Open Access Research

BMJ Open Healthcare professionals' perceptions of clinical governance implementation: a qualitative New Zealand study of 3205 open-ended survey comments

Robin Gauld, Simon Horsburgh

To cite: Gauld R, Horsburgh S. Healthcare professionals' perceptions of clinical governance implementation: a qualitative New Zealand study of 3205 open-ended survey comments. BMJ Open 2015;5:e006157. doi:10.1136/bmjopen-2014-006157

Prepublication history for this paper is available online. To view these files please visit the journal online (http://dx.doi.org/10.1136/ bmjopen-2014-006157).

Received 19 July 2014 Revised 9 December 2014 Accepted 17 December 2014

ABSTRACT

Objectives: To investigate healthcare professional perceptions of local implementation of a national clinical governance policy in New Zealand.

Design: Respondent comments written at the end of a national healthcare professional survey designed to assess implementation of core components of the clinical governance policy.

Setting: The written comments were provided by respondents to a survey distributed to over 41 000 registered healthcare professionals employed in 19 of New Zealand's government-funded District Health Boards. Comments were analysed and categorised within emerging themes.

Results: 3205 written comments were received. Five key themes illustrating barriers to clinical governance implementation were found, representing problems with: developing management-clinical relations; clinicians stepping up into clinical governance and leadership activities; interprofessional relations; training needs for governance and leadership; and having insufficient time to get involved.

Conclusions: Despite a national policy on clinical governance which New Zealand's government launched in 2009, this study found that considerable effort is required to build clinical governance at the local level. This finding parallels with other studies in the field. Two areas demand attention: building systems for organisational governance and leadership; and building professional governance arrangements.

CrossMark

Department of Preventive and Social Medicine, Centre for Health Systems, University of Otago, Dunedin, New Zealand

Correspondence to

Professor Robin Gauld; robin.gauld@otago.ac.nz

INTRODUCTION

How to improve healthcare system performance is high on the health policy agenda of developed-world governments. For many, clinical governance is a core component of healthcare system performance improvement. 'Clinical governance' has been defined in differing ways.3 The concept has origins in England, partly in response to the call for improved quality of healthcare and patient safety.⁴ In this context, clinical governance was seen by those promoting the concept as a

Strengths and limitations of this study

- This study included the full spectrum of healthcare professionals across the New Zealand public healthcare system for investigating perceptions of clinical governance implementation.
- The study used a novel method for drawing in respondent comments on a national survey.
- The lapse in time between launch of the clinical governance policy and this assessment could be considered short; written comments on a survey may reflect particular biases.

method for facilitating the focus on improvement through mobilising the health professional workforce. The core dimensions were encapsulated in the often-cited Scally and Donaldson⁴ definition of clinical governance

A system through which [health] organisations are acccountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish.

What this and other published definitions seem to have in common is the idea that medical and other professionals have a responsibility to step up, and change the systems and processes of care that they contribute to in order to improve patient safety and quality.³ 5-7 Alongside this is the assumption that clinicians will also be given, and willingly take on, responsibility for resource allocation, service organisation and associated decision-making-perhaps in full or in partnership with management. Thus, clinical governance involves a sharing or giving over of power from 'management' to health professionals.

Drawing from the literature and the policies of various countries, in practical terms, one might expect to see health professionals leading the way in quality improvement efforts, ensuring that clinical and organisational practices are evidence based, and working to build team-based and systematised services delivery processes.⁶⁻⁹ If quality improvement is an aim, clinical governance might be seen as providing essential organisational fuel for this. The downstream effects of this are likely to include improvements in patient experiences and safety, in clinical performance and workforce satisfaction, reductions in hospital readmissions, more efficient and appropriately located health services and, performance ultimately, financial improvements (although the evidence around the financial aspect is debatable).10-13

An emerging literature supports the focus on clinical governance development. A 2010 multicountry study showed that clinically led hospitals were more likely to have standard processes in place and better quality of care. 14 The researchers argued also that doctors, in particular, had a skill mix that deemed them well placed to assume service line management duties—being responsible for budgetary and service leadership—and that hospitals seeking high performance should look to create structures that devolve such powers to medical leaders of clinical directorates and departments. 14 A 2011 study of US hospitals added further weight to this argument, again showing a superior performance on financial and quality measures in clinically led institutions. 15 Then there are clinically dominated organisations, such as the Pennsylvania-based Geisinger Health System, which has worked to systematise services. For example, in pursuing best practice, its clinical staff agreed to 40 critical steps in the process of coronary artery bypass graft surgery. Significant improvements in performance across a range of cost and quality measures resulted.¹¹

While there is considerable information about what clinical governance should aim for and why it is important, there remains limited research into the potentially very complex process of implementing a national clinical governance policy at the local service delivery level. As noted, this requires that the management share power or build leadership partnerships with health professionals. This article contributes to filling this gap. It reports on a qualitative component of a New Zealand study, where the government launched a national clinical governance policy in 2009 with the expectation that every publicly funded healthcare services provider promote and implement this. The study was an assessment of the extent to which 19 of New Zealand's 20 regional planning and funding organisations (District Health Boards-DHBs) had worked to implement the government's policy (see box for more detail). This article reports on one part of the study, namely on comments received at the end of returned surveys distributed to the full range of DHB clinical staff. These respondent comments are a rich source of data, providing insights into different aspects of the clinical governance implementation process.

The New Zealand Healthcare System¹⁶

The healthcare system is predominantly tax-funded, with around 80% of total health expenditure from government sources. Government funding is allocated on a population basis to 20 geographically based DHBs, which plan and fund a full spectrum of services. DHBs own and run public hospitals, which dominate hospital care, and fund a range of other primary care, disability support and community services. Public hospitals are free of patient charges, universally accessible and employ all staff on salary. Around 40% of public specialists are in dual practice and, therefore, also work privately. Primary medical care is provided by general practitioners in private practice, but nearly half their income is from public sources with the remainder from direct patient charges.

Clinical Governance policy

In 2009, the government endorsed the recommendations of a working party on clinical governance. The Minister of Health said: "The Government is serious about re-engaging doctors and nurses in the running of front line health services and we expect DHBs to act on this report...[this is about supporting] strong clinical leadership and governance throughout the health system."

17 The reported asserted that DHBs: create governance structures to ensure effective partnership between clinical and corporate management; enable strong clinical leadership; devolve decision-making to clinical units and teams; and identify and support clinical leaders.
18

METHODS: ASSESSING CLINICAL GOVERNANCE AND LEADERSHIP

In 2012, a national study was conducted which aimed to assess progress with implementing the clinical governance policy, as detailed elsewhere. 19 As part of this, a short fixed-question survey was sent to every registered healthcare professional employed in the 19 DHBs (the 20th did not participate owing to demands of the Christchurch earthquakes). Thus, over 41 000 registered professionals, including all doctors, nurses and allied health professionals in ongoing employment, were invited by their DHB via email to participate in the online survey (those working in primary care, such as general practitioners and practice nurses, were not included as they are not part of the DHB system—see box). Two reminder emails were sent at weekly intervals. The survey probed perceptions of the extent to which key components of the clinical governance policy had been implemented. It also contained background guestions and a comments box in which respondents were asked for any further thoughts "especially on strengths and weaknesses in your DHB with regard to clinical leadership." Written tracts received were grouped by profession, printed out and analysed using a standard qualitative approach of organising the data into a series of recurring themes which emerged from this process.²⁰ In practice, for this study, this process involved reading and re-reading the written tracts and labelling these in accordance with the contents of each

tract. Initial labelling produced a vast range of potential themes emerging from the data including separate themes from the different professional groups. In subsequent labelling, data were consolidated into a series of 10 themes including all professional groups. Some of the themes featured only a small number of respondents' written tracts or were not necessarily directly relevant to the topic of clinical governance implementation. As discussed below, this article reports on a smaller number of major themes which emerged from the analysis. RG undertook the initial analysis and SH crosschecked the themes, labelling of tracts and allocation of these to themes from which illustrative tracts were extracted.

RESULTS

The survey response rate was 25%. However, this meant a total of 10 303 completed surveys from the full spectrum of professionals across the 19 participating DHBs, with respondent characteristics close to those of the broader New Zealand public healthcare workforce. ¹⁹ In total, 3205 written tracts (open-ended written comments) were received from respondents in the comments box. Of these, nurses provided 1289 (40%), allied professionals 868 (27%), doctors 646 (20%) and midwives 113 (3.5%). The distribution of comments by profession was very close to that of the broader survey respondents (eg, 44% of all respondents were nurses; 19% were doctors). A further 281 comments were from those who self-categorised as 'other' and wrote their profession in a free text box. Generally these were allied professionals, public health physicians or dentists who may have preferred to be identified separately. A small number of comments came from respondents who did not provide their profession.

Respondent comments were overwhelmingly negative with 90% categorised in this way. This finding was consistent across all 19 DHBs implying that only limited, if any, progress had been made on implementing clinical governance The level of commitment by management to clinical governance was frequently suggested to be 'lip service' only. Doctors were the most frank with their criticisms with the following tract from one encapsulating several themes, and implying that clinical governance has perhaps even created a new clinician—executive-clinician divide:

Lip service is paid to clinical-management partnership and the questions of practising clinicians go unanswered. Many so-called clinicians in senior positions have lost contact with real clinical practice on the ground and are more concerned with pleasing executive management than providing best care (doctor, DHB5).

Five key themes emerged from the analysis, around which a larger volume of comments were made compared with other identifiable themes. These five themes are described below.

Theme 1: Clinical-management relations

A strong and recurrent theme underpinning many comments was relations between managers and professionals. The connotation was clearly one of 'us and them', with management continuing to maintain responsibility for most decision-making and resource allocation functions and minimal partnering around this with health professionals. According to one respondent, this made for a complex situation:

Clinical Leadership is a giant misnomer in my opinion, because decision-making by clinicians is perenially subject to, and plays second fiddle to, the agenda of 'Managers' who have very little or no appreciation of the clinical issues and principles involved, and who often place considerations of cost above considerations such as patient-service or clinician-training. This is not always the case, but generally Clinical Leaders-such as Clinical Service Directors—have their perspectives warped and shaped by the Managers whom they have to work with, and before long have sunk so deep in the toils of 'Management' that they come to find 'political' expedience impossible to disentangle from clinical imperatives and professional or collegial wisdom. Top clinicians (clinician Directors) need to have more autonomy if they are to transform the clinical services that they lead into things of lasting value. Managers are important, but their roles should be strictly circumscribed. At present they call the shots and rule the roost, and this is an unhealthy state of affairs. Clinicians are continually impeded in their efforts to benefit their patients, or to manage their services sensibly and efficiently, by 'managers' who, as a class, are apt to be beating a different drum (doctor, DHB3).

Many other respondents wrote similarly:

Clinical leadership is paid lip-service only, with no real power being given to clinical leaders. Likewise quality is considered important so long as no extra resourcing is required. Obvious difficulties appear to be ignored (doctor, DHB1).

I feel that managers in this DHB prefer to order people to do things rather than support leadership, innovation and proactive strategies (nurse, DHB8).

This DHB has a management culture which is dismissive of clinicians' perspectives and focused on corporate perspectives rather than truly appropriate care...critical thinking is strongly discouraged, feedback systems do not allow true reflection on real situations. Obedience is valued, conformity is rewarded. Clinicians neither trust or respect managers. Decisions are often arbitrary and made without consultation (nurse, DHB10).

One wrote of the potential gains if 'management' sought close engagement with healthcare professionals:

There is clear management control philosophy—very sad! Clinical staff of all specialities hardly ever see these management appointees in the clinical forum. They clearly have no concept of how we work, and neither do they have any intention to. As a [consultant doctor], they have no idea how much they are missing by not coming and FULLY engaging with the clinical staff (doctor, DHB8).

Theme 2: Clinicians stepping up

Clinical governance implementation is reliant on professionals being willing to get involved in leadership activities and in changing the healthcare system they work in. Notable in many respondent tracts were concerns about professional colleagues' willingness to 'step up' in this way, while also highlighting that this should not necessarily be a universal responsibility:

Some healthcare professionals are not interested in managerial issues and would rather simply do their job. There should be no "obligation" to undertake this work (doctor, DHB12).

Management is very supportive. Senior doctors generally do not want to be involved in how the service works. They just want to deliver the service. The doctors that are engaged are listened to. I think we are trying to force many doctors to do something they don't want to do. Some are really best supported in providing a service, whilst letting others sort out how best to run the service (doctor, DHB15).

The DHB does not provide the incentive for clinicians to be involved in clinical governance...None of the Senior Surgeons want to do the role, and the department is insufficiently staffed to take any major leadership role within the Hospital. The most Senior Clinicians who have the experience for clinical leadership are not willing to give their time to management responsibilities, with the perception that they are not listened to and this is a waste of their time (doctor, DHB9).

Many respondents, as highlighted in the following comment, noted the impact of New Zealand's dual practice arrangements on engendering medical colleagues' engagement with clinical governance activities:

Not a great fan of the [clinical governance] term—seems it's a managerial construct to me—designed to 'patch over' the deficiencies in DHBs brought about by Senior medical doctors / specialists who are too busy doing private work during their non clinical hours when they should be on DHB campus mentoring / improving/ discussing/teaching etc. to improve patient care and quality of care. I find it odd that the clinical leadership concept is NON EXISTENT in private hospitals—the doctors just get on and do what they are supposed to do (only this time they get paid by an insurance company- not the citizens of NZ via taxes!!) (doctor, DHB18).

Theme 3: Interprofessional development and the professional hierarchy

Many respondents noted the challenges of incorporating all health professions in partnership in a clinical

governance structure, particularly given the traditionally higher status of medical professionals, but there was also a perception in some cases that nurses were the key driver of clinical governance:

I am a nurse. While I understand that doctors and senior nurses are involved in clinical governance, I have found that there are very limited opportunities for nurses to be involved aside from doing incident reports (nurse, DHB7).

I think medical staff have a long way to go in effectively collaborating and decision-making with nursing staff (nurse, DHB11).

Very strong nursing focused. Not easy, especially for Allied Health professionals (allied health, DHB12).

Seems that physicians hold a lot of power but the same opinion by nursing is not listened to. More opportunity for physicians in clinical governance and quality rather than other professions (nurse, DHB15).

There is a disconnect between medical leadership and nursing leadership. It would seem that nurses are required to take all the responsibility for establishing leadership and then try to engage doctors. Doctors do not get involved in quality activities such as clinical governance and seem to expect it all to be driven by nurses who then spend huge amounts of energy trying to engage medical staff (nurse, DHB18).

I feel like Allied Health professionals are actually really good at this and we work across the organisation so we have a good idea of how things could improve, but often the opinion of AH professionals is not valued or appreciated as much as the opinion of doctors (allied health, DHB6).

Clinical leadership is seen as medical leadership. The role of other health professionals is not recognised. While there is a clinical governance structure in place it is vertical through the directorates. There is no horizontal connection between the different services (allied health, DHB16).

Theme 4: Training needs

Many respondents noted that training in leadership and areas pivotal to clinical governance such as quality improvement and interprofessional working was crucial, yet such training was either unavailable or access limited:

Clinical leadership skills are mainly acquired through experience, being thrown in at the deep end and role modeling. It would be great to see DHBs supporting more development of senior clinicians who are taking on managerial and clinical leadership roles (doctor, DHB11).

Need for more courses and get medical and nursing on the same course would be great team building (nurse, DHB12). There is still a disconnect between clinical leadership, innovation and being able to put thought into practice. Clinical leaders are not given the skills to become proficient at management therefore often do not have the skills to manage the process. Clinical leaders need more training in enabling them to step up into senior management roles (allied health, DHB13).

One respondent noted the negative impact on a clinical leader's colleagues who may have benefited from specific training:

It appears to me that clinical leadership appears to only work if the clinicians have the skills to lead and manage. I have seen some terrible outcomes through incompetant leadership by clinicians of other clinicians. Absolutely I agree that senior clinicians should have input into the management of their service areas but they also need support and dedicated time to fufill these obligations... and appropriate training (doctor, DHB2).

Theme 5: 'No time...'

Numerous respondents cited lack of time in their busy clinical schedules as an 'impediment' to involvement in clinical governance and leadership activities. However, the issue of clinical governance being seen as a 'lower priority' activity than clinical work along with lack of incentives, especially for doctors, was also related to how respondents allocated their time:

The greatest impediment to clinicians being involved in Leadership and Clinical Governance is not the willingness of the organisation, but the ability of clinical staff to commit sufficient time. Most are extremely busy, and these activities are deemed of lower priority or are confined to after hours (doctor, DHB14).

There is willingness for clinical staff participation but with inadequate time on top of clinical duties. This often has to be fitted in 'out of normal hours' or squeezed into our full time-tables. There is little protected/identified time for work not directly related to patient care (doctor, DHB9).

DISCUSSION

Our quantitative analyses of fixed-response survey data reported elsewhere shows some progress in implementing clinical governance in New Zealand, with an index score across the 19 DHBs increasing from 46% to 54% between 2010 and the present 2012 study. This present study of written comments from participants in this national survey on clinical governance has provided insights into some key dimensions of the processes and challenges involved in its implementation, which are not easily investigated by fixed-response questions. In this regard, the written comments assist with further understanding the challenges involved. Very importantly, the insights provided come from practising healthcare professionals. Given that New Zealand's clinical governance policy is intended to be implemented throughout its

public healthcare system, it could be expected that practising professionals would recognise whether this was occurring in their workplace. In the context of New Zealand's policy,¹⁷ ¹⁸ they should have been reporting management-clinician partnership structures emerging, sharing of decision-making power, devolution of responsibility to clinical units and active support for clinical leaders. Respondents suggested otherwise with only a small percentage reporting a positive performance. Key concerns, which might also be considered barriers to the implementation process, were represented in the five themes that emerged from analyses of comments. At least from the perspective of healthcare professionals, DHB managers had not been responding adequately with failures in each of the key areas appearing to drive the respondent's negativity. Of course, a range of potential subthemes and different perspectives were contained within the five themes, pointing to the possibility that the conclusion of implementation 'failure', described above, could be premature or driven by factors beyond managerial control. Clearly, some doctors were of the belief that not all should have clinical governance obligations; others were critical of colleagues' commitment to the public sector and its improvement. Some nurses and allied health professionals also indicated unease in their interprofessional relationships and roles in clinical governance. As such, issues pertaining to professionalism and professional behaviour could also be partly to blame for the implementation challenges.

This aside, the findings of this study suggest not only a failure to commit at the local DHB level in implementing a government policy within a healthcare system where powers of planning and service organisation are devolved from the centre; these also echo findings from other studies of clinical governance, which show that management commitment is critical if healthcare professionals are to feel engaged in the implementation process. Sour findings indicate that considerable effort is required to reverse the situation and the sense of negativity among healthcare professionals. This could require two areas of focus for improvement: on the systems for organisational governance and leadership and on building professional governance arrangements.

On organisational governance and leadership, two key themes from this study were the resounding lack of partnership with management and, perhaps relatedly, strained relationships. This situation is not unique to New Zealand. Indeed, a diverse range of studies have reported difficulties in creating partnership management arrangements which entails a commitment to sharing of decision-making and, associated with this, power and responsibility. Yet it is also a situation for which there are remedies. In this regard, there are examples of healthcare organisations which have demonstrated that a coherent strategy, creation of which involves all levels of the organisation, from the governing board through to senior management and front-line staff, can provide the fuel for clinical governance and

leadership.¹⁰ ¹¹ This, in turn, has been shown to improve overall quality of care and financial performance. In our broader assessment of clinical governance, we found only limited evidence of such a strategy in some of the 19 DHBs.¹⁹

Two further themes emerging from this study were about capacity for healthcare professionals to 'step up' and take opportunities to engage in clinical leadership and to work across professional boundaries in the process. Again, respondents highlighted shortcomings in both of these areas. Notable were respondents who suggested that clinical governance and leadership should not necessarily be the responsibilities of all professionals; that some should perhaps be left to get on with clinical work. However, this contradicts the literature in the field, which suggests a professional responsibility to identify shortcomings in the standards of care and work to rectify these. ¹⁰ ²⁸ As such, this indicates an opportunity for the New Zealand government, employer DHBs and professional colleges and registration bodies to reiterate the basic expectations for clinical governance. At the same time, there may be a middle ground in which some professionals have less direct responsibility for clinical leadership. Improving interprofessionalism is presently on the management, research and training agenda in a range of countries. Respondents suggested that the medical profession remained dominant when it came to involvement in clinical governance, although concerns were also raised about the supremacy of nurses vis a vis allied professionals. An emerging literature tends to suggest that solutions are in early training and also in practical exercises aimed at building trust and improving understanding of the roles and contributions of different professions to high quality care systems. 32 33 Of course, the final theme pertaining to time availability potentially creates a substantial barrier to engaging in clinical governance and in interprofessional development. Clearly, this poses a challenge for the New Zealand government as well as for local DHBs who must work within a fixed funding allocation yet create systems that support staff involvement in activities such as clinical governance development.

This study has its limitations. First, the length of time between the 2009 launch of the national clinical governance policy and the 2012 assessment of this could be considered too short for respondents to detect change. Our survey asked respondents how familiar they were with the concept of clinical governance. Only 47% said they were 'familiar' or 'very familiar'. 19 It is possible that the high proportion of negative comments was driven by lack of knowledge or, relatedly, what could be considered to be an early point in the implementation process. Second, comments on a survey are subject to the biases of individual respondents who may have particular views they wish to air which do not necessarily reflect reality or the views of those who did not offer comments or participate in the survey. Those with grievances to air may have been more likely to provide written comments and may be another reason why negative comments substantially outnumbered positive ones. This said, the comments

presented in this article were examples of what would appear via the many other comments received to be widely shared views of a large number of healthcare professionals. Furthermore, comments were received from every professional group in all 19 DHBs. Third, there are obvious limits to using survey comments as a data source, meaning that some could question the strength of the conclusions of this study. These limits include that only some respondents will choose to participate in writing comments, that there is no opportunity to further investigate a respondent's viewpoint as can be done in an interview situation, and that many comments in this study were very brief written responses. Finally, the broader survey had what might be considered a low response rate. However, as detailed elsewhere, respondent characteristics were close to those of non-respondents providing increased confidence in the data.¹⁹

Caveats aside, this study reported on a novel but previously used method.³⁴ In doing so, the study provided an important insight into healthcare professional perspectives on policy implementation. It highlights key areas that policy makers in New Zealand, and elsewhere, seeking to implement clinical governance policy should emphasise at different points in the healthcare system. These include shifting from a hierarchical management system to one based on healthcare professional partnerships while also creating mechanisms to build interprofessional engagement.

Acknowledgements The authors are grateful to the participants in this study and for District Health Board Shared Services for helping facilitate the study.

Contributors Both authors designed the broader survey study and oversaw all aspects of the research protocol and analysis. RG carried out the initial analysis of the respondent comments; SH cross-checked this analysis. RG wrote the initial draft of the article and SH contributed to this.

Funding The study was commissioned by the National Health Board, Health Quality and Safety Commission, and 19 District Health Boards.

Competing interests None.

Ethics approval The study was reviewed and approved, including for ethics, by the boards and executive teams of the multiple funders (n=21) as well as three healthcare professional unions representing different professional groups.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement No additional data are available.

Open Access This is an Open Access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/

REFERENCES

- Smith PC, Mossialos E, Papanicolas I, et al., eds. Performance measurement for health system improvement: experiences, challenges and prospects. Cambridge: Cambridge University Press, 2009.
- Bohmer RMJ. Designing care: aligning the nature and management of health care. Boston: Harvard Business Press, 2009.
- Brennan N, Flynn M. Differentiating clinical governance, clinical management and clinical practice. *Clin Gover Int J* 2013;18:114–31.



- Scally G, Donaldson L. Clinical governance and the drive for quality improvement in the new NHS in England. BMJ 1998;317:61–5.
- Freeman T, Walshe K. Achieving progress through clinical governance? A national study of health care managers' perceptions in the NHS in England. *Qual Saf Health Care* 2004;13:335–43.
- Som CV. Making sense of clinical governance at different levels in NHS hospital trusts. Clin Gover Int J 2009;14:98–112.
- Travaglia J, Debono D, Spigelman A, et al. Clinical governance: a review of key concepts in the literature. Clin Gover Int J 2011;16:62–77.
- Hogan H, Basnett I, McKee M. Consultants' attitudes to clinical governance: barriers and incentives to engagement. *Public Health* 2007;121:614–22.
- Gauld R, Horsburgh S, Brown J. The clinical governance development index: results from a New Zealand study. BMJ Qual Saf 2011: 20:947–53
- James BC, Savitz LA. How Intermountain trimmed health care costs through robust quality improvement efforts. *Health Aff (Millwood)* 2011;30:1185–91.
- Paulus RA, Davis K, Steele GD. Continuous innovation in health care: implications of the Geisinger experience. *Health Aff (Millwood)* 2008;27:1235–45.
- Bisognano M, Kenney C. Pursuing the triple aim: seven innovators show the way to better care, better health, and lower costs. San Francisco: Jossey-Bass, 2012.
- Ovretveit J. Does improving quality save money? A review of the evidence of which improvements to quality reduce costs to health service providers. London: The Health Foundation, 2009.
- Dorgan S, Layton D, Bloom N, et al. Management in healthcare: why good practice really matters. London: McKinsey and Company/ London School of Economics, 2010.
- Goodall AH. Physician-leaders and hospital performance: is there an association? Soc Sci Med 2011;73:535–9.
- Gauld R. New Zealand's post-2008 health system reforms: toward re-centralization of organizational arrangements. *Health Policy* 2012;106:110–13.
- 17. Ryall T. Clinical leadership "In Good Hands". Ministerial press release. 12 March. Wellington: Minister of Health, 2009.
- Ministerial Task Group on Clinical Leadership. In good hands: transforming clinical governance in New Zealand. Wellington: Ministerial Task Group on Clinical Leadership, 2009.
- Gauld R, Horsburgh S. Clinical governance assessment project: final report on a National Health Professional Survey and Site Visits to 19

- New Zealand DHBs. Dunedin: Centre for Health Systems, University of Otago, 2012.
- Rice P, Ezzy D. Qualitative research methods: a health focus. Melbourne: Oxford University Press, 1999.
- Mays N, Pope C, Popay J. Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field. J Health Serv Res Policy 2005;10:6–20.
- Gauld R, Horsburgh S. Measuring progress with clinical governance development in New Zealand: perceptions of senior doctors in 2010 and 2012. BMC Health Serv Res 2014;14:1–7.
- Clark J. Medical leadership and engagement: no longer an optional extra. J Health Organ Manag 2012;26:437–43.
- Clark J, Nath V. Medical engagement: a journey not an event. London: King's Fund, 2014.
- Dickinson H, Ham C, Snelling I, et al. Are we there yet? Models of medical leadership and their effectiveness: an exploratory study. Final Report. Birmingham: NIHR Service Delivery and Organisation Programme, 2013.
- Buse K, Harmer A. Seven habits of highly effective global public-private health partnerships: practice and potential. Soc Sci Med 2007;64:259–71.
- Nicholson C, Jackson C, Marley J. A governance model for integrated primary/secondary care for the health-reforming first world —results of a systematic review. BMC Health Serv Res 2013:13:528
- Berwick D. A user's manual for the IOM's 'Quality Chasm' report. Health Aff (Millwood) 2002;21:80–90.
- Leape L, Berwick D, Clancy CM, et al. Transforming healthcare: a safety imperative. Qual Saf Health Care 2009:18:424–8.
- 30. Department of Health. *Building a safer NHS for patients: implementing an organisation with a memory.* London: Department of Health, 2001.
- Irvine D. GMC and the future of revalidation: patients, professionalism, and revalidation. BMJ 2005;330:1265–8.
- Pathak S, Holzmueller CG, Haller KB, et al. A mile in their shoes: interdisciplinary education at the Johns Hopkins University School of Medicine. Am J Med Qual 2010;25:462–7.
- Thomas EJ. Improving teamwork in healthcare: current approaches and the path forward. BMJ Qual Saf 2011;20:647–50.
- Chew B, Cheong A, Ismail M, et al. A nationwide survey of the expectation of public healthcare providers on family medicine specialists in Malaysia: a qualitative analysis of 634 written comments. BMJ Open 2014;4:e004645.