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Effective cooperation influencing performance: a study in Dutch hospitals

A.H.J. KLOPPER-KES[1,2], N. MEERDINK[2], C.P.M. WILDEROM[1] AND W.H. VAN HARTEN[1,3,4]

[1]Faculty Management and Governance, University of Twente, Enschede, The Netherlands, [2]Ziekenhuisgroep Twente, Almelo, The Netherlands, [3]Netherlands Cancer Institute, Amsterdam, The Netherlands, and [4]Antoni van Leeuwenhoek Hospital, Amsterdam, The Netherlands

Address reprint requests to: A.H.J. Klopper-kes, Faculty Management and Governance, University of Twente, Enschede, The Netherlands. Tel: +31-54-66-93-406; E-mail: hannekeklopper@hotmail.com

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Abstract

Objective. This study focuses on cooperation between physicians and managers and aspects of that cooperation that can provide leads for interventions aimed at enhancing hospital performance.

Design. We performed a qualitative study on cooperation between physicians and managers and the influence of that cooperation on hospital performance, and structured the resulting data according to the conditions of Allport's theory on intergroup conflicts.

Setting. General hospitals in the Netherlands.

Participants. Thirty physicians (surgical and internal) and managers (strategic, tactic and operational) working in five different hospitals.

Interventions. In-depth interviews exploring the influence of cooperation between physicians and managers on hospital performance.

Main Outcome Measures. Respondents confirmed the complexity of the relationship between physicians and managers and the link between their cooperation and hospital performance. Mentioned aspects such as power and status differences, clarity in decision-making and personal click, are important in determining the effectiveness of the cooperation between physicians and managers.

Results. Our study suggests that the effectiveness of cooperation between physicians and managers is related to the uptake of quality initiatives and hospital performance.

Conclusions. The complex relationship between physicians and managers can be referred to as an intergroup conflict situation. We combined Allport's Contact theory conditions with aspects found in our study leading to the following facilitating conditions: address common goals; create interdependent tasks; arrange the support of authorities and respect the medical domain. They will enhance intra-hospital cooperation and therewith hospital performance.

Keywords: hospital quality performance, intergroup conflict, professional culture, cooperation, physicians, managers

Introduction

Managing hospitals is an increasing challenge [1–3]. Patients demand transparency and safe and high-quality care; a veritable explosion of knowledge, technological innovations and expensive drugs results in improved opportunities for curing diseases. However, budgets are under strain as the limitations of collective financing of health care become apparent. Various Western healthcare authorities are experimenting with the introduction of market elements, emphasizing the position of the patient, transparency of quality data and stimulating new entries; all contributing to an increasing demand for more overtly managed care and an emphasis on efficiency as a part of hospital performance (as defined by the World Health Organization [4]).

A first step in response to these developments often involves the creation of public awareness in order to create external pressure, as shown by the reports on patient safety ('To Err is Human'), 100 000 and 5 Million Lives campaigns (IHI, 2006 and 2008) and quality ('Crossing the Quality Chasm') [5]. Laffel and Blumenthal [6] state that most quality programs in health care remain focused on the technical expertise and interpersonal skills of physicians, and pay little attention to other ways of creating hospital quality, such as

effective organization and the ability to mobilize resources. Quality programs originate from industries where these initiatives were usually implemented by the management, with a top-down approach [7]. In healthcare quality, initiatives originate from a bottom-up clinical, professional orientation and it was only recently broadened to include organizational practices [8]. In addition, it is important to consider the specific conditions that can promote change in hospitals, such as, taking a whole-organization approach and the active engagement of key personnel [9]. The work by Rogers [7] underpins this and provides extra input for our argument. According to Berwick [5], the participation of physicians is paramount for the uptake and therewith successful implementation of quality improvement in hospitals. One of the likely aspects influencing the slow uptake of quality programs are the well-known difficulties in cooperation (defined as 'having to work together within one organization') between physicians and managers [10, 11].

The organizational setting in the Netherlands is such that general hospitals are non-profit foundations. The majority of physicians are not employed by the hospital, but are associated with a hospital (usually one) and the physicians are partners in their own within-hospital firm where the accumulated fees are divided. Physicians depend on hospital policies for the allocation of staff (for example secretaries and nurses) and equipment, leading to a duality between autonomy and dependence of the physicians. Apart from this structure, the differences in professional culture of the two groups, defined as 'the specific collection of values and norms that are shared by people and groups in an organization and that control the way they interact with each other' [12], lead to a challenging complex cooperation [3, 10, 11, 13]. Research shows that the problem regarding cooperation between physicians and managers is widespread in Western countries and has not been suitably solved yet [14–16].

Differences between physicians and managers have been described in various papers [3, 11, 17, 18]. One of the most apparent difficulties in managing hospitals arises from the differences between the goals of physicians and managers. A physician's primary goal is to optimally treat individual patients. The primary goal of managers is to provide continuity for the organization and to deliver high-quality and cost-effective healthcare services to a given population. These differences in perspectives are an obvious source of potential conflict. For the manageability of hospitals, the professional autonomy and organizational position of physicians are key factors [3, 10, 11]. Physicians claim and receive autonomy in programming and executing their work based on expert authority. Managers do not have automatic authority over physicians. Therefore, it is essential for both groups to think and act collectively so as to secure cooperation for organizational improvements. Effective cooperation enables hospitals to deliver services that are both high quality and cost-effective [2, 19]. Hafferty and Light [20] saw that physician dominance was declining as a consequence of changes in national policies, and 'consumerism' among patients. But there is sufficient evidence to expect that they will remain the dominant professional group in hospitals [21]. Meterko *et al.* [22] showed significant correlation between culture and patient satisfaction. In a Dutch national survey, covering all hospitals, Sluijs and Dekker [23] found that the degree of the implementation of quality management is limited. She found leadership and professional involvement to be important factors for success. The literature on the effectiveness of quality management in health care suggests that the main determinants for success are not so much the exact system or systematic approach, but rather the culture of the organization and certain organizational factors. According to Rogers [7] the adoption or rejection of quality improvement is predominantly based on social networks; it is highly influenced by communication between physicians and managers (the social element of implementation). The relationship between cooperation and hospital performance has been pointed out, but there is a need for more empirical data on aspects and mechanisms influencing the cooperation [10, 24]. Although the relationship between cooperation and performance has been studied [2, 14, 17], Scott *et al.* [24] state that it is supported by 'relatively little firm evidence' and conclude that 'considerable work remains to be done to provide better substantiated articulation of what these links might be—and what their implications are for healthcare policy and management' (pp. 115).

Physicians and managers are two professional groups whose cooperation within an organization is rather complex. According to intergroup literature, members of both groups are likely to have an 'us versus them' way of thinking; this is referred to as an intergroup conflict situation. Many papers that describe ways to enhance cooperation within intergroup settings are based on the Contact theory of Allport [25]. Pettigrew and Tropp [26] meta-analysed studies based on this theory [25] and found that it applies to a broad range of intergroup settings. Allport describes four (facilitating) conditions: common goals, no competition, the support of authorities and equal status. In intergroup conflict situations, people often exaggerate differences [27] and information is filtered or directed to confirm negative images. In such a situation, it is very difficult to cooperate effectively (Fig. 1).

Methods

Using the findings from literature and Allport's intergroup conflict conditions, we conducted 30 in-depth, semi-structured interviews with physicians and managers from five different Dutch general hospitals. We chose this method in order to explore the qualitative nuances in this relationship, as these are not very accessible through more quantitative research methods [28]. We queried our respondents about the way the two groups value their cooperation and their view of the possible relationship between that cooperation and hospital performance. The respondents were surgical and internal physicians as well as board members and managers at operational and tactical hospital levels. We interviewed three professionals from each group per hospital and three managers per hierarchical level, a number considered to be sufficient to explore a hospital's organizational culture

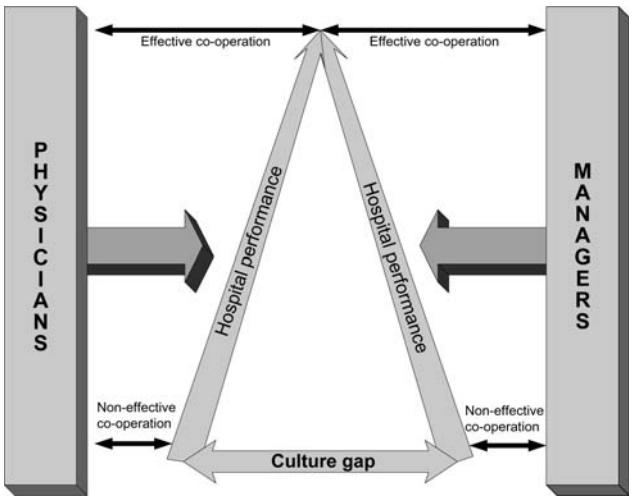

Figure 1 Influence of the cooperation between physicians and managers on hospital performance.

[29]. According to Hofstede *et al.* [30] organizational practices reflect the culture within an organization as to how things can best be done; practices are a key part of culture. We therefore asked the respondents about their perceptions of the daily practices regarding cooperation between members of the other group. They were literally asked which aspects they would take into account to influence cooperation, satisfaction and hospital performance (Table 1). The average length of the interviews was 1.5 h. We recorded and transcribed the interviews for analysis. From the literature, we derived that cooperation between physicians and managers can be seen as an intergroup conflict situation. Therefore, we categorized the data using Allport's conditions for overcoming intergroup conflict.

The first step in the analysis was that two authors read the transcripts independently, thus gaining an overview of the perceptions of cooperation and aspects within that cooperation. They then independently categorized the mentioned aspects into Allport's conditions. The coding of the interpretation was verified by questioning whether the mentioned aspects really reflected Allport's conditions. Consequently, to minimize coders bias, we also asked a physician and a manager who were not involved in our study to categorize the aspects into the conditions. Differing viewpoints were discussed, until an agreement on the categorization was reached.

Results of qualitative interviews

In Table 2 we present the data, categorized into the four conditions of Allport's contact theory [25], showing that apart from the condition 'support from authorities', all fields were covered in the responses. In the following we present the results of the interviews in the order of the sequence of the questions.

When asked which aspects of cooperation they would take into account when assessing this cooperation, managers mentioned the formal structure much more often than physicians. A topic of concern to managers is the hierarchical level at which decisions are made within the organization. In contrast, physicians often want to deal with board members or top management, even on some operational matters. More than half of the respondents found transparency of communication a relevant aspect. Both groups are concerned about clarity in decision-making and knowing where, how, and why decisions are made. Most important in the division of responsibilities is the way organizational and clinical responsibilities are distributed between physicians and managers; a manager noted: 'Physicians have a large amount of clinical responsibilities, but they do not seem to take on the corresponding managerial responsibilities'. The content of cooperation is linked to other aspects such as informal organization, respect and trust.

Secondly, respondents were asked to note factors that have an impact on their satisfaction with cooperation between physicians and managers. More than half of the physicians said that the more visible management is, the more easily things are accomplished. A typical remark made was that a 'personal click' (i.e. a positive perception of the other group or person based on personal characteristics) is needed, with trust, warmth and respect. Also negative aspects of satisfaction were expressed, such as decision-making without consent and conflicting interests; a typical remark is: 'The attitude and capability of managers is bad'. Managers were concerned about the unfamiliarity of physicians with their hospital financial results. Furthermore, all of the respondents agreed that cooperation is an absolute prerequisite to attain higher quality. Managers cannot just enforce organizational concepts onto physicians; and if physicians refuse to participate it will not succeed anyway.

Furthermore, we asked respondents which factors influence the satisfaction with hospital performance. An illustration of the responses of managers is depicted in the following quote, 'Many initiatives take place, but they lack a structured approach throughout the hospital'. A typical physician response was 'Physicians are not using their powers because they are too busy

Table 1 Interview questions used in the study

Interview questions
Which aspects of cooperation between physicians and managers would you take into account when assessing this cooperation?
What are the factors that influence your satisfaction with cooperation between physicians and managers?
What are the factors that influence your satisfaction with hospital performance?
Which aspects of the cooperation between physicians and managers, do you think, may affect hospital performance?

Table 2 Condensed reflection of key aspects derived from the qualitative study, categorized into Allport's conditions

Condition of Allport	Aspects mentioned by physicians	Aspects mentioned by managers
1. Common goals	Managers do not initiate quality	The physicians goals do not always align with the hospital goals
	We both want to provide good care for patients	Physicians are too focused on the microlevel (and not organizational level)
	We have conflicting interests	Because of the introduction of market elements, the interests between physicians and managers divert
	Physicians are unaware of financial results while management focuses on it	We are unaware of each other's goals, but we both do the best we can
2. No competition	There is a lot of bureaucratic administration	Quality blossoms when physicians and managers work well together
	Good convenants could be of benefit to cooperation	A good balance is only possible with good cooperation
	We are dependent on managers for finances	You can make decisions as a manager but they are not good if you make them without the doctor
	Working together with management leads to better quality	Planning, if done together, works better
	The higher levels of management are more difficult to work with	Clarity of communication is hard to achieve
	Less bureaucracy leads to better cooperation	Medical and managerial responsibilities do not align
	Management should be easily accessible	Physicians have a large number [or amount of responsibility] of clinical responsibilities, but they do not seem to take on the corresponding managerial responsibilities
3. Support of authorities	Not mentioned	Not mentioned
4. Equal status/respect the medical domain	We have been the core of the business, management is an unavoidable evil	The professional autonomy of physicians hinders cooperation
	Attitude and capability of managers are bad	Many physicians only want to deal with the highest possible hierarchical level of managers
	Managers are deliberately frustrating the physicians	As long as you respect and trust each other
	Decisions are made without the consent of the physicians	A personal click is very important
	When managers are listening, you feel respected	
	Decision-making should be transparent	
	We question the added value of management	
	Managers have to understand the organizational problems, and not educate physicians on subjects they cannot judge	

keeping their own shops running; quality initiatives take too much time'. Furthermore most doctors are unfamiliar with the performance indicators, but all managers have clear opinions about them. This widens the differences between the two groups.

Finally, we asked which aspects of the cooperation between physicians and managers may affect a hospital's performance? All managers agreed that 'physicians have very little steering power, but do have preventative power. Physicians have informal power, because they can form a front against management; they can influence quality, budget and production'. A physician stated: 'Individual physicians are not that bad, but hospital quality would improve if they cooperated more' and 'Cooperation needs to be good otherwise you cannot deliver good quality. I do not mean medical quality, but quality of care'. Almost all physicians and managers agreed that when the relationship between physicians and managers fails, it ultimately harms the patient.

Discussion

The differences between the goals of hospital physicians and managers and the professional autonomy and organizational position of physicians are noted to be a key in the continuing problematic cooperation between physicians and managers [13, 15, 16]. More empirical data, also on the mechanisms through which cooperation is related to hospital performance, is needed to design appropriate interventions to improve hospital performance

The interviews offered insight into the effects of extant structures and human factors across both groups. The effect of organizational structures is reflected by the respondents in mentioning the lack of transparency in decision-making and the accessibility of management. Blurred organizational structures seem to discourage the enthusiasm of individual physicians and managers to enhance hospital performance. These problems seem to be strengthened by the noted cultural factors like power differences, lack of mutual participation, respect and trust. Inequality between physicians and managers seems to hinder their cooperation. This may be connected to the mentioned lack of 'personal click' and unclear communication. Furthermore, we found a number of aspects that could be seen as pitfalls: the questioning of the added value of management and the use of performance indicators, and the perceived emphasis on financial issues. Some might consider these to be platitudes, and may use them as an excuse for not participating in quality initiatives.

Although one would have expected to find aspects that indicate that traditional differences between physicians and managers are becoming less obvious [20], our results show that they are still substantial. Thus, the complex relationship between physicians and managers can indeed be seen as an intergroup conflict situation [13]. We structured our data and categorized it into Allport's conditions [25] providing us with conditions that need to be met when designing interventions aimed at more effective cooperation. Note that in the interviews we did not find respondents referring to aspects categorized under his third condition, 'support of authorities'. This might be because our questions focused on the cooperation between physicians and managers and not on external conditions for that cooperation. Also from the literature we know that the hierarchical structure in hospitals does not work for physicians, there is a 'dual hierarchy' [3]. We describe Allport's conditions using the key aspects found in our study, for the third condition we use the literature, and come to the following conclusions on improving cooperation between physicians and managers in hospitals.

(i) In terms of 'common goals': questioning the added value of management and indicators can be interpreted as an expression of not having common goals between physicians and managers. Many projects focus on either medical *or* organizational quality. If both types of goals are not included in a project, the risk is an emphasis on the differences between the two groups, thereby eliciting the latent rivalry or intergroup competition. The intergroup literature has taught us the value of defining super-ordinate goals [27] that address the needs of both groups and, at the same time, have one single goal instead of multiple goals.

(ii) The second condition in Allport's theory is 'no competition'. From the mentioned power differences and non-alignments of medical and managerial responsibilities we derive that quality initiatives are often seen by physicians as limiting their degree of professional autonomy. This is a potential source of conflict which strengthens feelings of competition and rivalry. In designing quality initiatives, the tasks of the two groups should be interdependent; the project needs the expertise of both professional domains to be successful. Furthermore, both groups should have the same level of understanding of the intervention.

(iii) The third condition is to 'arrange the support of authorities'. To enhance commitment, support of both professional and organizational authorities can be used: internal support by means of a medical board and board of directors, and external support by means of health inspectorates, scientific bodies and government agencies.

(iv) Allport's fourth condition is 'equal status'. From the literature we can conclude that there is an inequality in status between physicians and managers [13], which is very difficult to 'overcome'. An effective quality initiative might consider the status gap by approaching the implementation from the medical domain, instead of only the commonly used managerial focus. We suggest a change in the label of this fourth generic condition for hospital settings into: 'respect the medical domain'.

In the introduction, we referred to a few quality campaigns of the IHI. In one of their most recent initiatives ('the care bundles'), we recognize elements of Allport's conditions [25]. For every care bundle, super-ordinate goals ('5 Million Lives campaign') as well as sub-goals for both professions are defined. Because expert authorities from all relevant disciplines are involved, both physicians and managers are encouraged to see the urgency of implementing these bundles. Although the bundles are often presented in a top-down way, they are developed specifically for the medical domain, which could be helpful in facilitating uptake within hospitals. Further research could include a longitudinal action-research type case study in which the above insights are applied in an intervention; it could also include other professions (for instance nurses, and physiotherapists) so that more (multidisciplinary) field knowledge can be gained on interventions that promote better inter-professional group relations in hospitals.

Conclusion

One of the key factors influencing the uptake of quality initiatives in hospitals is cooperation between physicians and managers. From our qualitative study we found that (apart

from the effects of formal structure) cultural factors influence cooperation, such as status differences, clarity in decision-making and 'personal click'. The complex relationship between physicians and managers is based on their respective professional cultures. In the literature, a situation like this is referred to as an intergroup situation [25]. We found that Allport's Contact theory [25] on improving intergroup relations fits the hospital setting. We applied the key factors of this theory to the aspects found in our study, leading to the following suggestions, which can facilitate effective cooperation and therewith hospital performance: address common goals; create interdependent tasks; arrange the support of authorities and respect the medical domain. Successful implementation of quality initiatives in hospitals needs a bottom-up approach with cooperative efforts by both physicians and managers, in order to improve performance and reduce unnecessary harm to patients.

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