Lynne Maher of the NHS Institute for Innovation and Improvement, Dr John Oldham formerly of the NHS Improvement Foundation, and Julie McDonald of the Centre for Primary Health Care and Equity, University of new South Wales).

Activity to date has taken the form of a focused literature review on the rationale and process for developing a list of high impact changes in England; the experience of implementing high impact changes in England the New Zealand primary health care context, including the Primary Health Care Strategy and progress with implementation; and planning and bringing about change within primary health care.

The literature review has been informed and extended by the carrying out of a set of semi-structured interviews with 12 national primary health care stakeholders drawn from organisations including: Healthcare Aotearoa; PHO Alliance; PHONZ; IPAC; Royal New Zealand College of GPs; Māori Coalition of PHOs; senior nursing colleagues; DHBNZ; and the Ministry of Health. In these interviews, people were asked about their perception of the need for change within primary health care, and what they felt might facilitate or impede such change. They were also asked questions about the relevance or otherwise of a high impact changes approach, and about how they felt an overall approach to change in primary health care might go forward.

WHAT ARE HIGH IMPACT CHANGES?

A 'high impact changes' approach was first developed in England by the NHS Modernisation Agency, whose successor is the NHS Institute for Innovation and Improvement. Both organisations were established to promulgate, fund and support service improvement activity within the National Health Service (NHS) in England. The high impact changes approach is based on strategic models of service improvement developed by the Institute of Healthcare Improvement in the United States of America. A high impact changes approach is intended as an evidence-based approach to innovation, and seeks to be patient-centred and rooted in a 'systems view' that calls for the whole of the relevant care system to be examined and addressed as changes are made. The approach uses case studies as the basis for demonstrating how changes can be made to services in local settings.

In 2004, the NHS Modernisation Agency published *10 High Impact Changes for Service Improvement and Delivery*, since reprinted in 2007 (NHS Modernisation Agency, 2007). The changes are set out in box 1 below.

Box 1: the NHS High Impact Changes (NHS Modernisation Agency, 2004/2007)

1. treating day surgery (rather than inpatient surgery) as the norm for elective surgery;
2. improving patient flow across the whole NHS system by improving access to key diagnostic tests;
3. managing variation in patient discharge, thereby reducing length of stay;
4. managing variation in the patient admission process;
5. avoiding unnecessary follow-ups for patients and providing necessary follow-ups in the right care setting;
6. increasing the reliability of performing therapeutic interventions through a Care Bundle approach;
7. applying a systematic approach to care for people with long-term conditions;
8. improving patient access by reducing the number of queues;
9. optimising patient flow through service bottlenecks using process templates; and
10. redesigning and extending roles in line with efficient patient pathways to attract and retain an effective workforce.

The *10 High Impact Changes for Service Improvement and Delivery (the High Impact Changes)* document was accompanied by implementation guides for clinicians and for primary care trusts (NHS Modernisation Agency, 2004a, 2004b). Subsequently, high impact changes guides have been developed in England for primary care, mental health services, human resources, genito-urinary medicine, and health and social care (Care Services Improvement Partnership, 2006, 2008; Department of Health, 2006; DH Workforce Directorate/NHS Partners/Manchester University, 2006; The Improvement Foundation, 2006).

The documents setting out the high impact changes say little about the process through which they were developed. However, a subsequent academic paper (Bevan, Robert, Bate, Maher, & Wells, 2007) tells the story of how a 'design approach' was used by the NHS Modernisation Agency when trying to 'go beyond existing perspectives, methods, and approaches and the underlying theories that drove them as these were not by themselves going to be sufficient to deliver the transformational changes required' (Bevan et al, 2007,

pp. 137–8). This paper reveals how senior managers leading service improvement activity within the NHS sought to find a way in which they could draw together the many strands of improvement work in train within the NHS, adopt ‘a comprehensive approach to problem solving and transformation’ (Bevan et al, 2007, p. 138), and do this in a way that would appeal to chief executives and senior leaders of hospital and primary health care organisations. Thus the approach was about helping to close the gap between strategic intentions and isolated frontline initiatives, and creating better, quicker, more sustainable changes.

A four-stage design process was used as a way of distilling the learning and best practice advice from ‘one of the largest health care improvement efforts in the world through its work with tens of thousands of NHS clinical teams over 3 years into 10 demonstrably successful change ideas’ (Bevan et al, 2007, p. 139). The stages in the process of design were intended to enable people to ‘think like a designer’ when exploring how to improve services for the future, and are set out in box 2 below.

Box 2: Four stages of ‘thinking like a designer’ (Bevan et al, 2007, p. 140)

1. reflection, analysis, diagnosis and description of the existing situation;
2. imagination and visualisation of the ideal future outcome;
3. planning and prototyping a model that will deliver the desired outcome; and
4. action and implementation.

Bevan et al (2007, p. 141) underlined the importance of the first stage of the process as follows: ‘hindsight gives insight, and insight gives foresight’. In other words, the development of high impact changes was rooted in reflection on the experience of trying to improve patient care and services in the NHS, using this analysis as the basis for looking forward to what might be designed for the next phase.

Those leading the process first of all asked hospital and primary health care organisation chief executives why they had not adopted service redesign as a way of trying to achieve their service priorities. This resulted in two messages: one about there being so many initiatives that it was impossible at a strategic level to identify and select which would make the greatest contribution; and a second one about a lack of data about what quantifiable difference these initiatives could make. In addition, the NHS Modernisation Agency carried out an audit of the ‘best practice advice for improvement’ that was being promoted in the NHS and this identified over 1,000 current improvement initiatives. Five core design principles therefore emerged to guide the other three stages of the process of identifying high impact changes (Bevan et al, 2007):

- create a small number of high-leverage change principles to focus on to achieve strategic goals;
- do less more thoroughly;
- quantify potential benefits;
- design a ‘package’ to encourage chief executive/senior leader adoption; and
- create pull not push, because externally driven change had been shown not to produce transformational improvement on its own.

During the imagination and visualisation phase (which ‘requires the designer to begin to visualize and conceptualize what might be the ideal outcome or product or scenario for the

future', Bevan et al, 2007, p. 143), the concept of 'ten high impact changes' or a 'ready reckoner' for improvement began to develop. During the third stage (planning and prototyping), a set of evaluative criteria was applied to the 1,000 improvement initiatives to produce a list of 64 'best practice changes with greatest potential' which were then refined down to ten following a participatory design day with 40 people comprising national leaders of NHS improvement programmes together with local NHS leaders of service improvement. Evaluative criteria included:

- the potential to impact on a large number of patients;
- a focus on areas where there was a significant gap between typical practice and best practice; and
- relative ease of implementation.

A systematic process of assessment was used to identify and agree upon the ten highest impact changes on the list, plus two to be held in reserve in case the team ran into difficulties with any of the original ten.

All ten changes were fully developed and launched in September 2004 (15 months after the design process began). This included the identification of a 'subject-expert champion' who led the development of each one of the changes – most of these people were clinicians with an in-depth knowledge of and interest in the topic. A justification was developed for each change, along with a process for implementation, assessment of costs, and statement of likely impact.

The changes were suggested in England to be something that should be built into commissioning (planning and funding in New Zealand terms) service agreements, and a guide for primary care trusts (the local health planning body that in many respects equates to a New Zealand district health board) was developed, in relation to how commissioners might apply the changes.

The high impact changes approach was subsequently applied to primary health care and in particular to general practice teams, with a national development team from the NHS Institute and the NHS Improvement Foundation working closely with a group of known innovators from the primary health care sector, and seeking advice from national primary health care organisations. This work resulted in a set of nine high impact changes for general practice teams (The Improvement Foundation, 2006), set out in box 3 which follows.

Box 3: the NHS High Impact Changes for practice teams (The Improvement Foundation, 2006)

1. promote patient self care and self management;
2. improve the management of patients with long-term conditions;
3. improve patient access;
4. improve care for patients by redesigning roles in general practice;
5. use data and information to drive improvement;
6. improve care through systematic review of patient feedback;
7. avoid unnecessary follow-ups in primary and secondary care;
8. provide services closer to patients; and
9. maximise use of practice based commissioning (a form of budget-holding for referred services taken up by some by general practices in England).

Each of these nine changes was accompanied by a set of 'how to get going' tips, along with case study examples of primary health care teams who had experience of making the specific change. In this way, the high impact changes for practice teams work represented a process of drawing together innovation in service delivery within general practice, focused on examples where service improvement techniques advocated by the NHS Institute had been used.

In summary, a high impact changes approach represents an attempt to draw together several years' of experience of applying service improvement techniques within the NHS in England, trying to identify those changes considered most likely to have a 'high impact' in relation to improving patients' experience within the health system. The approach draws heavily on improvement science rooted in process re-engineering, based on a belief that systematic examination of the processes of care experienced by individual patients can form a basis for subsequent design work to enable further change and improvement in patient care. The design process that underpins the high impact changes emerged from the specific context of NHS improvement activity. This is an important point to which we return later in this paper when considering the extent to which high impact changes (either the design process or the changes themselves) could be translated into the context of New Zealand primary health care.

WHAT DO WE KNOW ABOUT THE IMPLEMENTATION OF HIGH IMPACT CHANGES?

There has been no quantitative study in England of the implementation of the ten high impact changes overall, and as is often the case in evaluations, it would in any case prove difficult to attribute improvements to the *High Impact Changes* as opposed to other things occurring at the same time (Bevan et al, 2007). However, since their implementation, the NHS is reported to have made significant progress in key indicators such as increased day case service delivery rates and reduced patient waiting times and length of stay (Bevan et al, 2007). This paper by Bevan et al appears to be the only published contribution to the academic literature to date based on the experience of implementing high impact changes in England. Studies of the implementation process have remained unpublished (e.g. Cornwall, 2005; Middleton-Kelly & Bevan, 2006; cited in Bevan et al, 2007), apparently due to NHS structural changes inhibiting the research process (Maher, 2008, personal communication). The authors of the Bevan et al paper (who, it has to be borne in mind were the designers and champions of the process) assert that the *High Impact Changes* have been very positively received, which they attribute to three factors:

- the *High Impact Changes* provided leaders with evidence with which to make changes;
- they succeeded in engaging leaders, clinicians and managers; and
- the broad principles were able to be adapted to local contexts.

On the other hand, there have been a number of reported shortcomings associated with the approach (Bevan et al, 2007):

- there were variations in the implementation of the *High Impact Changes* (effective leadership being a key factor);
- target audiences other than chief executives should also have been more involved in the development of the changes in order to enhance their ownership; and

- there was a need to quantify likely future benefits (a challenge given that different methods of outcome measurement and data collection were used across service improvement initiatives).

A rapid assessment and evaluation of the introduction of the NHS high impact changes was commissioned by the NHS Modernisation Agency in the months following their launch (Cornwell, 2005, unpublished, cited in Bevan et al, 2007). Three strategic health authorities (SHAs) were selected as case studies and semi-structured interviews were carried out at each SHA and in hospital and primary care organisations within the SHA area. A number of national level interviews were also carried out. Findings of this review indicated an extensive level of awareness of the *High Impact Changes*, some use within business planning, yet limited adoption at a local level, with no evidence of systematic use being made of the changes across whole organisations or health communities. It was concluded that there was a need for:

- a bigger picture national narrative to be created about improvement using the High Impact Changes;
- examples of the High Impact Changes applied to real SHA data; methodologies for baseline measurement of high impact changes together with assessment of benefits;
- engagement with professional bodies and constituencies for endorsement, training and dissemination; and
- stronger local leadership by trusts and PCTs in developing and monitoring action plans for service improvement.

This evaluation by Cornwell suggests that there are specific challenges related to implementation of an approach such as high impact changes, in particular in relation to winning the hearts and minds of clinicians and managers at a local level, at least to a degree where such work can move centre-stage and be considered critical as part of overall management activity and development within an organisation. Whilst the process of developing the changes has been reported as innovative, and inclusive of NHS leaders, questions appear to remain about how the approach has been taken forward and embedded within the health system at local level.

HOW DOES THIS RELATE TO THE WIDER LITERATURE ABOUT CHANGE IN PRIMARY HEALTH CARE?

A large literature exists on organisational change within health care. We have been necessarily selective in the studies we have chosen to include in this discussion paper, seeking to highlight studies that shed light on the complexities of bringing about change and improving services within primary health care.

In a systematic review of the spread and sustainability of innovations in health service delivery (Greenhalgh et al, 2004), closely related to the topic of high impact changes and service improvement, it was concluded that innovations were more likely to be adopted and implemented where they fulfilled the conditions set out in box 4 below.

Box 4: Conditions required for adoption and implementation of innovations in health care (Greenhalgh et al, 2004)

Where the innovations:

- have a clear, unambiguous advantage in terms of either effectiveness or cost effectiveness, and this advantage must be recognised by the key players;
- are compatible with the values, norms and perceived needs of the intended audience;
- are simple to use;
- can be trialled by users on a limited basis, and adapted or refined to better suit needs;
- are relevant to the adopter's work and improve task performance;
- are feasible and workable in the adopter's setting; and
- have few barriers to be overcome in order to be implemented.

This review pointed out that adoption of an innovation by an organisation is not a single event, but often a complex and drawn-out process. The importance of the organisation having the capacity to absorb new knowledge and be receptive to change was underlined, as was the early and widespread involvement of staff at all levels, particularly top management support and advocacy for the implementation process. Thus the importance of local readiness, and of capacity for change, was underlined.

Local readiness is not just concerned with health organisations and professional groups, but also encompasses the readiness for change of the wider local community. An example of a model which assesses community readiness for intervention and change is the Community Readiness Model (Jumper Thurman, Vernon, & Plested, 2007). Within this model, existing resources and strengths are identified via a structured process of assessment and engagement, and then used to develop interventions in partnership with the community. With community involvement and ownership, promoters of the model claim strategies are more likely to be successful and cost-effective (Jumper Thurman et al, 2007).

One of the most widely referred to reviews of change management literature within health care settings is the work of Iles and Sutherland (Cameron, Cranfield, Iles, & Stone, 2001; Iles & Sutherland, 2001). Their work examines evidence-based lessons related to 'making change happen', and underlines the fact that the people within a process of change will each have different starting points. They assert that the common concerns faced by people are likely to be: who wants the change and why; where the drive for the change is coming from; who is opposed to the change and why; how the change fits in with the other performance objectives set for the unit or organisation; how to measure the success of the change; what professional groups are involved in or affected by the change; and how to involve these groups in discussions and in the development of a solution. Iles and Sutherland suggest that these questions can be helpful in enabling managers and professionals (and, we would add in New Zealand, community leaders) to orientate themselves in relation to the need for renewed change, and to start planning and implementing the change.

The researchers who were involved in the development of the high impact changes approach in England have carried out further work examining how the factors associated with quality improvement are set in motion, and how they interrelate (Bate, Mendel, & Robert, 2008). They examined medical organisations that had earned reputations for

sustained achievement of quality improvement in the UK, USA and the Netherlands. Bate et al concluded that quality improvement processes are interconnected and symbiotic. Furthermore they asserted that all the successful organisations shared an ability to address multiple challenges simultaneously, together with a talent for adapting solutions to their own organisational context. This again echoes the theme of readiness for change, organisational capacity, and effective local leadership, as well as the need for access to the service improvement tools and expertise required by managers to bring about sustainable change.

Bate and Robert (2007, p. 41) have also written in the methodological literature arguing for ‘a major shift in focus away from a strong management orientation of organisation development (OD) towards a more ‘user-centric’ OD, one that seeks to mobilise and privilege change on behalf of the consumers or users of an organisation’s product or service, involving them at every stage of the design process, from problem diagnosis to solution generation and implementation’. They draw on the field of experience-based design and employ a case study of user-centric design when working with a cancer clinic team in the UK. The two key planks of the approach are the direct involvement of service users in the process of design and development of a service (i.e. no third-party representation of users), and an experience element that focuses on improving the overall experience of how the service looks and feels. (See also Bate & Robert, 2006; Pickles, Hide, & Maher, 2008.)

Collaboratives are another approach to service improvement within health care. They originate from the American Institute for Healthcare Improvement (IHI), and there have also been a number of collaborative initiatives piloted in England. Collaboratives are aimed specifically at quality improvement, by ‘...bring[ing] together groups of practitioners from different healthcare organisations to work in a structured way to improve one aspect of the quality of their service’ (Øvretveit et al, 2002, p. 345). Greenhalgh et al, in their review of the implementation of innovations within health services, found little published evidence for the effectiveness of this approach, concluding ‘...such initiatives are popular but expensive and that the gains from them are difficult to measure and contingent on the nature of the topic chosen and the participation of motivated teams with sophisticated change skills from supportive and receptive organisations’ (Greenhalgh et al, 2004, p. 229).

A final form of organisational change which is worth considering is a social movements approach. A review of social movements literature in order to assess its potential use and value for NHS modernisation and improvement activities considered social movements frameworks could be helpful for understanding how to mobilise improvement efforts inside and across NHS organisations (Bate, Bevan, & Robert, Undated). ‘Social movements involve collective action by individuals who have voluntarily come together around a common cause; they often involve radical action and protest which may lead to conflict with accepted norms and “ways of doing” things’ (Bate et al, undated, p. 12). Such movements have spontaneous beginnings, but need some form of organisation if they are to achieve an impact, which is often modest although they can lead to transformational change. A number of contrasts were drawn between a project/programme approach and a social movements approach, as shown in the table below:

Table 1: Project/Programme Approaches versus Social Movements Approaches

Project/Programme Approach	Social Movements Approach
a planned programme of change with goals and milestones (centrally led)	change is about releasing energy and is largely self-directing (bottom up)
'motivating' people – change is driven by an appeal to the 'what's in it for me'	'moving people' – there may well be personal costs involved
talks about 'overcoming resistance'	insists change needs opposition – it is the friend not enemy of change
change is done 'to' people or 'with' them – leaders and followers	people change themselves and each other – peer to peer
driven by formal systems change: structures (roles, institutions) lead the change process	driven by informal systems: structures consolidate, stabilise and institutionalise emergent direction

Source: (Bate et al, undated, p. 9)

Finding pre-existing networks of interest was identified as a first step to developing communities within the NHS committed to improvement activities. Within these, multiple, multi-level leadership would be required to bring about sustained change. However an important limitation was noted, namely that '...many observers believe we cannot predict the emergence of an improvement movement, we cannot make it happen or consciously construct them, and we certainly cannot control its direction and impact. In short, social movements are unpredictable and difficult to control' (Bate et al, undated, p. 44). Further research and thinking about the potential for success and sustainability of social movements in the NHS was recommended.

In terms of the sustainability of health service innovations (an issue of importance in relation to what happens beyond pilot projects and schemes billed as 'innovative'), Greenhalgh et al found there was a paucity of literature on this topic (Greenhalgh et al, 2004). They considered four systematic reviews of implementation and sustainability, and concluded the success of an implementation initiative depends on the following factors:

- the nature of the innovation and its fit with the organisation's existing skill mix, work practices and strategic goals;
- motivation, capacity and competence of individual practitioners;
- elements of organisational structure (e.g. devolved decision-making, internal networks) and capacity (e.g. change skills, service improvement skills);
- resources and leadership;
- early involvement and co-operation of staff at all levels;
- personalised, targeted and high-quality training;
- evaluation and feedback;
- linkage with the resource system from development of the innovation through to implementation;
- embeddedness in inter-organisational networks; and

- conducive external pressures e.g. synchrony with local priorities and policymaking streams (Greenhalgh et al, 2004, p. 257).

Responding to the relative lack of literature on the sustainability of primary health care innovation, an Australian study examined five initiatives, considering factors in six domains (political, institutional, financial, economic, client and workforce) which facilitated or inhibited sustainability (B. M. Sibthorpe, Glasgow, & Wells, 2005). Synthesis of the findings revealed three major themes. The first was the critical importance of social relationships, networks and champions for sustainability. The second theme was the effect of political, financial and societal forces as the context in which innovations take place. Thirdly, the motivation and capacity of agents within the system to adapt to innovation must be taken into account (B. M. Sibthorpe et al, 2005).

In relation to bringing about change within the specific context of primary health care, a New Zealand study explored quality initiatives and achievements in 12 primary health care organisations in 2001 (Barnett, Malcolm, Wright, & Hendry, 2004). Clinical leadership at governance and executive level was found to be the critical factor in driving the quality programme. Other facilitating factors were a national primary health care strategy, education programmes and information systems, while limiting factors were cited as a lack of funding, poor quality data, low GP morale, and funders' lack of recognition of achievement.

Although New Zealanders are anecdotally known for their innovativeness in health care as well as other spheres, only a small number of primary health care innovations appear to have been evaluated and published. In this review we examined evaluations of integrated care projects, reducing inequalities projects, Care Plus, nursing innovations and mental health initiatives (CBG Health Research Limited, 2005, 2006; Clarke, Howells, Wellingham, & Gribben, 2003; Dowell et al, 2007; Health Services Research Centre and Te Rōpū Rangahau Hauora a Eru Pōmare, 2001; Primary Health Care Nurse Innovation Evaluation Team, 2007). Across the evaluations the following key messages recur, which underline themes of capacity, relationships, leadership, 'working with the willing' and evaluation:

- adequate resources are necessary to establish new projects, including funding, management capability and IT capacity;
- developing trusting relationships when implementing new initiatives takes time;
- the importance of effective leadership along with the engagement of clinical staff who will be implementing changes;
- early success depends on working with those willing to embrace change; and
- evaluation should be planned and agreed before projects begin.

A study of three local English initiatives to bring about closer clinical integration (Ham, 2008) illustrated three routes to achieving the same end: community-based specialists; primary health care reaching in to hospitals to provide more care in the community; and partnership between primary and secondary care. All were considered useful, so rather than taking a prescriptive approach, policy-makers need 'to focus instead on encouraging the development of integrated care using the means that appear most appropriate in different contexts' (Ham, 2008, p. 10). Other important findings were:

- all three cases developed out of the initiative and commitment of local leaders, with partnerships between medical leaders and senior managers contributing significantly to making progress;

- key characteristic of the change leaders was resilience and persistence in the face of barriers and setbacks;
- change takes time to happen and integration often involves a complex path of development; and
- national policies had been both facilitators and barriers to clinical integration. Where relationships were mature, ways could be found to overcome barriers.

An Italian study (Longo, 2007) of GPs sought to understand how, even in the same system and operating under common constraints, organisations may develop differently. An exploration was made of the change drivers used by managers in three health authorities since a period of change in primary care began in 1992 (including incentives for solo practices to move to group practices, fundholding, introduction of clinical guidelines and target payments). By 2004, there were wide differences between the three areas as to the percentage of GPs in group practice (from 45–95%) and the percentage of GPs adopting clinical guidelines (from 58–100%). The research concluded that the two most important drivers of change were leadership from, and good relationships between, main players. They suggested that this was consistent with a ‘complex adaptive systems’ framework which emphasises the interconnected agents in health care organisations and the importance of relationships between them.

Researchers in Australia (B. Sibthorpe, Glasgow, & Longstaff, 2004) have similarly drawn on complexity theory in asserting that primary health care is best considered as a complex adaptive system, particularly in relation to trying to bring about change within primary health care. Sibthorpe et al concluded that when a new system is being instituted (such as a change in the organisation of primary health care services), a short list of simple rules, or minimum specifications, might be the most effective way to bring about change. They also point out that over-prescription can be counter-productive and can stifle creativity and innovation. This is echoed by Plsek and Wilson, who argued that rather than using detailed targets, specifications and controls, ‘...those who seek to change an organisation should harness the natural creativity and organising ability of its staff and stakeholders through such principles as generative relationships, minimum specification, the positive use of attractors for change, and a constructive approach to variation in areas of practice where there is only moderated certainty and agreement’ (Plsek & Wilson, 2001, p. 749).

Jonathan Lomas, in a critique of innovation within the New Zealand health system (Lomas, 2008) noted that the organisational characteristics that would support adoption of innovation (e.g. porous boundaries between the ideas and action communities, dedicated resources for innovation exploration, development and evaluation, incentives and networks for ongoing interaction between innovators, evaluators and implementers) are not well established in most health service organisations in New Zealand. Lomas asserted that there are many innovations, but that they lack focus and co-ordinated evaluation to determine which innovations are worthwhile. He recommended the focus for innovation should be performance improvements related to existing health targets, that a co-ordinated infrastructure for innovation evaluation be put in place, and that the Ministry of Health’s new Sector Capability and Innovation Division ‘should take the lead to develop and facilitate the frameworks and opportunities for spreading proven innovations for health’ (Lomas, 2008, p. v).

What this evidence about bringing about change within health organisations highlights is the value in accepting from the outset that health is a highly complex and messy setting in which

to try and take forward service development. Indeed, the concept of change being ‘managed’ appears to be fundamentally challenged by much of the evidence. Instead, it appears to make more sense to regard health care (and primary health care in particular) as a complex adaptive system where the main focus should be on developing a set of ‘simple rules’ or principles to guide relationships as stakeholders seek to achieve a set of mutually agreed desired outcomes for the local organisation or system.

The importance of resilient and respected local leaders comes through as a strong theme from the evidence, as does the need for strong clinical leadership and support for change, supported by effective organisational and community readiness and support. The need for national policies, overarching narrative, and sense of direction is a further theme that is common to much of the research, with the caveat that this needs to be able to be flexible in order to help local organisations overcome barriers, and balanced by local management that is able to support and enthuse clinicians and connect to specific local priorities and communities. Finally, the importance of developing a culture of innovation and learning that allows space for reflection, provides resource for evaluation, and includes structured processes for sharing learning and exploring the design of future activity, underpins much of the research evidence.

A summary of the lessons from the literature is set out in box 5 below.

Box 5: Summary of lessons from the literature

1. The adoption and implementation of innovation is a complex and drawn-out process that requires resilience on the part of the managers and clinicians leading the process.
2. Assessing the readiness for change within a local situation is critical, in respect of clinicians, managers, the local community, and the overall health care organisation.
3. Senior management and clinical leadership of service improvement are needed.
4. There is a need to involve staff and service users from the outset of any process of service improvement.
5. There is increasing academic and practitioner interest in using a ‘design science’ approach where users and staff are partners with managers in reflecting on past experience of services and working together to improve things for the future.
6. An overarching narrative of service improvement and desired change is important, at both national and local level.
7. If primary health care is viewed as a complex adaptive system characterised by entangled webs of relationships, it is useful to develop ‘simple rules’ or principles about how to work together to bring about change.
8. Change cannot really be ‘managed’ – it makes sense instead to agree a set of shared desired outcomes and to have the ‘simple rules’ in place to guide relationships and ways of working.
9. To enable a culture of innovation and learning, there is a need for structured reflection and sharing of service improvement experience, resource for robust evaluation, and processes that focus on how to translate such reflection and evaluation into the next phase of service improvement design.

In the next section, we examine the specific issues facing primary health care in New Zealand, before going on to consider what might make sense in relation to an approach to implementing change in the next phase of development of this sector.

WHAT ARE THE SPECIFIC ISSUES FACING NEW ZEALAND PRIMARY HEALTH CARE?

We set out here the themes that emerged from interviews with national primary health care stakeholders, considered within the context of other studies and commentary of primary health care reform within New Zealand.

This is about the next stage of implementation of the Primary Health Care Strategy

All of the twelve respondents talked about the importance of regarding change in primary health care as being fundamentally about how the Primary Health Care Strategy (King, 2001) is implemented in its next phase. It was emphasised that high impact changes for primary health care in New Zealand was very much concerned with restating and refreshing the vision for primary health care (and health more generally) as set out in the 2001 Strategy.

It was noted that as part of any such 'refreshing' of the Primary Health Care Strategy, it would be important to locate the desired next steps for primary health care within the context of the Ministry of Health's Ten Targets for the health system, so that those trying to implement change locally can see a coherence to overall strategic direction for the system. Along with this, people were clearly seeking principles that would 'give permission' to district health boards, primary health organisations and practices/providers to make change locally.

'People in DHBs and PHOs are waiting for the next steps of the PHCS, yet they don't realise they are the next steps. A high impact changes framework could help steer and give permission, to enable them to do it and get there.'

In this way, there was a clear resonance with the message from the literature about the need for clear central direction for and narrative about the need for change, as complementary to local organisations working out what is most appropriate to their specific context and needs. Reflecting the core tenet of the Primary Health Care Strategy about improving health and reducing inequalities, some respondents suggested that any approach to 'high impact changes' should be focused on health outcomes, specifying the outcome indicators that need to be addressed if core national priorities are to be achieved by means of change in service provision within primary health care.

Better integration of primary and secondary health care services is needed

The most commonly recurring theme in interviews was that of how to achieve better integration of service provision across primary and secondary care. This was framed as critical to future care of people with long-term conditions, and as a way of enabling sustainability of workforce and other system resources. Indeed, some respondents emphasised that workforce issues were likely to be the most powerful driver of change in relation to service integration. (Workforce capacity has also been raised as an issue in other New Zealand primary health care organisation research (Cumming et al, 2005). Respondents talked of a need to enable GPs to provide (or be able to access) a wider range of services in the community setting (e.g. diagnostics, specialist opinion); for better service

integration for individual users; and for pooling of funding streams so that district health boards (DHBs) and/or primary health organisations (PHOs) could put in place new models of care.

District health board performance in relation to primary health care varies

District health boards (DHBs) were considered to be critical to the development of local primary health care implementation strategies. Comment was made about a need for attitudinal change in some DHBs that were considered to be captured by hospital issues, along with greater clarity about DHBs' actual role in relation to primary health care and PHOs. There was similarly a call for DHBs to be more firmly held to account for delivering change in primary health care. Boards were exhorted to work more closely with both general practice and non-governmental organisation providers, in order that service planning could take place locally, and DHBs gain a better understanding of the issues faced by providers. Relationships and trust were cited as central to how DHBs work with local PHOs and providers, as indeed was the case in relation to discussion about national planning between the Ministry of Health and bodies representing primary health care, echoing the messages from the literature about the importance of relationships, leadership, and having agreed principles to guide behaviour and engagement.

The role of primary health organisations is interpreted in different ways

In some respects, comments about DHBs were repeated in relation to PHOs, in particular concerning a need for greater role clarity, effective relationships with primary health care providers, and a stronger focus on shaping services that can deliver improved population health. However, whereas DHBs were regarded as a critical element of the health system, and one where responsibility for ensuring improved population health was firmly located, opinions varied as to what exactly PHOs were and what their role was (and should be). Whilst some people talked of PHOs in a way that suggested they were local planners and funders (or even purchasers) of primary and community health services, others clearly saw them as developers of providers (or of networks of providers).

Better engagement and support of clinical professionals is needed

A strong theme, and one that is underlined in the literature on readiness for change, was the need for more effective engagement of clinical professionals in planning and implementing change, along with continuing to strengthen the involvement of communities and their representatives. General practice was highlighted as a profession that had been particularly disenfranchised during implementation of the strategy, and as needing much better engagement (at national, DHB and local level) if changes focused on improving health were to occur within primary health care. Although the history of clinical disengagement in the implementation of the Primary Health Care Strategy was rehearsed by some respondents, all agreed that there was a need to now move on and to find ways of focusing on service development as a uniting force at national and local level. It was also pointed out that primary and secondary care clinicians needed to work together to plan changes to services, particularly in view of the expressed need for better primary/secondary integration.

Clinical leadership was viewed as critical to drive service improvement, together with the effective management of teams. Respondents emphasised the need for enhanced clinical networking, with examples being given of networks led by local clinicians and made up of linked groups of multi-disciplinary health professionals and organisations working across

different parts of the sector (primary, secondary, and tertiary) and across existing professional and organisational boundaries.

Some people talked about the fact that it did not make sense to require or expect that all providers would be ready to make changes at the same time. A clear message was given that there were pockets of innovation throughout different business models in the primary care sector, the implication being that it was not helpful or fair to categorise any particular area of primary health care provision as particularly innovative and/or ready to change.

The need for high quality management support at provider level was made, and for some respondents, this was related to a concern about scarce primary health care management resources being spread too thinly across the DHBs, PHOs and provider organisations. Some respondents pointed to a need for a greater focus on management and organisational development within the health system, and especially in primary health care, given the high expectations of the sector in the coming years. It was also asserted that primary health care providers needed a greater degree of infrastructure support if they were to deliver a wider range of services in future, including new approaches to premises and IT development. Alongside infrastructure development, respondents called for workforce skill development in areas such as service improvement techniques, interpersonal relationship management, and cultural competencies.

Funding streams could be better integrated

When exploring the ways in which high impact changes could be brought about in primary health care, and what was impeding such changes, a strong theme was that of a need to integrate more effectively the different funding streams for primary health care. A case was also made about a need to better align funding allocations to local health needs and priorities – to develop an approach where DHBs and/or PHOs (opinions varied as to which) could plan and fund primary care services according to identified local population health needs.

‘We need to decomplicate the system – there are too many funding streams that have been rolled out in pieces, and we now lack a coherent picture.’

‘It has got to be about funding. Flows of primary health care funding are now mostly about reducing the cost of a visit to the doctor, and most of the capitation payment flows in the patient subsidy. If more were tagged to extra services for the local population, we could facilitate change. Form follows funding.’

It was also pointed out that whilst new government capitation funding had reduced the cost barrier in primary care, it had not addressed other barriers such as enabling better co-ordination across the primary/secondary care interface, or for enabling effective after-hours triage (fees had fallen, but patients still face a fee in primary health care that they do not have to pay for secondary care or DHB-managed community services). There was a view that despite a capitation approach to funding, many providers remained in a fee-for-service mindset, especially in areas where the patient co-payment remained a significant element of practice income.

People were however optimistic about the possibility of making change in primary health care, and all those interviewed expressed a desire to ‘get on with it’ and find ways of trying

out new approaches to funding and planning within a ‘light touch’ national framework of priorities.

New models of care need to be scoped and piloted

When pressed about the desire to ‘get on with it’ in making changes in primary health care in New Zealand, respondents asserted a desire to ‘work with the willing’, and to develop pilot sites where new models of service provision could be explored and evaluated in different contexts. In relation to evaluation, it was pointed out that any assessment of progress and performance needed to join up with the wider framework of the Ten Health targets and also the PHO Performance Management Programme. People were wary of unduly complicated assessment of progress, albeit that they wanted to ensure that change would be properly evaluated in a way that would enable learning and development.

It was emphasised that there needed to be a supportive environment for such an approach, with a commitment to provide support, evaluate change, and sustain changes with long-term funding where they were shown to be effective.

‘There’s a huge sense of good will about wanting to work with the government to make the right decisions. I sense the time is right, but the Primary Health Care Strategy needs to be led.’

‘New Zealand needs to wake up to the fact that it can do it [make high impact changes in primary health care]. We don’t need any more reports – we need to focus on the steps we are going to take.’

Summary

The following themes emerged from stakeholder interviews about taking forward change to primary care service provision in New Zealand:

Box 6: Summary of themes from interviews

1. Any consideration of bringing about change within primary health care in New Zealand is fundamentally concerned with how the Primary Health Care Strategy is implemented in its next phase.
2. The most commonly recurring theme was that of how to achieve better integration of service provision across primary and secondary care.
3. DHBs are considered critical to the development of local primary health care implementation strategies, and need to be held clearly to account for this.
4. The role of PHOs is interpreted in different ways across the country and people called for greater clarity about this and for a stronger focus on how they can shape services to deliver improved health.
5. There is a need for more effective engagement of clinical professionals in planning, leading and implementing change, across both primary and secondary care.
6. Funding streams for primary health care could be better integrated in ways that would enable better alignment with local health needs and priorities.
7. There is a call to ‘get on with’ piloting different service and funding models within primary health care, ensuring that this takes place within a range of PHO and population contexts.

It was clear from the interviews that people recognised both the achievements to date of the Primary Health Care Strategy, but also the need for the strategy to be refreshed and reinterpreted for the current context. When pressed about desired change, almost all those interviewed focused in the importance of working out how to get beyond debate about funding roll-outs and general practice fees, and focus instead on how to bring about more extensive and sustained change at practice/provider level, and in ensuring that an appropriate range of services is wrapped around and accessible to providers and their patients. In relation to facilitating such change, the critical role of national direction was highlighted, along with greater clarity about the role and expectations of different organisations in what is a complex health system with a public-private mix of funding and provision. Relationships were considered to be critical, as was the engagement of both clinical and community interests at all levels of planning, management and service delivery. There was a clear message about 'wanting to get on with it' and for the wider system to play its part by freeing up some of the constraints associated with complex funding arrangements, and backing some pilot projects supported with management resource and evaluation capacity.

WHAT MIGHT MAKE SENSE IN RELATION TO AN APPROACH TO IMPLEMENTING CHANGE IN THE NEXT PHASE OF PRIMARY HEALTH CARE DEVELOPMENT IN NEW ZEALAND?

It is clear from the interviews carried out for this study, and from other recently published commentary on primary health care reform in New Zealand (Croxon, Smith, & Cumming, 2008; Cumming & Gribben, 2007; Gauld, 2008; Smith, 2008) that a consensus is emerging about the next phase of change needed. Namely, there is a need for more consistent, sustained and far-reaching development and extension of primary health care provision at practice and provider level. This is articulated as being necessary due to the challenges of long-term conditions and an ageing population, and also on account of the need to maximize the use of scarce workforce and skills within the New Zealand health system.

The exact nature of this desired change and how it might be implemented in local settings is less well articulated. Those interviewed for this project, and findings from research into Primary Health Care Strategy implementation, point to a need for more multidisciplinary team working, the integration of a greater range of community and diagnostic services with 'core general practice', more effective co-ordination by primary health care professionals of individuals' care across elements of the health system, and a more health-promoting and improving focus to the care that is provided by general practice.

A further theme that recurs in discussion about making change in primary health care in New Zealand appears to be that the time is now ripe to try and 'reframe' the relationship between government and general practice in relation to primary health care reform, and to move on from the fraught and conflicted relationship that has so often been played out through the 'fees issue' (Croxon et al, 2008). As part of this 'reframing', DHBs need to involve general practice stakeholders in the planning and delivery of primary health care in a more extensive and consistent manner. Furthermore, continuing attention will need to be paid to the ways in which national policy makers relate to and work with the leaders of the different primary health care professions and with organisations representing the range of primary health organisations.

The desire to make change to service provision at practice and community organisation level appears to be an issue that unites different stakeholders within New Zealand primary health care. It is also central to the strengthening of first-contact primary health care that was signaled in the Primary Health Care Strategy as critical to the development of health systems (Starfield, 1998), and yet which has been asserted in recent analysis of New Zealand primary health care reform to have been an area to some degree neglected as part of strategy implementation with its particular focus on the reduction of fees for first-contact care (rather than on what was actually happening within that care) (Smith, 2008).

The Primary Health Care Strategy clearly has continuing and strong widespread support within the health sector and different national organisations, and is considered to provide a supportive context within which further change can occur. The focus on improving health and reducing inequalities continues to be the ‘fire that burns’ when people talk about and analyse the Primary Health Care Strategy and its implementation. The next phase of activity to bring about change needs to be able to enact these aims if it is to be regarded as ‘high impact’ in New Zealanders’ eyes. In this, there is a clear cultural demarcation with the apparent philosophy of the English service improvement work, for that appears to have been much more concerned with health services from a patient experience perspective, rather than making the connection across to health outcomes and inequalities. This reflects the different orientation of health policy in New Zealand and England in the past decade, the former having been strongly focused on seeking to reduce inequalities and improve overall health, whilst the latter has embarked on a major service modernisation and improvement effort designed to improve individuals’ experience within the health system.

Stakeholders in New Zealand have a strong sense of what is needed to facilitate this next phase of primary care development work, including a restatement of direction for the Primary Health Care Strategy, clarifying organisational roles, taking a more flexible approach to local (possibly pooled) funding arrangements, fostering better relationships within the system, and piloting different approaches to funding, organising and delivering services locally. Indeed given the complex nature of primary health care, it will be critical to find ways of including both clinical professionals and local communities in planning and bringing about the next phase of change.

People do, however, appear to be wary of what is perceived by some to be a centrally-driven and perhaps imposed approach to service improvement as taken within the NHS. In interviews for this project and in discussion with the advisory group, concern has been raised about the term ‘high impact changes’, which is reported as sounding ‘brutal’ and ‘off-putting’ and ‘imposed from outside’. Arguably, in a more devolved health system such as that in New Zealand, the design process followed by people in the English NHS when taking forward service improvement needs to be critiqued, challenged and adapted for the specific cultural and organisational context of New Zealand.

This issue of context is critical to the topic of this research, and has become more so as interviews have been carried out and the experience of English high impact changes work more closely examined. The English high impact changes work was carried out as a result of and building on several years of focused service improvement effort that had had significant financial and management resource attached to it. Arguably, it was part of a culture of service modernisation and improvement being put in place within a health system that was under political orders to ‘shape up’ in return for record financial investment by the Blair government. In New Zealand, the situation facing primary health care is one of a complex public-private system (both in relation to funding and provision) where there is significant

heterogeneity of approach in different parts of the country and even within districts. Indeed, the early focus of the Primary Health Care Strategy implementation in allowing a variety of models of primary health care organisation to develop has cemented such heterogeneity further in place. This heterogeneity is considered fundamental to much of New Zealand public policy and is underpinned by strong local community governance of health organisations, in sharp contrast to the more nationally focused and centrally-run NHS. There is, however, a possible parallel to the NHS in that within New Zealand there has been a similar process of widespread innovation in service delivery at local level – what is different is that this process has been less centrally managed and driven than in England and subject to relatively little evaluation or drawing together within a national ‘programme of improvement’.

Some of the people interviewed for this project, and those commenting from within New Zealand as part of the advisory process, have suggested that New Zealand does need to beware of using cultural specificity and difference as an excuse not to explore a more sustained and nationally supported programme of service improvement at a local level. It was pointed out that it might sometimes be easier for managers and clinicians to call for environmental change such as funding and policy developments, rather than engage in the ‘difficult stuff’ of working with clinical teams and communities to work out improved ways of delivering services based in primary health care and integrated with other providers in the health system.

A review of the experience of high impact changes development in England, taken together with the lessons from literature on change in primary health care and the material gathered in stakeholder interviews, suggests that what is critical, regardless of cultural context, is that the actors in a local health system are given the tools, permission and policy environment within which they can work together to design and implement improved services for their local population.

A strong message from the analysis in this paper is the importance of having a structured process for such work that encourages both reflection and also the development of desired outcomes, along with ‘simple rules’ or ‘design principles’ about how people will engage when seeking to develop services in a collaborative manner. Greenhalgh and Bate both point to the importance of an inclusive design process for change and innovation work within healthcare (inclusive of providers, service users and communities), which would suggest that New Zealand could usefully determine its own process for service improvement in primary health care, based on some ‘simple rules’ or principles as to how such work might be carried out. Any such process will need to be developed in a way that takes account of and dovetails with frameworks such as the Ten Health Targets and the PHO Performance Management Programme. In this way, a response would be made to the twin challenges identified above of needing to address the nature of service delivery at practice and provider level, as well as reframing working relationships between managers and professionals within the health system.

In summary, whilst there appears to be an emerging high level consensus about what is needed for the next phase of change in primary health care in New Zealand (e.g. more multidisciplinary team working, the integration of a greater range of community and diagnostic services with ‘core general practice’, more effective co-ordination by primary health care professionals of individuals’ care across elements of the health system, and a more health-promoting and improving focus to the care that is provided by general practice), there is also a clear steer that the detail of *how* to do this has to be worked out at a local

level by the clinical and community teams who face specific challenges in developing services to meet local needs.

There is a need for a clear sense of overall direction for the development of primary health care and of national priorities for change, allied with permission to 'get on and do this' at a local level, in a context of national enabling and support. Such support would be likely to include the development of overall desired outcomes for change, and some principles or 'simple rules' to apply when making change locally. Furthermore, there will be a need for willingness on the part of policy makers to address issues such as those relating to complexity of funding arrangements, clarification of organisational roles, and development of an appropriate performance framework, as highlighted by those interviewed for this project.

REFERENCES

- Barnett, P., Malcolm, L., Wright, L., & Hendry, C. (2004). Professional leadership and organisational change: progress towards developing a quality culture in New Zealand's health system. *The New Zealand Medical Journal*, 117(1198), <http://www.nzma.org.nz/journal/117-1198/1978/>.
- Bate, P., Bevan, H., & Robert, G. (Undated). Towards a Million Change Agents: A Review of the Social Movements Literature: Implications for large scale change in the NHS: NHS Modernisation Agency.
- Bate, P., Mendel, P., & Robert, G. (2008). Organizing for Quality: The Improvement Journeys of Leading Hospitals in Europe and the United States. London: The Nuffield Trust.
- Bate, P., & Robert, G. (2006). Experience-based design: from redesigning the system around the patient to co-designing services with the patient. *Quality and Safety in Health Care*, 15(5), 307–310.
- Bate, P., & Robert, G. (2007). Toward More User-Centric OD: Lessons From the Field of Experience-Based Design and a Case Study. *The Journal of Applied Behavioral Science*, 43(1), 41–66.
- Bevan, H., Robert, G., Bate, P., Maher, L., & Wells, J. (2007). Using a Design Approach to Assist Large-Scale Organizational Change: "10 High Impact Changes" to Improve the National Health Service in England. *The Journal of Applied Behavioral Science*, 43(1), 135–152.
- Cameron, M., Cranfield, S., Iles, V., & Stone, J. (2001). Making Informed Decisions on Change: Key Points for Health Care Managers and Professionals: NHS Service Delivery and Organisation R&D Programme, London.
- Care Services Improvement Partnership. (2006). 10 High Impact Changes for Mental Health Services: National Institute for Mental Health in England.
- Care Services Improvement Partnership. (2008). High Impact Changes for health and social care: Department of Health.
- CBG Health Research Limited. (2005). Improving Access to Primary Health Care: An evaluation of 35 reducing inequalities projects Wellington Ministry of Health.
- CBG Health Research Limited. (2006). Review of the Implementation of Care Plus. Wellington: Ministry of Health.
- Clarke, D., Howells, J., Wellingham, J., & Gribben, B. (2003). Integrating healthcare: the Counties Manukau experience. *The New Zealand Medical Journal*, 116(1169), <http://www.nzma.org.nz/journal/16-1169/1325/>.
- Croxson, B., Smith, J., & Cumming, J. (2008). Patient fees as a metaphor for so much more in New Zealand's primary health system. Wellington: Health Services Research Center, Victoria University of Wellington.

- Cumming, J., & Gribben, B. (2007). Evaluation of the Primary Health Care Strategy: Practice Data Analysis 2001–2005. Wellington & Auckland: Health Services Research Centre & CBG Ltd.
- Cumming, J., Raymont, A., Gribben, B., Horsburgh, M., Kent, B., McDonald, J., et al (2005). Evaluation of the Implementation and Intermediate Outcomes of the Primary Health Care Strategy. Wellington: Health Services Research Centre, Victoria University of Wellington.
- Department of Health. (2006). 10 High Impact Changes for Genitourinary Medicine 48-hour Access: Department of Health.
- DH Workforce Directorate/NHS Partners/Manchester University. (2006). HR High Impact Changes: An evidence based resource: NHS.
- Dowell, T., Garrett, S., Collings, S., McBain, L., McKinlay, E., & Stanley, J. (2007). Primary Mental Health Initiatives: Interim Report. Wellington: School of Medicine and Health Sciences, University of Otago, Wellington.
- Gauld, R. (2008). The Unintended Consequences of New Zealand's Primary Health Care Reforms. *Journal of Health Politics, Policy and Law*, 33(1), 93–115.
- Greenhalgh, T., Robert, G., Bate, P., Kyriakidou, O., Macfarlane, F., & Peacock, R. (2004). How to Spread Good Ideas: A systematic review of the literature on diffusion, dissemination and sustainability of innovations in health service delivery and organisation: Report for the National Co-ordinating Centre for NHS Service Delivery and Organisation R&D (NCCSDO), London.
- Ham, C. (2008). Integrating NHS Care: Lessons From the Front Line. London: The Nuffield Trust for Research and Policy Studies in Health Services.
- Health Services Research Centre and Te Rōpū Rangahau Hauora a Eru Pōmare. (2001). Evaluation of the National Demonstration Integrated Care Pilot Projects: Overview Report. Wellington: Health Services Research Centre.
- Iles, V., & Sutherland, K. (2001). Organisational Change: A Review for Health Care Managers, Professionals and Researchers: NHS Service Delivery and Organisation R&D Programme, London.
- Jumper Thurman, P., Vernon, I. S., & Plested, B. (2007). Advancing HIV/AIDS Prevention Among American Indians Through Capacity Building and the Community Readiness Model. *Journal of Public Health Management and Practice*, 13 (Supplement), S49-S54.
- King, A. (2001). The Primary Health Care Strategy. Wellington: Ministry of Health.
- Lomas, J. (2008). Formalised Informality: An action plan to spread proven health innovations. Wellington: Ministry of Health.
- Longo, F. (2007). Implementing managerial innovations in primary care: Can we rank change drivers in complex adaptive organizations? *Health Care Management Review*, 32(3), 213–225.

- NHS Modernisation Agency. (2004a). *The Clinicians' Guide to Applying the 10 High Impact Changes*: NHS Modernisation Agency.
- NHS Modernisation Agency. (2004b). *The PCT Guide for Applying the 10 High Impact Changes*: NHS Modernisation Agency.
- NHS Modernisation Agency. (2007). *10 High Impact Changes for Service Improvement and Delivery (New Edition)*: NHS Institute for Innovation and Improvement.
- Øvretveit, J., Bate, P., Cleary, P., Cretin, S., Gustafson, D., McInnes, K., et al (2002). Quality collaboratives: lessons from research. *Quality and Safety in Health Care*, 11(4), 345–351.
- Pickles, J., Hide, E., & Maher, L. (2008). Experience based design: a practical method of working with patients to redesign services. *Clinical Governance: An International Journal*, 13(1), 51–58.
- Plsek, P. E., & Wilson, T. (2001). Complexity, leadership, and management in healthcare organisations. *British Medical Journal*, 323(7315), 746–749.
- Primary Health Care Nurse Innovation Evaluation Team. (2007). *The Evaluation of the Eleven Primary Health Care Nursing Innovation Projects: A Report to the Ministry of Health by the Primary Health Care Nurse Innovation Evaluation Team*. Wellington: Ministry of Health.
- Sibthorpe, B., Glasgow, N., & Longstaff, D. (2004). *Complex Adaptive Systems: A Different Way of Thinking About Health Care Systems*. Canberra: Australian Primary Health Care Research Institute, The Australian National University
- Sibthorpe, B. M., Glasgow, N. J., & Wells, R. W. (2005). Emergent themes in the sustainability of primary health care innovation. *The Medical Journal of Australia*, 183(10 (Suppl)), 77–80.
- Smith, J. (2008). *Critical analysis of the implementation of the Primary Health Care Strategy and framing of issues for the next phase*. Wellington: Ministry of Health.
- Starfield, B. (1998). *Primary Care: balancing health needs, services and technology*. New York: Oxford University Press.
- The Improvement Foundation. (2006). *High impact changes for practice teams*: NHS Institute for Innovation and Improvement.