Hybrid practices as a means to implement quality improvement: A comparative qualitative study in a Dutch and Swedish hospital

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Background: Managers and scholars commonly perceive resistance from professionals as hampering the implementation of quality improvement (QI) and refer to the incompatibility of clinical and managerial approaches to QI as a reason. Yet a growing body of research indicates that, in practice, these two approaches rather blend into hybrid practices that embody different types of QI-related knowledge and values. This opens up a new perspective on implementation challenges that moves attention away from resistance against managerial QI toward difficulties for clinicians to draw together different types of knowledge and values within their clinical work. So far, little is known about how managers can support clinicians to generate hybrid QI practices.

Purpose: The aim of this study was to deepen our understanding of how managers can support the generation of hybrid practices that help clinicians to integrate QI into their everyday work.

Methodology/Approach: We draw on comparative qualitative research including 21 semistructured interviews, documentary analysis, and participant observation that we conducted in one Dutch and one Swedish hospital over a period of 8 months in 2011/2012.

Results: Hospital managers designed hybrid forums, tools, and professional roles in order to facilitate the integration of different QI practices, knowledge, and values. This integration generated new hybrid practices and an infrastructure for QI that has potential to support clinicians in their efforts to align different demands.

Practice Implications: New opportunities to implement QI emerge when we change the implementation problem from clinical resistance to the need of support for clinicians to develop hybrid QI practices. Hospital managers then have to intentionally organize for the generation of hybrid practices by designing, for example, hybrid forums, tools, and professional roles that integrate different knowledge and values in a nonhierarchical way.

Key words: engaging, health care, hybrid practice, legitimizing, quality improvement (QI)

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Implementing change in clinical practice is generally considered to be difficult (Grol & Grimshaw, 2003), which seems to apply in particular to managerial quality improvement (QI) plans (Øvretveit & Gustafson, 2002; Øvretveit & Klazinga, 2013). Managers and scholars commonly refer to resistance from managers against QI as a reason (Mascia, Morandi, & Cicchetti, 2014). They argue that clinicians often regard managerial QI as alien to their professional knowledge and value base and that clinicians therefore tend to decouple managerial QI tools from clinical QI efforts (Mascia et al., 2014).

A growing body of research, however, shows how managerial and clinical approaches to QI actually converge in practice and can rather blend into various kinds of hybrid practices that embody different types of knowledge and values (e.g., Noordegraaf, 2015). This opens up a new perspective on implementation challenges that moves attention away from resistance against managerial QI practices toward difficulties for clinicians to combine different types of QI-related knowledge and values in their everyday clinical work. So far, little is known about how managers can facilitate the implementation of QI through supporting clinicians with the generation of hybrid QI practices.

This comparative qualitative study, which was conducted in one Dutch and one Swedish hospital in 2011/2012, investigates how hospital managers identified their implementation challenges and how they tried to overcome them in their everyday QI work by facilitating hybrid practices. With this article, we aim to deepen the understanding of how managers can organize for opportunities to generate hybrid QI practices that help clinicians to integrate various QI elements into their everyday work.

We begin with situating our research within the health care literature and an outline of our conceptual framework. Second, we describe the methods used to collect and analyze our data. Third, we provide interview and ethnographic data about how hospital managers support the generation of hybrid QI practices. Fourth, we discuss the contributions to the literature and practical implications that derive from our findings.

**Theory**

In this section, we will first outline the concepts of “managerial QI” and “clinical QI” and how recent literature describes the emergence of hybrid practices. We then show how the concepts of engaging and legitimizing can be useful analytical concepts to make sense of how managers understand QI implementation challenges and how their efforts to overcome those troubles lead them to create hybrid practices.

As ideal types, “managerial QI” and “clinical QI” encompass dissimilar values and bodies of knowledge (Noordegraaf, 2015). We define clinical QI practices as activities that mainly derive from knowledge produced with a strong focus on care provided by clinicians in direct interactions with individual patients (Noordegraaf, 2015). This includes, for example, evidence-based care, clinical guidelines, as well as quality registers. Clinicians consider the delivery of good care to individual patients as a paramount value (Noordegraaf, 2015). Managerial QI in health care, on the other hand, draws on QI knowledge that derives from industrial practices, such as Lean management or the Deming cycle (Dixon-Woods, McNicol, & Martin, 2012). Such practices are mostly introduced by senior managers and to an increasing amount mandatory for reimbursement by external regulatory and supervisory agencies (Noordegraaf, 2015). Managerial QI in health care has been defined as “better patient experience and outcomes, achieved through changing provider behavior and organization, through using systematic change methods and strategies” (Øvretveit, 2009, p. 8). For managers, the central value of doing good QI lies hence in turning inputs into tangible results for user groups rather than the focus on individual patient needs (Noordegraaf, 2015). In summary, the two approaches differ, first of all, in what counts as relevant knowledge and values and, second, in the rationale behind change and quality management.

The literature suggests that differences between the two approaches hinder the implementation of QI, often described in terms of clinicians’ resistance to managerial QI (Currie, Lockett, Finn, Martin, & Waring, 2012; Waring & Currie, 2009). Research shows that managerial QI tools are often discarded by professionals as lacking scientific evidence (Dixon-Woods, McNicol, & Martin, 2012). According to this literature, managerial tools lack legitimacy as to what clinicians accept as appropriate knowledge for QI. Moreover, managerial tools are often regarded a bureaucratic burden, rather than as helpful to engage clinicians in QI (Waring, Currie, Crompton, & Bishop, 2013, p. 85). As a consequence, engaging and legitimizing are often considered as important factors toward effective implementation of QI efforts and other organizational change (May & Finch, 2009).

An emerging body of literature suggests, however, that, in practice, the two approaches to QI are rather blurred. These different types of knowledge and values are gradually blended into various hybrid practices that help frontline staff to address increasing demands to combine efficient outcomes and transparent professional practice (Noordegraaf, 2015). Here, hybrid practice refers to “how professionalism and managerialism might be intertwined in daily practice” (Greenwood, Raynard, & Kodeih, 2011, p. 188). These new kinds of professional practice require managerial support including managerial tools in order to guide and motivate the efforts of professionals (Noordegraaf, 2015). So far, however, most of the research on hybrid practice addresses institutional research on competing logics.
in organizations (Besharov & Smith, n.d.) or various responses from frontline staff to managerial expectations in the public sector (Numerato, Salvatore, & Fattore, 2012). Although only a very small number of studies focus on the work of health care managers by studying topics such as identity (McGivern, Currie, Ferlie, Fitzgerald, & Waring, 2015), the implications for managerial practice are only presented fragmentarily.

We aim to fill this gap by focusing on how managers support the generation of hybrid practices that contain both managerial and clinical QI components in their attempts to ease the implementation of QI efforts. In doing so, we take up Greenwood et al.’s (2011) call for research that reveals deeper insights into how individual organizations respond to implementation challenges by creating practices and structures that incorporate hybrid logics, a term they use to refer to ways of looking and understanding reality that combine different perspectives.

**Method**

This article draws on comparative qualitative research including interviews, documentary analysis, and participant observation that we conducted in one Dutch and one Swedish hospital over a period of 8 months in 2011/2012.

**The Cross-Country Case Study**

Data collection took place as part of the Quality and Safety in European Hospitals (QUASER) study. This longitudinal, comparative study was conducted across five European countries and used a shared data collection and analysis protocol (Robert et al., 2011). We used relevant parts of the QUASER data set and focused on hybrid practices in our analysis.

Although the QUASER study explored how various cultural and organizational processes influenced QI work, this article investigates an additional topic that emerged from the data. We learnt that senior managers in some of the study hospitals perceived resistance of professionals with managerial QI as a major challenge for QI implementation. To study how senior managers respond to this challenge, we chose to compare managerial QI work in one Dutch and one Swedish hospital because they are both teaching hospitals of approximately the same size and the authors had access to the ethnographic data sets.

Case studies as units of analysis are particularly well able to explore complex processes in context (Yin, 2009). Our case study is designed according to a purposeful sampling approach (Patton, 1990), which comprises the targeted selection of information-rich cases for the in-depth study of a selected issue (such as practices of QI implementation). Although there are various ways to sample purposefully, our study follows a “variation strategy” (ibid.) in terms of national health care system characteristics (Table 1) that shape the preconditions for health care managers’ QI governance. This variation approach helps us to study managerial QI efforts in dissimilar macro contexts and hence enables us to explore both the differences and similarities of QI governance, thereby strengthening explanatory power.

Although QI governance through performance-based budgeting and outcome measures increases continuously

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<th>Characteristics</th>
<th>Netherlands</th>
<th>Sweden</th>
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<tr>
<td><strong>Organization</strong></td>
<td>System is a public/private mix. All citizens have health insurance. Parties are providers, insurers, and patients who regulate the system through competition on the basis of price and quality of care.</td>
<td>Ministry of Health is responsible for overseeing the health system. At the regional level, 21 county councils are responsible for delivering health care, including primary and secondary care, public health, and preventative care.</td>
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<td><strong>Payment mechanisms</strong></td>
<td>Bismarck model: Funding comes from insurance, which all citizens pay for, and an employer contribution, indexed to earnings. Insurers have an increasing role in buying care based on price and quality.</td>
<td>Beveridge system: Direct taxation and state funding. County councils are beginning to experiment with payment by quality. There are no sanctions but control in the form of inspections by the National Board of Health. Other regulatory mechanisms include interprofessional audit schemes, national clinical guidelines, disciplinary boards and courts.</td>
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<td><strong>QI standards</strong></td>
<td>The Healthcare Inspectorate supervises quality of care. Next to governmental supervision mandatory quality criteria are also set by professional associations, nongovernmental accreditation systems, and payers for example.</td>
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in Sweden and the Netherlands, the respective national QI governance context is vastly different. In the Netherlands, various governmental and nongovernmental parties, such as supervisory bodies, insurers, and patient organizations, collectively finance and regulate health care (Schut & van de Ven, 2012, p. 109). Increasingly, these external bodies link payment for health care to these QI standards, and consequently, health care providers have difficulties to comply with the increasing multitude of (often slightly dissimilar) standards for QI that external parties set. In Sweden, the regional County Councils are responsible for health care, financed through direct taxation and state funding, providing considerable variation across the country (Anell, Glenngard, & Merkur, 2012). Complexity is added through governmental, regional, and professional directives, performance comparisons among hospitals, and the nationwide “quality registers” that the medical specialists use to evaluate clinical interventions (ibid.). In the context of these differences in macropolitical QI governance, we explore both the differences and similarities of managerial QI governance at the hospital micro level.

Data Collection

To investigate how managers facilitate QI implementation in the two hospitals, we took a qualitative approach. We conducted in total 21 semistructured interviews with senior managers and clinicians who are accountable for QI implementation (Table 2).

In addition, we observed five clinicians and managers with various professional backgrounds. In the Dutch hospital, we followed the executive director and the quality manager who carry the overall responsibility for QI in the hospital. In the Swedish case, we followed the chief executive officer (CEO), the chief medical officer (CMO) in charge for QI, and the hospital QI coordinator. In addition, we observed a variety of meetings, committees, conferences and daily routines that are related to QI implementation, which again helped us to unravel management strategies related to QI. Participant observation amounted to more than 40 hours in total. In addition, we conducted a document analysis (policy papers, news coverage, internal documents, and meeting notes) in both hospitals.

Ethical approval was granted in Sweden (Regional Ethical Committee, Lindköping, ref. 2011/164-3). No ethical permission was necessary under Dutch law, as no patient data were collected.

Data Analysis

We analyzed audiotaped and transcribed interviews, observational field notes, and other documentary data by means of thematic coding (Rivas, 2014). We took the interviewees’ own concerns about QI implementation as

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<td>Informants</td>
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<tr>
<td><strong>Dutch hospital</strong></td>
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<tr>
<td>Quality manager</td>
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<td>QI implementation officer</td>
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<td>QI implementation nurse</td>
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<td>Head of service, internal medicine</td>
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<td>Head of service, surgery</td>
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<td>Lead oncologist</td>
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<td>Head of nursing ward, oncology</td>
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<td>Executive director</td>
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<td>Head of department for public relations</td>
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<td><strong>Total:</strong></td>
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<td><strong>Swedish hospital</strong></td>
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<td>Head of service, internal medicine</td>
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<td>Head of service, surgery</td>
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<td>Head of service, anesthesiology/intensive care</td>
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<td>Controller, hospital administration</td>
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<td>Chief medical officer</td>
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<td>Chief executive officer</td>
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<td>Coordinator for quality and development activities, hospital administration</td>
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**Total:** 9
a starting point for our analysis (i.e., professional resistance). Through comparing vignettes that were based on our findings from an initial set of six interviews and our field notes, we learnt that managers addressed the issue of resistance predominantly through attempts to “engage” and “legitimize” QI programs (Table 3). These concepts also correspond to major threads in the literature on barriers to implementation of QI programs. We therefore used engaging and legitimizing as analytical concepts to focus our data analysis (Stake, 1995) when searching our complete set of data for examples of how managers made use of various means to overcome their perceived resistance challenges.

All interviews were conducted in the respective national language (i.e., Dutch and Swedish). Then, relevant parts (relating to engaging and legitimizing) were translated into English.

We validated our findings through comparison with the literature and presented this comparison in the discussion of this article. Within our research team, we also applied a member-check for both our codes and results.

Results

The analysis focuses on how managers create hybrid practices as a means to QI implementation using the concepts of engaging and legitimizing. The section is divided into three major paragraphs: the Dutch case, the Swedish case, and a cross-comparison.

The Dutch Case

The nonacademic teaching hospital is located in a rural area. Since a structural reorganization process in the late 1990s, the responsibility for QI work and quality control is split in the organization: the department for quality and safety controls compliance with QI, whereas clinical frontline staff is responsible for QI. QI work is to a large extent issued by senior management and organized in top-down QI projects. Some theme-based or ward-based improvement efforts among clinicians exist, most of which remain isolated experiences and unaligned to one another.

Engaging clinicians: Making managerial QI tools valuable for clinicians. Senior managers coherently claim that clinicians do not sufficiently consider the relevance of managerial QI for their frontline work. They argue that there is a need to move professional perceptions of managerial QI from a “have to do safety mind map to one where frontline staff wants to do safety” (Executive Director, interview, 03.04.2012).

For this reason, the quality manager—supported by the executive director—consciously tries to influence staff’s perception about the relevance of managerial QI for their frontline work. The executive director is a clinician and feels that he therefore has a stronger standing with frontline staff (Executive Director, interview, 03.04.2012). Therefore, he is often the one discussing the benefits of managerial QI, for example, in public events, workshops, or celebrations. An excerpt from a regional patient safety meeting with nurses and doctors is telling:

The executive director reminds his audience of a crisis, where two patients died in fixation accidents. He shows a video that elaborates which guidelines were neglected and how this triggered the death of the two patients. Also, emotional excerpts of conversations with the patients’ relatives are shown. The video is supplemented by dramatic music. He then explains how the accident could have been avoided, if protocols would have been followed up. He ends by stressing that patient safety as part of professional ethos demands for managerial QI (Research diary, 15.11.11).

After the meeting, the hospital’s executive director explains that he “repeatedly uses crisis and emotion” as a means to increase awareness for the importance of managerial QI tools. He tells that he usually also appeals to professional ethos when showing how managerial QI tools can decrease patients’ risks. This link between

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<td><strong>Analytical concepts</strong></td>
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<td><strong>Definition</strong></td>
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<td><strong>Engaging</strong> Any attempts from managers to enroll clinicians into QI efforts (e.g., patient safety programs).</td>
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<td><strong>Legitimizing</strong> Various quality improvement means (tools, performance measures, policies) that are accepted as relevant and meaningful toward improving quality.</td>
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ethos and managerial QI, he argues, helps him to increase awareness among clinicians for managerial QI components as a crucial element of good care (ibid.).

In summary, by means of strategically linking emotions (i.e., video), professional ethos (i.e., patient safety), and managerial QI (i.e., accurate use of patient safety tool), the executive director intentionally tries to translate managerial QI into a practice that should be considered as relevant for patient safety and good care by frontline staff. Hence, the challenge of engaging clinical frontline staff with managerial QI was addressed through creating a discourse on patient safety that blended managerial QI practice and professional ethos of good clinical practice.

**Legitimizing collaboration: QI as science.** Senior managers, who almost all hold degrees in administration or social sciences, unequivocally argue that there is a “longstanding difficult relationship between clinicians and managers” (Quality Manager, interview, 09.04.2011). They feel that their knowledge base is regarded a bureaucratic burden by most clinicians and thus not considered as a legitimate source to improve quality. And indeed, clinicians tend to prioritize evidence-based knowledge and rely on expertise that derives from professional associations rather than other supervisory bodies (Medical Manager, interview, 16.08.2011). Managers therefore invest in the scientific outlook of the managerial QI tools they utilize (Quality Manager, interview, 16.08.2011). We take the QI monitoring tool as an example.

The hospital has a unique ICT-based quality compliance infrastructure in place—the so-called “demand monitor.” The tool endeavors to benchmark professional performance against all existing norms from patient groups, insurers, national bodies, and medical associations across the country. The monitor translates external demands into specific tasks for professional groups. Unique is that the monitor consciously includes (evidence-based) protocols and guidelines from medical associations, which clinicians consider as appropriate knowledge for QI. The executive director explains:

> We say: “Ok, the scientific association thinks this is evidence-based, and that this is best practice, so...how often do we encounter this here? Do clinicians use it?” And we control whether and how [clinicians] do it here. And if [they] don’t, we want to know why (Executive Director, interview, 29.09.2011).

The design of the database is interesting for two reasons. One, it intentionally blends managerial and professional QI knowledge. Two, by doing that, the executive team intends to increase the overall scientific outlook of the database that frontline staff previously tended to depict as a managerial burden. By showing that the tool is based on scientific evidence, the management team legitimizes (and increases adherence to) managerial QI tools with clinicians. In the Dutch case, the challenge to legitimize managerial QI was hence addressed by incorporating evidence-based, scientific knowledge into managerial QI tools.

**The Swedish Case**

The hospital is a major nonteaching academic hospital in a large metropolitan area, characterized by a high staff turnover. At the end of the 1990s, quality of health care became an explicit goal for the hospital (Coordinator for Quality Affairs, interview, 01.04.2011). An organizational review carried out by a governmental agency concluded that the hospital was well organized, but they “seemed to have forgotten the patient” (ibid.). In consequence, the hospital moved attention away from purely efficiency-driven QI practices and began to better integrate managerial and clinical QI approaches. In 2002, the hospital was transformed into an equity company owned by the county council, overseen by a board with individuals from private business and, at the moment of data collection, run by a CEO with background in social service management.

**Engaging clinicians: Shaping professional values.** Senior managers argue that clinicians do not sufficiently consider the relevance of managerial QI. The CEO tries to commit managers and clinicians to the hospital’s QI practices by means of aligning professional and managerial values.

The CEO leads annual management days and management training with the main aim to change the hospital culture so that a better awareness about quality and safety can be ensured. Such days usually include reviewing adverse events. Participants also watch a touching movie about a patient who was given the wrong medication. The film is followed by a discussion about the current status quo of patient safety in the hospital. Right thereafter, the CEO presents the central values that the management board had decided upon (translated by second author from hospital brochure):

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**The patient first:** concerns patient flow and patient safety, involves continuous improvements, measuring and follow-up toward common goals as well as evidence-based care.

**Respect for the individual:** respecting patients’ integrity and right to participate and self-determinacy, mutual respect between employees, to do your best and to learn from each other.

**Avoid waste:** includes the right response at the right time, that is, to reduce time used for waiting for each other, searching for things, controlling faults, multiple documenting, etc.
Social responsibility: includes research and teaching that improves future care, securing access to care and environmental work.

Two things can be learned from the meeting. First, the hospital’s central values are a blend of professional (e.g., patient safety) and quality management approaches (e.g., avoid waste). The management board thus intentionally designs QI practices that blend managerial and professional values as an integral part of the hospital’s quality management process. Second, the management board proactively tries to get doctors on board by creating such a new, hybrid approach as a means to implement QI efforts. Managerial knowledge is assimilated into an existing clinical knowledge base by means of strategically linking emotions (i.e., the movie) to professional practice (i.e., accurate incident analysis). Here, the challenge of engaging clinical professionals was addressed through creating new, hybrid practices and discourses that simultaneously engage both the board and the doctors.

Legitimizing QI tools: QI as science. Not being trained in a clinical profession, the CEO feels the need to legitimize managerial QI work. Our fieldwork shows how managers invest in the scientific outlook of the managerial QI tools they utilize. The CEO argues that she needs to convince clinicians who tend to have more trust in their fellow colleagues than in managerial experience when it comes to QI work:

> Because I don’t have a medical background I need to sort of have legitimacy through others (…) to use them to communicate with all the managers because then medical managers are all there (CEO, interview, 27.05.2011).

To be able to produce legitimacy, senior managers influence perceptions about what QI is by means of training. The CEO developed a new position: One of the department heads was recruited as CMO in charge of QI practices. This person would directly report to the CEO. When we interview the CMO, she stresses the need for department heads to learn about QI in order to be able to lead on it in a context where many of the employees are well versed in QI, especially nurses:

> There is definitely a gap there because they can have a lot of knowledge and carry out projects, which department heads can find very difficult to value, if they are not really knowledgeable about these concepts. So I think it is quite an important part of my task to continuously discuss these concepts and recommend books, showing that there is a literature in this area and so on (CMO, interview, 11.05.2011).

The CMO argues that she makes use of her intermediary position as being trained in both medicine and managerial QI practices. She explains that her strength to negotiate QI matters with fellow clinicians stems from her ability to couple financial aspects of particular quality indicators and the respective clinical value—an argument that nonclinical, financial officers cannot make in a credible way (CMO, interview, 11.05.2011). Hence, her double knowledge base and her resulting legitimacy among clinicians and managers help her to broker between the two domains by aligning managerial demands with clinical values.

In addition, the CMO emphasizes the importance to make doctors and department heads realize that QI is a science. For example, the CEO and the CMO brought all the department heads to the annual European health care quality conference. The visit provided the department heads with new tools (e.g., lean management), a new framework (e.g., culture of safety), and a new vocabulary (e.g., process vs. content facilitation) to make sense of and address indicators and improvement work in their daily work. The CEO and the CMO hence make a conscious effort to demonstrate that managerial QI is as valuable as scientific research. They intend to make clinicians understand that “there are theories around this, there is a scientific part of it” (CMO, interview, 11.05.2011).

In summary, both the alignment of clinical and professional knowledge (in the person of the CMO) and the training in and representation of managerial QI as science are conscious endeavours to increase the legitimacy of managerial QI tools.

Cross-Case Analysis

Our cross-case comparison reveals that managers in both hospitals share similar concerns about the implementation of QI practices: resistance from professionals toward managerial QI. Managers in both hospitals find it hard to convince clinicians to understand or employ managerial QI tools and performance measures. They report that clinicians tend to consider these as irrelevant and illegitimate to improve the quality of care. Moreover, managers from both hospitals perceive not only resistance but also its solutions in similar ways (i.e., as the need to engage and legitimize QI efforts). In their efforts to overcome these problems, they use similar means (e.g., quality meetings, people with hybrid roles; see Table 4). In the following, we discuss these solutions in more detail.

First, the managers try to overcome what they perceive as a lack of engagement with managerial QI programs and tools through, for example, linking managerial QI tools to professional ethos. Managers in both hospitals make use of moralizing stage scenarios, where they link emotions (movies, music, patient narratives) to previous failure in professional practice (Sweden, incident analysis; Netherlands, fixation incident). Incidents are discussed in relation to how compliance with managerial QI tools, such as protocols and formal risk analysis tools, could have saved the patient’s
life. The core values at the Swedish hospital can also be seen as a tool that incorporates components from both clinical and managerial QI components. In both countries, managers thus portray managerial QI as a practice that is relevant for patient safety and hence for good clinical work. Moreover, these practices incorporate elements from both clinical and managerial QI practices as a means to support clinicians in their QI efforts.

Second, managers find it challenging to legitimize managerial QI elements. They try to achieve this, for instance, by appealing to values associated with medical science. In the Dutch case, the QI monitoring tool intentionally includes guidelines from professional associations in order to demonstrate the scientific soundness of the tool. In the Swedish hospital, managers urge the heads of department to attend a QI conference to demonstrate that managerial QI is as valuable as scientific research, because both are based on evidence-based methods. Hence, managers from both hospitals depict managerial QI as an equally science-based practice as medical science and incorporate elements from clinical QI into their support for clinicians’ efforts.

In summary, managers try to support clinicians’ QI efforts by means of engaging clinicians in managerial QI and legitimizing managerial QI elements. In this effort, they combine elements from managerial and clinical QI components.

**Discussion**

**QI Implementation Through Generating Hybrid Practices: Forums, Tools, and Roles**

The managers under study perceived resistance from professionals as the main implementation problem, which they tried to address by engaging clinicians in their QI plans and legitimizing managerial QI methods. A closer look at our findings, however, reveals that their attempts to engage and legitimize generated additional effects: Hospital managers designed hybrid forums, tools, and professional roles that have the potential to support clinicians in their efforts to align different QI demands in new, hybrid QI practices (Table 4).

In both hospitals, managers organized hybrid forums (i.e., meetings, conferences, and training days), at which different perspectives on QI were exchanged within and across different professional groups. Scholars within the health care literature have already discussed these as well-facilitated forums (Dixon-Woods et al., 2012) or “town meetings” (Keroack et al., 2007). However, little is known about how managers establish and design them. In our cross-case analysis section above, we showed how hospital managers can design such forums as part of their everyday QI work by integrating different types of knowledge (i.e., managerial and clinical) in a nonhierarchic way.

Managers shaped the design of QI-relevant hybrid tools (i.e., monitoring system, policy) that intentionally blended managerial and professional QI knowledge. Hybrid QI tools have already been discussed in relation to their performative effects, showing that the standardization of health care through QI tools (i.e., best practices) does not lead to more uniformity but rather generates hybrid practices (Timmermans & Berg, 2003). Our study adds to the understanding of QI tools by highlighting that such tools never derive from only one type of knowledge in its pure form but are intentionally selective and hybrid, integrating components from both clinical and managerial sources.

People with clinical backgrounds were proactively put in managerial roles. In their hybrid professional roles, they represented both managerial and professional values and knowledge. Our study corroborates the relevance of hybrid roles for creating more legitimacy of managerial tasks in health care (McGivern et al., 2015).

Hybrid tools, roles, and forums combine managerial and professional values and knowledge bases. Both narratives showed, for example, how managers shaped values that are collectively shared between managers and clinicians. In the Dutch hospital, they facilitated the assimilation of professional perceptions of “good care” and managerial demands through discussion in meetings (i.e., by means of emotional videos); in the Swedish case, they influenced the development of shared values through policy development (i.e., core values). Likewise, managers in both organizations influenced the design of organizational structures that incorporate different types of knowledge and values as the case of the Dutch priority coding system shows. Hybrid tools, roles, and forums, hence, helped to generate new, QI-relevant knowledge and values that carry the potential to be accepted by both senior hospital managers and clinicians. They organized for the creation of hybrid practices that can reconcile a variety of sometimes contradicting demands such as individual patient needs and organizational targets that clinicians...
can find difficult to address simultaneously on their own (Noordegraaf, 2015).

**Practice Implications**

Deliberately organizing for possibilities to generate hybrid practices has the potential to reconcile dissimilar QI approaches across different professional groups. Because clinicians are increasingly expected to draw together different types of knowledge and values as part of their work, hybrid practices can make it easier for them to integrate QI into their everyday clinical practice. We can hence open up new opportunities to integrate QI into everyday clinical work by changing the implementation problem from resistance to the need of support for clinicians to develop QI practices that embody different types of knowledge and values. This requires hospital managers to intentionally organize for the generation of hybrid practices by skillfully designing, for example, hybrid forums, tools, and professional roles that allow for an integration of different knowledge and values in a nonhierarchical way.

**Limitations and Implications for Future Research**

Our case study is limited in two important ways. First, we did not study the effectiveness of hybrid practices as means to implement QI measures. Future research should therefore investigate how hybrid practices benefit QI implementation. Second, both the research protocol of the longitudinal, comparative study from which our findings are derived as well as our choice to narrow down our analytical focus after our preliminary analysis (i.e., using engaging and legitimizing as theoretical concepts for data analysis) focused our analysis down and led to a neglect of other ways that managers support the generation of hybrid practices. Inductive, ethnographic research is needed to cope with this shortcoming.

**References**


