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The importance of management in establishing high-quality patient care in hospitals

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Abstract
It has been shown that certain hospital trusts and health authorities routinely perform better than others across a variety of metrics. Why? The combined eVorts of individual physicians and teams, as well as some evidence that "management- ment matters," are important. Studies on the correlation between service management and patient care quality have been conducted, but they have been subject to theoretical and methodological criticism. The private sector has been the subject of a bigger and, some would argue, more rigorous amount of study on company performance, most of it undertaken within the fields of organizational behavior and human resource management. The effects of decentralization, participation, creative work practices, and "complementarities" on outcome variables like job satisfaction and performance have been the subject of research in these schools of thought. The purpose of this study is to highlight certain reviews and research traditions that might provide novel insights to future studies of the factors influencing hospital performance. Theoretically informed and longitudinal studies are preferred over cross-sectional ones for future study. Hospital outcomes might be estimated separately for structure and process with the use of multilevel modeling, a statistical technique that allows for the inclusion of variables at different levels of analysis.

Keywords: hospital organisation; hospital performance; management; quality of care

Introduction

Organisational researchers have long sought to establish the impact of organisational struc- tures and managerial processes on outcomessuch as profitability,[1] eVectiveness,[2] perform- ance,[3] and organisational growth and survival.[4] Organisational researchers have also focused on the public sector, particularly hospitals, inan eVort to link organisational characteristicsto a number of important outcomes for patients and staV.[5 6] Although few would now question that “management matters” in deliv- ering quality health care, knowledge about the nature of the relationship is incomplete. The fact that we know so little about the relation- ship between structures, processes, and out- comes within hospitals makes it diYcult to re-commend, on the basis of sound theory and empirical evidence, ways of organising that could improve patient care.

One of the criticisms of research on hospital performance is that it has been rather insular, paying little attention to developments in related fields such as organisational sociology, organisational behaviour, management studies, or human resource management. Most of these disciplines study organisational performance inthe context of a market and their dependent variables are usually profitability, productivity, or market share which are very diVerent from many of the proxies for quality of care—such asmortality or morbidity—used in studies of hos-pital performance. However, these reports are similarly concerned with issues of motivating, engaging, and rewarding staV which may be linked to patient outcomes as well as to business success. Greater attention to the work that has been done on organisational perform- ance, broadly defined, could illuminate our attempts to link the characteristics of hospitals and units to the kind of care they are able to provide to patients.

Of course, the disciplines of organisational sociology and human resource management are vast and the aims of this paper are modest. It is impossible to treat the literature on these subjects in great depth here. The main aim of this paper is to identify a number of “landmark studies”, defined as frequently cited review articles, that try to make sense of the burgeon- ing literature on organisational performance.These studies could contribute to the develop- ment of theory in this area. A second aim is to identify variables at diVerent levels of analysis—individual, organisational, andenvironmental—that could be used in futuremodels of hospital organisation and quality of patient care.

Health policies motivating organisational research

The message from the current UK government that quality of care must be given greater prior-ity than in the past has been widely welcomedby the professions. Some of the main policy documents relating to quality of care in the UKNational Health Service are described in table

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1.Within the quality initiative there is a clearrecognition that only so much can be achievedby appealing to individual practitioners, and that more eVort needs to be expended on understanding how the organisation and man-agement of care aVects outcomes. Many of the goals of the new NHS—including clearer lines of accountability and responsibility, better communication, and improved conditions for staV—require interventions at the level of theorganisation.

One of the most important planks in the quality platform is the policy of clinical governance. Clinical governance has been defined as "a framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care can flourish".[7] Buetow and Roland[8] noted that the "duty of quality" relates to the organ- isation, not just to individuals within the organisation. Although a named individual, most often the Chief Executive, will assume statutory responsibility for quality, many trusts have already implemented structural changes, creating new layers of management and estab- lishing new committees to enable them to meetthe challenge of clinical governance. Clinical governance also demands cultural change towards openness, participation, staV empow- erment, partnership, and collaboration; an important goal is to move away from a culture based on blame to one that emphasises learning from mistakes.[9] The emphasis on the need for structural and cultural change in both organisations and professions recognises that not all the quality goals of the NHS can be achieved by inducing or exhorting individual clinicians and managers to change their own practice.The quality of patient care may be related in an important way to the quality of life experienced by staV at work. Partly as a result of the quality initiative, concern about the way the NHS treats its employees has increased.Issues of human resource management havealso been highlighted by the projected crisis in the number of nurses and by the dissatisfaction of junior doctors with their working hours. Toofew trained nurses, combined with overworked and fatigued doctors, are not a recipe for excel-lence in patient care.[10] So, how can we improvethe quality of working life in ways that will enhance the ability of the NHS to recruit and retain staV? Pay, flexible hours, and job prospects are obviously central, but improving the quality of working life also means helping individuals to develop their potential, to increase their sense of autonomy, and the abil- ity to achieve their goals. At the same time, attention needs to focus on organisational development. Creating an environment that is perceived as "a good place to work" requires multiple interventions at diVerent levels.

Clinical governance and better human re- source management practices are important planks in the current health policies emphasis- ing quality of patient care. Both planks demandattention, not just to the individual level of analysis, but to the ways that clinical directo- rates, divisions, trust boards, and professions work together to achieve quality. These goals move organisational research onto the centre stage.

Organisational research focusing onhospitals

Studies of the organisation and management of hospitals have examined the impact of a dizzy- ing array of factors on the quality of patient care. Flood,[11] in a wide ranging review of organisational research conducted mainly in the USA in the 1980s, identified the basic sources of variation that were found to be asso-ciated with quality of patient care.

A number of studies have found a weak rela-tionship between doctors' training and experi- ence and quality of care. Flood[11] has inter- preted this to mean ". . . not that physicians are unimportant for quality but that organisational context is far more important in setting limits (upper and lower) for physicians than formerly recognised . . .". Medical staV organisation— including peer review, selection and continued review of new staV members, and participationin policy making committees—have also been shown to be positively related to quality ofpatient care.

Few studies have examined whether a similarset of relationships hold for other staV, but stud- ies of coordination and communication have focused on nurses and ancillary staV. Coordina-tion appears to be particularly significant, and aseries of studies conducted in intensive care found that "conflict management skills, includ-ing communication, problem solving and leadership, combined with a patient orientation"were positively related to quality of patient care.[11] Flood suggests that one promising area for future research will be the extent to which the boundary between the two traditional authority structures—professional and administrative—are breached in hospital organisations.

There is a well established relationshipbetween the volume of patients passing through a health care unit and the quality of care delivered,[12] although there is disagreementas to the mechanism generating this relation- ship. The literature proposes at least five plau- sible hypotheses,[11] two of which rely on the idea that "practice makes perfect"—that is, the skillsof individual practitioners are enhanced by specialisation and by repeated performance of the same or similar tasks. Highly skilled and specialised practitioners also provide better peer review. A third mechanism involves units with good reputations attracting more referrals and consequently having a high volume. It has also been suggested that high volumes are associated with a

more preventative orientationamong a group of doctors, with patients being treated at an earlier stage of their illness. Finally, some studies have suggested that ". . . volume of similar cases leads to benefits because the organisation and its staV become more practised in managing and caring for these patients or because certain eYciencies can be introduced with suYcient volume much akin to economies of scale".[11]

Flood surmises that many diVerent mecha- nisms may be operating at once to produce the relationship between volume and quality, but itis clear that extent of specialisation of staV, vol-ume of patients, and case mix are important variables in relation to quality of patient care. Complexity can take many forms—for exam- ple, the severity of each individual patient's ill-ness, the frequency of multiple diagnoses, and the number of patients who have combined health and social problems—which require the coordination of a large number of cliniciansand services. It also includes characteristics of the work, such as whether or not admissionpatterns are predictable. Complexity could plausibly be related to quality of care and con- tingency theory would suggest that somemanagerial approaches will work for some groups of patients and types of services and notfor others.

A number of stable characteristics of hospi- tals have also been related to outcomes. One consistent finding is that quality of care is bet- ter in hospitals aYliated to a major medicalschool. Findings over the last 30 years have shown, at least in the USA, that teaching hospitals aYliated to a major medical school tend to be associated with higher costs, better quality outcomes, and more sophisticated techniques, after taking into account patient mix.

Flood[11] concluded from her review of studiesof health care organisations that, although much of this research can be criticised both theoretically and methodologically, there is at least some support for the relationship betweenquality of care and a number of variables. The most serious deficiencies in this body of research lie in the failure to specify themechanism linking organisational characteris- tics to outcomes, and in failing to show that organisational and managerial factors come logically before quality. It is still possible to infer from many studies of this type that qual- ity of care might have caused changes in the structure of the organisation, managerial pro- cesses, or in the kind of staV who chose to workthere, rather than the other way round. Many studies also focus exclusively on the internal structure and processes of the hospital and fail to consider the wider environment, particularly the network of relationships in which hospitals operate. The omission of environmental and relational variables would be particularly egre- gious in models of quality in the NHS where the links between the organisation and the healthcare system are particularly important. Flood also criticises the lack of attention toculture as an important influence on manage- rial decision making. Future research should try to make some theoretical progress in this area which will help to explain how organisa- tional structures and processes, as well as the internal and external environments, are related to quality of care. The problem of causal ordering, which is ubiquitous in organisational research, can only really be addressed by longi-tudinal rather than by cross sectional research designs.

Mitchell and Shortell[13] suggest that ". . . given that adverse events appear more closely related to organisational factors than to mortality,researchers need to refine and better define suchevents that are logically related to the co- ordinative organisational processes among caregivers." The "failure to rescue" measure developed by Silber *et al*[14] is a significant development in this area. This conditional probability—death rates followingcomplications—has been found to be more closely related to hospital factors than raw mor-tality figures. The idea is that, while the likelihood that a patient will develop a complica-tion is largely due to factors such as their age and severity of illness, the likelihood that they survive following development of a complication is at least partly a function of the care they receive. Finally, Mitchell and Shortell[13] recommend that future research should focus on smaller care giv-ing units rather than on the hospital because units within a hospital vary greatly. Using the hospital as the unit of analysis may be maskingthe eVect of organisational and managerial vari-ables as the amount of variation within a hospi-tal may be greater than that which exists between hospitals.

Organisation of nursing work

In the early 1980s the American Nurses' Association identified a group of hospitals that were known by reputation as "good places to work".[15] Designated as "magnet" hospitals because they had little diYculty in recruiting and retaining staV, they were found to share a number of organisational features, including:

- a relatively flat nursing hierarchy with few supervisors;
- the chief nurse had a strong position in themanagement structure of the hospital;
- nurses had autonomy to make clinical deci-sions in their own areas of competence andhad control over their own practice;
- decision making was decentralised at the level of the unit;
- staYng was adequate and limits were placed on the number of new nursing graduates;
- methods to facilitate communication be- tween nurses and physicians were estab- lished;
- the organisation of nurses' work promoted accountability and continuity of care—forexample, primary

nursing care;
- the institution demonstrated the value itattached to nurses—for example, by invest-ing in their education.

Aiken and colleagues at the University ofPennsylvania have since shown in a series of studies that cardinal features of the "magnet" hospitals are related to lower mortality rates,[6] increased patient satisfaction,[16] and lower burnout rates[17] and needle stick injuries among nursing staV.[18] These methodologically sophis-ticated studies use a research strategy whereby data gathered from individuals about their sense of autonomy, control over their own work, and quality of communication are aggre- gated to describe important characteristics of the organisation. This enables the researchersto estimate the relationship between structural
characteristics of the organisation and out- comes for patients and staV. This research pro- gramme has now expanded to include an inter- national sample including hospitals and nurses in Scotland and England. The results of this study, which is currently underway, will have much potential to inform policies for changing the organisation of nursing work to promote positive patient outcomes.[19]

Research on non-hospital organisations Although there are many diVerences betweenhospitals and other kinds of organisations suchas business firms and industries, research onorganisational outcomes provides support forsome of the independent variables identified byFlood and Aiken and suggests some additional variables that might be considered. Clues fromthe literature on industry, firms, and otherbusinesses suggest that decentralisation andparticipation in management, which are or-ganisational level variables related to autonomyand control at the individual level, should beconsidered as contenders for a place in a causal model. Some of these variables refer to organi-sational structures and others to processes, andthese will be discussed in turn.

Mintzberg[20] explains the importance of structure in the following way: "Every organ-ised human activity—from the making of potsto placing a man on the moon—gives rise to two fundamental and opposing requirements:the division of labour into various tasks to beperformed, and the coordination of these tasks to accomplish the activity. The structure of anorganisation can be defined simply as the sum total of the ways in which it divides its labourinto distinct tasks and then achieves coordina-tion among them."

Most standard texts in management studies have at least one chapter on organisational structures. Dawson,[21] for example, in a chapter entitled "Coordination and control: structure and organisational design" defines organisa- tional structure as ". . . the socially created pat- tern of rules, roles and relationships that exist within [the organisation]." In contrast, the cul- ture of an organisation refers to the collectionof values and beliefs within it. Mintzberg implies that there is a strong relationship between culture and structure. His classifi- cation of organisational *configurations* suggests,for example, that organisations with relatively non-hierarchical structures such as universities are likely to have very diVerent cultures from organisations such as the army that have a strong hierarchical structure. One of the most interesting features of an organisational struc- ture is the extent to which it is centralised or decentralised.
Decentralisation and participative manage-ment are related to a number of other "innova-tive work practices" which have been reviewedby Ichniowski *et al*.[29] Within this broad term they include eVorts to improve workers' involvement (such as profit sharing, flexible and broadly defined work assignments), im- proved communication and dispute resolution mechanisms, and worker participation in decision making. These can be contrasted with traditional work practices where jobs have clearboundaries and associated rates of pay, where there are clear lines between workers and supervisors, decisions are made almost exclu- sively by managers, and communication flows through the formal chain of command. They concluded that: "Innovative human resource management practices can improve business productivity, primarily through the use of systems of related work practices designed to enhance worker participation and flexibility in the design of work and decentralisation of management tasks and responsibilities". They also suggested that there are potentially large payoVs—that is, the consequences of adopting participative work practices can have economi-cally important eVects on the performance of firms that adopt them. Perhaps the most important finding is that the *specific* work prac-tice is less eVective than the co-existence of a number of similar practices that improve productivity and attitudes as well as decrease turnover and accidents. This is the phenom- enon of "bundling", which is used to describe the combination of high involvement work practices and supporting management prac- tices. "Workers cannot make good decisions without suYcient information and training, and they are unlikely to make suggestions if they feel that this will cost them their jobs or reduce their pay".[30] It is tempting to conclude that some underlying cultural shift in the rela- tionship between workers and managers is a necessary prerequisite for beneficial changes inthe structure and functioning of the organis- ation. In other words, tinkering with one or twoorganisational innovations is not enough. The question of the extent to which high involve- ment work practices and

supporting manage- ment practices have been adopted in the NHS has still to be determined. However, if trusts dovary on these dimensions, it makes an empiri- cal test of the relationship between work prac- tices and quality of care at least theoretically possible.

Similar conclusions emerged from a review of the literature on the determinants of organisational performance commissioned by the National Health Service Executive and conducted by Pettigrew and colleagues at Warwick and Aston Business Schools.[30] They were asked to identify and synthesise what is known and not known about the determinants of performance in private and public sector organisations, and about the practices and techniques of performance management. They found there is more literature on performance measurement, less on perform- ance management, and least on the determi- nants of performance. Relative to research on the private sector, research on the determi- nants of public sector performance is very lim- ited in quality as well as quantity. In fact, they could find no quality studies of the determi- nants of performance in trusts. They con-cluded that the most comprehensive, illumi- nating, and useful research on performance determinants in healthcare settings has been carried out in the USA by Shortell and colleagues.[31] This work, which was mainly conducted on managed care organisations, raises important findings and questions for the implementation of primary care groups.

There is some evidence—for example, in the work by Shortell *et al*,[31] Pettigrew,[32] and Collins and Porras[33]—for the impact of a number of organisational and managerial factors that are related to organisational performance in both the public and private sectors (box 2).

Pettigrew *et al*[32] criticised this work for the historical tendency to focus on one determi- nant of quality such as human resource management practices, rather than attemptingto construct and estimate multivariate models. In some ways the idea of "bundling" can be seen as an attempt to redress the balance in favour of more complex models.

These authors identified the recent theoreti- cal writings of industrial economists Milgrom and Roberts[34] as an important impetus to future work in this area. The complementari- ties approach argues that sets of factors can bemutually reinforcing in their eVects on per- formance. Their recommendation is that fu- ture research on the performance of healthcareinstitutions should, at least in part, use the idea of complementarities.

Conclusion

A great deal of research is currently under- way that will strengthen the evidence on which recommendations about the organisation and management of hospitals can be based. How-ever, the process of producing good quality research can be prolonged. In the meantime, it is important to communicate the importance of organisational factors to clinicians, to whom they may be relatively unknown. Medical andnursing education tends to focus, quite rightly, on individual patient care, and an awareness of how each clinical encounter is constrained orenabled by the system within which it is embedded can take many years of clinical practice. We all need to become much more conscious of how the way we work together, and the way that care is organised, aVects patients' experience of the healthcare system.

References

1 Perrow C. The analysis of goals in complex organisations. *Am Sociol Rev* 1961;**26**:854–66.
2 Meyer MW. Measuring performance in economic organisa- tions. In: Smelser NJ, Swedberg R, eds. *The handbook of economic sociology.* Princeton, NJ: Princeton University Press, 1994: 556–78.
3 Barron DN, West E, Hannan MT. A time to grow and a time to die: growth and mortality of credit unions in New York City, 1914–1990. *Am J Sociol* 1994;**100**:381–421.
4 Scott WR, Forrest WH Jr, Brown BW Jr. Hospital structure and postoperative mortality and morbidity. In: Shortell SM, Brown M, eds. *Organisational research in hospitals*. Chicago: Blue Cross Association, Inquiry Book. 1976: 72–89.
5 scattered beds. Paper presented at the Annual Meeting of the ASA, New York, 1996.
7 Aiken LH, Sloane DM. EVects of organizational innovations in AIDS care on burnout among urban hospital nurses. *Work and Occupations* 1997;**24**:453–77.
8 Aiken LH, Sloane DM, Klocinski J. Hospital nurses' risk of occupational exposure to blood: prospective, retrospective and institutional reports. *Am J Public Health* 1997;**87**:103–7.
9 Aiken LH, Sloane DM, Sochalski J. Hospital organisation and outcomes. *Quality in Health Care* 1998;**7**:222–6.
10 Mintzberg H. *The structure of organizations.* Englewood CliVs, NJ: Prentice-Hall, 1971.
11 Dawson S. *Analysing organisations.* Basingstoke: Macmillan Business, 1996.

12 Simon HA, Guetzkow H, Kozmetsky G, *et al*. *Centralisation vs. decentralisation in organising the Controller's Department*. New York: Controllership Foundation, 1954.
13 Khandwalla PN. Viable and eVective organisational design of firms. *Acad Management J* 1973;**16**:481–95.
14 Pugh DS, Hickson DJ, Hinings CR, *et al*. Dimensions of organisational structure. *Admin Sci Quarterly* 1968;**14**:115– 26.
15 Hage J, Aiken M. Relationship of centralisation to other structural properties. *Admin Sci Quarterly* 1967;**12**:72–92.
16 Acorn S, Ratner PA, Crawford M. Decentralisation as a determinant of autonomy, job satisfaction, and organisa- tional commitment among nurse managers. *Nursing Res* 1997;**46**:52–8.
17 Wagner JA III. Participation's eVects on performance and satisfaction: a reconsideration of research evidence. *Acad Management Rev* 1994;**19**:312–30.
18 Cotton JL, Vollrath DA, Froggatt KL. Employee participation: diverse forms and diVerent outcomes. *Acad Management Rev* 1998;**13**:8–22.
19 Ichniowski CT, Kochan A, Levine D, *et al*. What works at work: overview and assessment. *Industrial Relations* 1996; **35**:299–333.
20 Pettigrew A, Brignall TJS, Harvey J, *et al*. *The determinants of hospital performance: a review of the literature.* Review conducted for the NHSE and available from Warwick Business School, 1999.
21 Shortell S, Zimmerman J, Rousseau D, *et al*. The perform- ance of intensive care units: does good management make a diVerence? *Med Care* 1998;**32**:508–25.
22 Pettigrew AM. *Organising to improve performance. Hot topics.* Warwick Business School, 1999: 1, 5.
23 Collins JC, Porras JI. *Built to last: successful habits of visionary companies*. New York: Harper Business, 1994.
24 Milgrom P, Roberts J. Complementarities and fit: strategy, structure and organisational change in manufacturing. *J Account Econ* 1995;**19**:179–208.