

BMJ Open Rethinking clinical governance: healthcare professionals' views: a Delphi study

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ABSTRACT

Objective: Although the guiding principle of clinical governance states that healthcare professionals are the leading contributors to quality and safety in healthcare, little is known about what healthcare professionals perceive as important for clinical governance. The aim of this study is to clarify this by exploring healthcare professionals' views on clinical governance.

Design: Based on a literature search, a list of 99 elements related to clinical governance was constructed. This list was refined, extended and restricted during a three-round Delphi study.

Setting and participants: The panel of experts was formed of 24 healthcare professionals from an academic hospital that is seen as a leader in terms of its clinical governance expertise in the Netherlands.

Main outcome measures: Rated importance of each element on a four-point scale.

Results: The 50 elements that the panel perceived as most important related to adopting a bottom-up approach to clinical governance, ownership, teamwork, learning from mistakes and feedback. The panel did not reach a consensus concerning elements that referred to patient involvement. Elements that referred to a managerial approach to clinical governance and standardisation of work were rejected by the panel.

Conclusions: In the views of the panel of experts, clinical governance is a practice-based, value-driven approach that has the goal of delivering the highest possible quality care and ensuring the safety of patients. Bottom-up approaches and effective teamwork are seen as crucial for high quality and safe healthcare. Striving for high quality and safe healthcare is underpinned by continuous learning, shared responsibility and good relationships and collaboration between healthcare professionals, managers and patients.

INTRODUCTION

Clinical governance (CG) is an organisation-wide approach to continuous improvement of healthcare quality by all the individuals who are involved in a patient's care.¹ The intention of CG is to 'safeguard the high

Strengths and limitations of this study

- Using the Delphi method, this study explored healthcare professionals' views on clinical governance, a viewpoint that has been largely overlooked in the existing literature on enhancing clinical governance to improve quality.
- This study provides interesting insights into what healthcare professionals perceive as key aspects of a bottom-up approach to clinical governance.
- The results of this study suggest that good relationships between managers, policymakers and healthcare professionals are very important. However, this study did not include managers and policymakers in the expert panel. A study involving the perspectives of managers and policymakers could be a valuable step in achieving successful collaboration.
- Although the selection of experts was appropriate for the purpose of this study, the results may have limited generalisability.

standards of care by creating an environment in which excellence in clinical care will flourish'.² Clinical governance builds on the premise that healthcare professionals are the leading contributors to high-quality healthcare.^{1 3} Reflecting this view, it has been suggested that one should balance the traditional top-down approach to the governance of healthcare with a bottom-up approach that values the perceptions of healthcare professionals.^{1 3 4}

Nevertheless, despite the criticisms, top-down approaches that focus on accountability and standardisation remain prominent in the CG literature.⁴ These critiques observe that other aspects of CG are valued by professionals.^{5 6} Although the CG literature is extensive, little is known about what healthcare professionals actually perceive as important for CG.^{7 8} This is surprising given that the perspective of healthcare professionals is indispensable for healthcare improvements, due to their practical expertise in healthcare

delivery.^{1 4 9} Gaining insights into healthcare professionals' perceptions of CG will help in the transition to the proposed bottom-up approach to CG.^{6 8}

Additionally, the variability in the definitions of CG in the literature has led to the current situation in which many elements are considered at times to be part of CG.^{10 11} The aim of this study is to explore the extent to which CG elements that are described as important in the literature match what healthcare professionals perceive as important for CG.

The main elements of CG are generally taken as clinical audits, risk management, patient involvement, lifelong learning and evidence-based practice.^{4 9 10} Further, the patient–professional relationship is seen as central to high-quality healthcare.^{12 13} One approach starts from the premise that the main elements listed above and the patient–professional relationship are supported by beliefs shared by healthcare professionals concerning ownership, teamwork, leadership, communication and systems awareness.⁹

Ownership: refers to active participation in the design and execution of healthcare by healthcare professionals. As such, healthcare professionals share responsibility for quality improvement. The ownership and solution of problems by healthcare professionals requires a working environment that allows creativity and the freedom to express opinions.⁹ *Teamwork*: refers to collaboration among healthcare professionals. It contributes to high-quality patient care through mutual learning and increased knowledge and skills within a team.^{14 15} In order to support teamwork and to create an enabling working environment, *leadership* is essential.^{16 17} The quality of healthcare increases when leaders stimulate 'communication' about the quality of healthcare.¹⁸ Communicating information about the patient is important, such as when a patient is transferred to another department or in consultations with other healthcare professionals. Additionally, effective communication increases the sharing of values and beliefs, which contributes to a collective vision shared by all organisational members. From this collective vision stems an open, enabling organisational environment.¹⁹ Moreover, communication is central to the patient–professional partnership. Communication is essential to establish the correct diagnosis and to involve patients in developing a treatment plan that accords with the patient's needs; this form of communication is also referred to as 'patient involvement'.^{11 12 20} Furthermore, blame-free sharing of experiences when the delivery of healthcare goes wrong, or nearly goes wrong, helps healthcare professionals learn from mistakes and become more aware of the ways in which their actions might contribute to the larger process.^{4 9 11 14 21} This awareness is further referred to as *systems awareness*: the recognition that healthcare processes are interrelated and the system in which one is working might include errors due to processes that are not fully aligned with each other. Systems awareness ideally leads to the re-evaluation of processes in order to reduce risks.⁹

This approach to CG emphasises the leading role of doctors and nurses in the establishment of high-quality healthcare. To compare this scenario with reality, this study explores the views of healthcare professionals on CG using the Delphi method.

METHODOLOGY

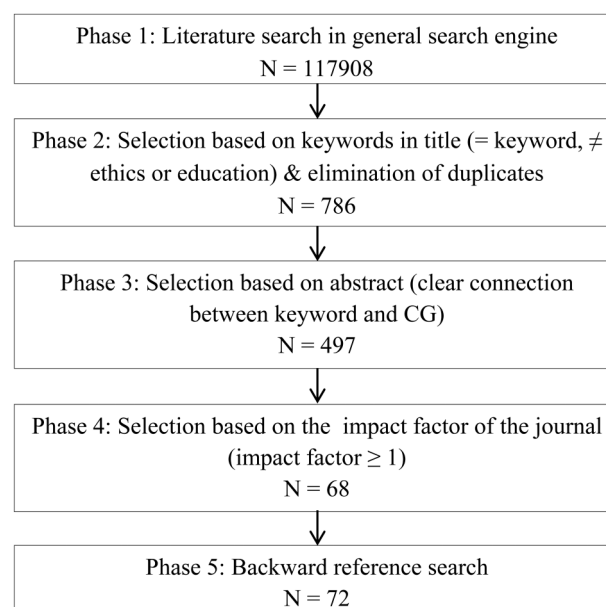
Literature study

In order to ensure that most of the elements associated in the literature with CG were considered during our study, a list of potential elements was constructed to help the expert panel determine which aspects of CG are important. The list of elements was based on a five-phase literature search (see [box 1](#)).

The search was carried out using a general search engine that includes the following databases: EBSCOhost, EMBASE, PUBMED, Emerald and Web of Science. We searched for peer-reviewed articles published between 2000 and 2015 containing the keywords: communication, team, culture*, patient*, change*, quality assessment, ownership, implementation, system*, system thinking, improvement*, multidisciplinary teams or leadership* in combination with Clinical Governance. The five-phase literature search resulted in a selection of 72 articles from which the list of elements was derived.

The initial selection of articles based on their title and abstract resulted in a substantial number of articles (N=497). Given this large number and the focus on identifying CG elements rather than systematically reviewing the literature, we initially limited ourselves to the articles in the highest impact journals (N=68). Then, in phase 5 of our literature search, we used backwards reference searching which added a further four articles from lower impact factor journals.

Box 1 Flow diagram for selecting articles



A group of five researchers identified elements from four of these articles. The group exchanged identified elements and discussed differences to come to a consensus during two meetings. Following this, the work of deriving elements from the remaining 68 articles was shared among the researchers. One researcher then compared the individual lists ($N_{\text{total}}=209$ elements) and removed overlapping elements to produce a draft list that was discussed in a meeting involving seven researchers. Here, the researchers agreed on a list of 99 elements, which formed the input for the Delphi study. The original list of elements is included as an additional file (see online supplementary table S1).

Delphi study

Prior to the Delphi study, we conducted 10 semistructured interviews with a member of the executive board, the staff director for Medical Affairs, the chief of the Department of Surgery, the chief of the Department of Internal Medicine, a specialist registrar, a nurse specialist, the Quality & Safety coordinator, a division director, a manager and a senior policy staff member. The interview questions were categorised according to the main CG aspects.⁹ These interviews provided background information for our main study.

In order to refine, complete and restrict the list of CG elements, we conducted a Delphi study. This is an appropriate technique because it aims to achieve a consensus within an expert panel about a topic.^{22 23}

The panel of experts consisted of selected healthcare professionals from a single academic medical centre in the Netherlands. At the time of the study (May 2015), Groningen's academic medical centre (UMCG) had 6 years' experience with CG and was considered a national model having initiated several CG activities. The UMCG has implemented CG as a bottom-up quality improvement activity in which it has attempted to involve all healthcare professionals. Since CG is diffused throughout the organisation by its healthcare professionals, the UMCG is seen as an appropriate environment to explore the views of healthcare professionals. The selected healthcare professionals had been leaders in disseminating CG within the UMCG and, as such, were considered CG experts.

The experts were selected on the basis of tenure (at least 2 years working in this academic hospital) and of belonging to the group of 'early adopters'²⁴ of the UMCG's CG concept. In selecting the expert panel, researchers included both medical specialists ($n=15$) and nurses ($n=9$). The panel members ($n=24$, $M_{\text{age}}=42.17$, $SD=7.41$, $M_{\text{tenure}}=11.42$, $SD=5.94$) worked in the following departments: Surgery ($n=8$), Internal Medicine ($n=5$), Dermatology ($n=2$), Paediatrics ($n=2$), Revalidation ($n=2$), Psychiatry ($n=1$), Intensive Care ($n=1$), Neurology ($n=1$), Oncology ($n=1$) and the Emergency Department ($n=1$). Informed consent was obtained from all participants.

Opinions concerning the CG elements were sought over three rounds in which the experts could indicate

on a four-point scale (1=not important to 4=very important) how important each element was for CG. After responding to each element, the experts were asked if they thought the element could be better phrased. At the end of each round, the experts could suggest additional elements and a reflection on the results took place. In line with the Delphi methodology, this reflection was done in an open manner in which the researchers tried to avoid steering the respondents and respected the meaning they wanted to attribute to CG.²³ In each successive round, the list of elements was based on the responses given during the previous round. The rules used for inclusion and exclusion of elements correspond to other Delphi studies.²⁵ Elements that were perceived as important (a score ≥ 3) by at least 80% of the panel were immediately included in the final list. New elements, and elements that were perceived as important by between 51 and 80% of the panel, were retained for reassessment during the next round of the Delphi study. Elements that less than half of the panel perceived as important were removed and thus did not appear on the final list. This approach, involving feedback and the opportunity to reconsider initial responses, enabled the panel to reach a consensus about the elements. Elements that were not rated as important by at least 80% of the panel during the third round were categorised as elements on which there was no consensus. A description of the Delphi process is provided in online supplementary box S1.

To facilitate the interpretation of results, two researchers independently categorised the elements after the study was completed. Six categories aligned with previously described CG aspects: ownership, teamwork, leadership, communication, patient involvement and systems awareness.⁹ Further, given that some elements described the goal or prerequisites of CG, rather than the previously mentioned categories, a 'general CG elements' category was added.

RESULTS

Background interviews

The semistructured background interviews, including members of the board and policymakers, provided insights into CG perceptions on other organisational levels. In these interviews, CG was explained as a value-driven approach, promoted by the board, that led to responsibility being shared by collaborating professionals as illustrated by the following quotes: 'I would like to quote Berwick's meaningful words: "When values are strong, rules are unnecessary. When values are weak, rules are insufficient". You do not need rules when you can rely on ownership and leadership' (Chief of the Department of Surgery). '..., the healthcare professionals take the initiatives to improve, the board helps them advance' (member of the executive board). 'I understand CG as a shared responsibility for the quality of healthcare. Hence, CG is shared governance by doctors, nurses and managers' (senior member of policy staff).

Delphi study

The first round was completed by 23 experts (a 95.83% response rate). During the second and third rounds, all members of the expert panel were present (N=24). During the three rounds of the Delphi study, the panel added six new elements to the list of 99 elements that we had derived from the literature study. The decreasing number of elements in each round reflects saturation over the three rounds (see [table 1](#)).

The 50 elements that made it through to the final list, together with their means, SDs and assigned category, are displayed in online supplementary table S2. Online supplementary table S3 contains the elements that were excluded or on which no consensus (NC) was reached. We discuss below the views of the panel on each aspect of CG, and include panel member comments for illustrative purposes.

Ownership: The panel indicated that the role of healthcare professionals is important for CG. Further, they felt the approach to CG should be bottom-up, as illustrated by the high scores attached to elements that reflected the importance of personal responsibility and innovation among healthcare professionals. Although these elements and the elements referring to participation in developments by individual healthcare professionals were perceived as important, opinions on increased individual autonomy were mixed, with no consensus over the element 'CG offers more autonomy to individual healthcare professionals'. One expert commented: 'Teamwork is a central element of CG and not the autonomous professional'.

Teamwork: Multidisciplinary teamwork was perceived as leading to organisational and cultural change. Aspects of teamwork relating to shared responsibility and good relationships were perceived as especially important. Although mutual learning was perceived as important by the healthcare professionals, this aspect of collaboration was not perceived as moving CG beyond current quality improvement methods. One expert commented: 'There are other quality improvement initiatives that emphasise learning. This aspect does not make CG unique'.

Leadership: The panel indicated that, for CG to be successful, it is important that leaders have a clear understanding of clinical practice. They saw it as important that leaders create an open and participative environment and enable changes by facilitating professional development. According to the panel, it is important for CG that leadership involves collaboration and a shared responsibility among healthcare professionals, managers and the governing body. The panel rejected elements that referred to authoritarian approaches to leadership.

Communication: Elements that referred to sharing values and practice-based feedback as a means to improve quality were perceived as especially important for CG. The elements excluded reflected the informal sharing of information among healthcare professionals and the sharing of department performance indicators. The latter elements raised questions in the panel such as: 'With whom to share performance data?' and 'How can performance be defined?'

Patient involvement: Although the panel highlighted the importance of good patient outcomes, and of agreement between healthcare professionals and patients, the elements that referred to involving patients in decisions about healthcare, to patients' complaints about the received care and to the relationship with the patient being the most important aspect of CG were rejected. A member of the panel gave the following comment regarding the importance of the relationship with the patient: 'A good relationship is important, but adequate healthcare is much more important'.

In an attempt to find an explanation for the lack of consensus on patient involvement, we carried out an additional analysis looking for differences between medical specialists and nurses. This highlighted a small difference in opinion regarding patient involvement ($F(1, 22)=3.27$, $p=0.08$), whereas no differences were found for the other CG categories, ($p \geq 0.10$). Nevertheless, given the large number of elements on the list relative to the number of experts on the panel, these results should be interpreted with caution.

Systems awareness: Elements that referred to 'learning from mistakes' or 'a learning culture' were perceived as important. The following comment illustrates the importance that the experts attached to being aware of the variety present in clinical practice: 'I think that clinical practice is difficult to standardise'. Elements that referred to managerial approaches, such as 'systematic risk evaluation' and 'continuous revision of guidelines', were rejected by the panel.

General aspects: In general terms, CG was described as a cultural concept aimed at continuous quality improvement. The elements that referred to a practice-based approach were perceived as important in achieving the ultimate goal of CG: the highest possible quality of patient care. General elements that referred to traditional top-down approaches, such as performance management, quality assurance and standardisation, were perceived as less important by the healthcare

Table 1 Delphi panel results

Response rate (N=24)	Round 1 96%	Round 2 100%	Round 3 100%
Elements considered	99	47	32
Included on final list	39	10	1
Excluded	19	5	13
Rephrased	19	8	0
Unchanged	22	24	0
New elements	6	0	0
Priority (scores)	2079	1104	768
Very important	30%	27%	20%
Important	39%	43%	35%
Moderately important	21%	24%	32%
Not important	10%	6%	13%

professionals. Rather, these strategies were perceived as a logical consequence of shared values, as illustrated by the following comment: 'quality improvement, auditing and risk management are a logical consequence of the existing culture, rather than a strategy in itself'.

DISCUSSION

The aim of this Delphi study was to explore the extent to which CG elements that are described as important in the literature match those that healthcare professionals perceive as important. The members of our expert panel agreed that "an environment in which excellence in clinical care will flourish"² is created by good relationships between healthcare professionals, managers and patients, by teamwork and by shared values concerning the quality of healthcare. Our findings indicate that the panel perceives CG as an approach that should be part of the culture of the organisation: it is a mindset that sees quality improvement as a consequence of shared values such as 'openness' and 'trust' and of seeing 'mistakes as learning opportunities'. Healthcare professionals perceived culture as the natural antecedent of continuous quality improvement, and rejected top-down and managerial approaches to quality improvement. In line with the literature,^{4 6 9 10} this study highlights the importance of a local, bottom-up and practice-based improvement approach.

These findings were supported in the preliminary interviews with staff members, managers and a member of the board prior to the Delphi panel. In these interviews, CG was seen as a value-driven approach that could be helped forward by the board, leading to shared responsibility among collaborating professionals.

The panel members in this Delphi study perceived healthcare professionals to be the key actors in improving patient care. They saw that healthcare professionals "being at the heart of CG is central to re-establishing 'responsible autonomy' as a basic principle in the performance and organisation of clinical work".⁶ It might be that the role of healthcare professionals goes beyond quality improvement in the clinical practice itself to include reinforcing an organisational mindset of continuous quality improvement. This implies that healthcare professionals partly determine what constitutes CG.²⁶ As such, CG should not be considered a static framework but rather as a mindset that emerges from the primary process and evolves along with the changing nature of clinical practice and its organisation since these will be reflected in the goals and values of individuals, teams and the organisation.

Furthermore, the expert panel agreed that learning is an important aspect of CG. In another study, on the operationalisations of CG across various countries, learning was mentioned as an essential element of CG in five of the 13 included reports.²⁷ In our Delphi study, there was only one element on which the panel did not reach a consensus: that mutual learning moves CG beyond

current methods for quality improvement. This finding to an extent reflects the literature in which there are distinct perspectives on whether learning is an essential element of CG,²⁷ and might be explained by the perception that mutual learning does not distinguish CG from other quality improvement methods.

Further, the panel indicated that leaders should have a clear understanding of clinical practice³ and are important in creating an enabling working environment.^{3 17 18 28} The healthcare professionals also highlighted the importance of good relationships and collaboration with managers and policymakers. Although neither managers nor policymakers were involved in the Delphi study, the background interviews indicated that managers and board members had similar perceptions of CG as the healthcare professionals. Nevertheless, including managers and board members in the Delphi panel might have led to other conclusions.^{7 29} For example, CG managers in an National Health Service trust highlighted the importance of accountability, a blame-free environment and patient centredness,²⁹ whereas these aspects were not rated consistently highly by our panel. Not involving managers and policymakers in our Delphi process is a limitation, and investigating similarities and differences in what is perceived as important by managers, by policymakers and by healthcare professionals is potentially a valuable next step.

The panel members did not reach a consensus on all the aspects of CG that we found in the literature. The lack of consensus regarding patient involvement was a surprise—to both the researchers and to the panel members. This lack of consensus might be due to a difference in attitude between doctors and nurses with regard to patient involvement. The pattern in our study was consistent with the literature suggesting that nurses have more positive attitudes towards patient involvement³⁰ and are more likely to report patient involvement by healthcare professionals in their organisation.³¹ The literature also suggests that nurses and medical specialists may have differential attitudes with respect to knowledge of, and contribution to, CG development.³² As such, in future research, it may be beneficial to have two separate panels since this might lead to valuable findings by being able to rigorously compare the views of medical specialists and of nurses.

The lack of a consensus regarding the importance of patient involvement might also be due to healthcare professionals perceiving CG as an internal matter for hospital governance, describing how people can collaborate to improve quality within the organisation, rather than as an approach that involves external parties such as patients. It is also possible that the lack of a consensus over patient involvement reflects a situation in which this aspect of CG is less well integrated into the culture of the hospital. This idea is encouraged by the conclusion of Groene and Sunol (2014), based on their large-scale study on quality improvement in Europe, that

"levels of patient involvement are low and seem tokenistic".³³ We see this as a concern since patient involvement is central to high-quality healthcare, and a lack of positive attitudes towards patient involvement poses a barrier towards their involvement in decisions about their care.^{12 13 20 27} We would therefore encourage policy-makers and future research to focus on strategies to improve patient involvement.

Another notable observation during this study was the repeated rejection of managerial approaches such as standardised risk reduction, formalisation, accountability and clinical performance measurement. It is not that healthcare professionals reject the utility of these approaches completely; rather, they perceive them as 'a logical consequence of the existing culture, rather than a strategy in their own right'. It might be that the rejection of such managerial approaches is related to how the organisation of the healthcare system is perceived in the Netherlands. First, unlike in countries such as the UK, Ireland and New Zealand, CG was not centrally introduced in the Netherlands. Consequently, there is no national CG policy, and healthcare organisations shape their own version of CG.³⁴ Second, compared to countries such as Germany, Portugal, Greece and Poland, the complex interplay between various stakeholders means that the healthcare system within the Netherlands has to be highly coordinated, leading to rigid managerial procedures such as target setting based on performance indicators. This reduces the opportunities for healthcare professionals to apply managerial procedures flexibly according to the needs of the clinical situation,³⁵ and might explain why healthcare professionals are resistant to managerial approaches.

In an international comparison of CG operationalisations (involving Australia, Italy, New Zealand, Ireland and the UK), some CG dimensions were fairly universal, whereas others, such as clinical audits, quality assurance and accountability, were less often seen as essential CG aspects.²⁷ We argue that this variation in the extent to which certain aspects are perceived as essential to CG might be a consequence of how healthcare is organised nationally.

This observation highlights one of the limitations of our study. Although it offers interesting insights into healthcare professionals' perceptions of a bottom-up approach to CG, the generalisability of the results might be limited due to our panel consisting of healthcare professionals with CG expertise. The Delphi methodology prescribes a panel consisting of experts on a topic^{22 23} and, as such, healthcare professionals with considerable experience in setting up CG activities were selected for the expert panel. Further, the experts all came from the same hospital. As such, the panel might not be representative of all healthcare professionals, and this may pose limitations on the generalisability of the findings.

Another potential limitation of this study is that the literature selection might have excluded relevant articles published in journals with relatively low impact factors.

However, since the elements extracted from the selected papers were broadly consistent, we do not see this filtering as likely to have led to the exclusion of important CG elements. As a further check, a random selection of articles from lower impact journals were evaluated without suggesting that these included topics that were not mentioned in our initial selection. Finally, it can be argued that the list of elements drawn from the publications was not definitive but merely served as the starting point for our Delphi study in which the panel could rephrase and add CG elements. Thus, overall, we would argue that the literature search met the needs of the study.

Although the list of elements was drawn up to form a basis for a discussion in which the panel would decide which elements were important in CG, there is a risk that its length would restrain the panellists from suggesting additional items. To counteract this danger, we stressed that the list should not be seen as complete. Further, given that some elements showed similarities to other elements, this 'repetition' combined with the length of the list might have led to the panel members losing interest. To counteract this, the first round of the study was carried out on a different day to the second and third rounds to counteract fatigue. Further, between the second and third rounds, the panel was asked to discuss the elements, which provided a period for recovery. In these ways, we attempted to avoid the onset of fatigue or overload, and the fact that the panellists did take the opportunity to add and rephrase elements we believe means we were successful.

To summarise our main conclusions, we found that the healthcare professionals who participated in our study saw CG as a practice-based, value-driven approach whose goal was to deliver the highest possible quality patient care. We would also like to stress that the description of the CG offered is not the final product, and this study highlights that CG is an evolving process. Whereas CG started out as a structured approach to improving quality,^{1 2} it seems to have developed into an organisational mindset that precedes continuous quality improvement in healthcare. Therefore, we would encourage future research to investigate methods that could stimulate this mindset in healthcare professionals.

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