

How well are NHS hospitals managed – and what could be done to improve this? **CEP researchers** have conducted a unique survey of clinicians and hospital managers to address these questions, and to explore the impact of competition on management practices in the NHS.

Management practices in the NHS

The performance of hospitals within the National Health Service (NHS) varies considerably. This is true irrespective of the measure used: mortality rates, waiting times, patient satisfaction and other indicators all show a wide spread of performance between hospitals.

The variation in performance parallels other parts of the economy, where there are astounding differences in productivity across firms and plants, even within narrowly defined sectors. There has long been speculation that management practices might play a role in explaining this dispersion, a view confirmed by a series of recent CEP studies.

Might the same be true for the performance of NHS hospitals? In a new study, we apply to hospitals a modified version of the methodology for measuring management practices that we have used successfully in the manufacturing and retail sectors.

We interviewed doctors and managers

in orthopaedics and cardiology in acute hospitals (those intended for short-term medical and/or surgical treatment and care) in England, using an evaluation tool that defines and scores 18 different management practices from one ('worst practice') to five ('best practice'). We developed this survey through discussion with management and healthcare experts and we score management practices within three broadly defined areas:

- **Monitoring:** how well do hospitals track the steps along a patient's path through the NHS system, and do they use this information for continuous improvement?
- **People:** do hospitals actively promote and reward their employees based on performance? Are staff doing the roles they are best trained to perform? Is there a systematic process of hiring and keeping the best people? Are under-performers retrained or moved to a different role where they can perform better?

Better management is strongly correlated with better hospital performance measured by both clinical and financial outcomes

■ **Target setting:** do hospitals set the right targets and track the right outcomes? Do they take appropriate action if targets are not met?

To obtain accurate responses from hospitals, we interviewed managers and clinicians using a 'double-blind' technique. Interviewees were not told in advance that they were being scored, nor were they shown the scoring grid. Similarly, to avoid prejudice, the interviewers were not given information on hospital quality.

To run this blind scoring, we used open questions. For example, the first incentives question was 'How does your appraisal system work? Tell me about your most recent round', rather than closed questions such as 'Do you promote high performers [yes/no]?'

We obtained a high response rate – 61% of all acute hospitals in England – interviewing a total of 161 clinicians and managers.

Management practices and hospital performance

In our first analysis of the data, we look at whether our measure of management quality is correlated with standard measures of hospital performance. Hospitals with higher management scores have better clinical outcomes (for example,

lower mortality rates from emergency heart attacks), shorter waiting times, better financial performance and higher staff satisfaction.

For example, we find that a one standard deviation improvement in management is associated with a fall in the death rate from heart attacks from 17% to 16%. Such an improvement would result in around 400 fewer deaths a year in our sample from this condition alone.

Another general indicator of hospital performance is the overall rating from the Healthcare Commission (the former regulator of the sector, now replaced by the Care Quality Commission), which, as Figure 1 shows, clearly rises with better management practices.

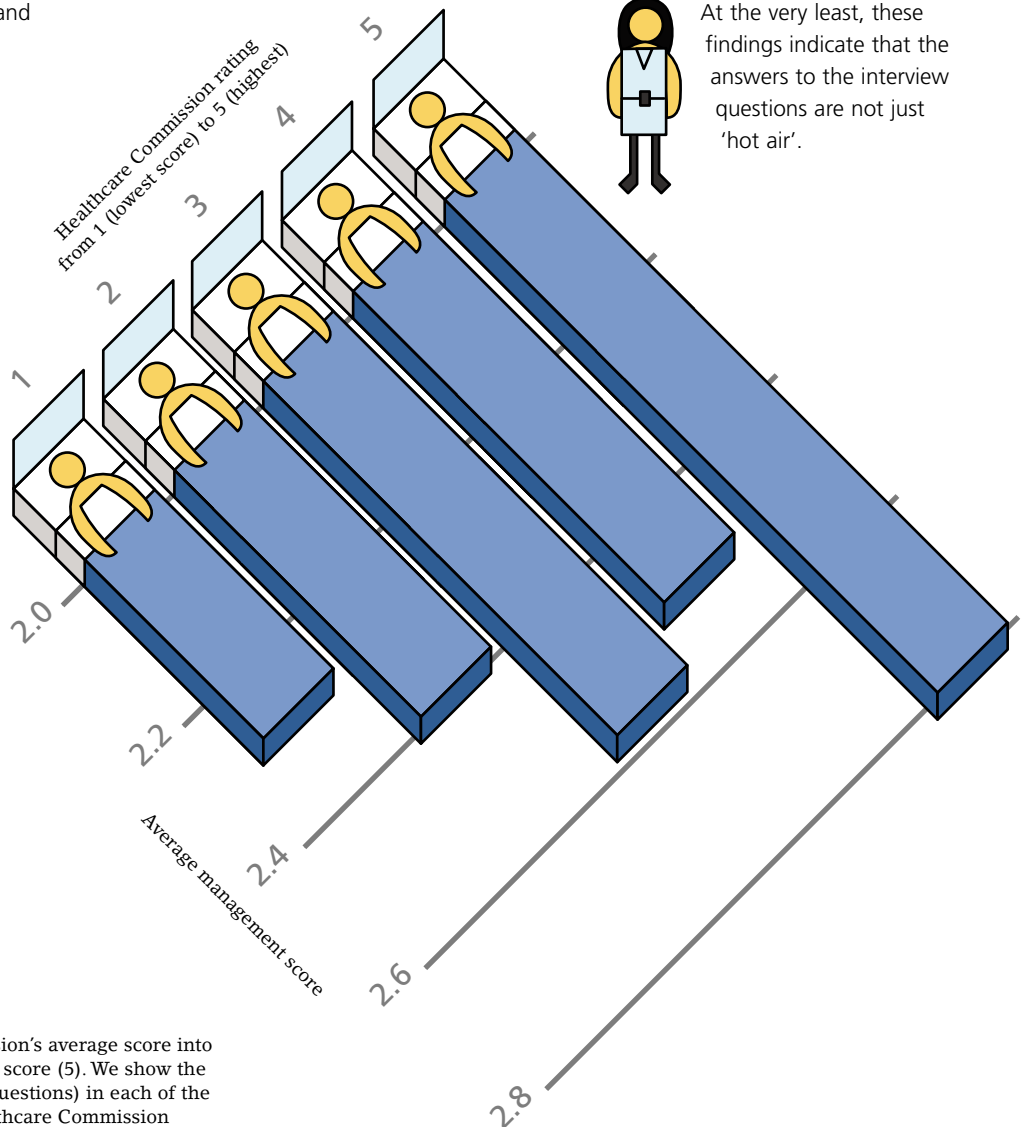
Although we cannot be sure that these are causal effects, the strength of the correlation is suggestive of important effects of management practices on hospital performance.

At the very least, these findings indicate that the answers to the interview questions are not just 'hot air'.



A one standard deviation improvement in management is associated with 400 fewer deaths from heart attacks a year in the surveyed hospitals

Figure 1: Healthcare Commission ratings are higher in hospitals with higher quality management



Note: We divide the Healthcare Commission's average score into quintiles from lowest score (1) to highest score (5). We show the average management score (over all 18 questions) in each of the quintiles. The hospitals with higher Healthcare Commission ratings have higher management scores.

Comparing management practices in the NHS

We find that there is large variation in management practices between hospitals, as Figure 2 shows, a phenomenon also observed in other sectors of the economy.

Although comparing across sectors is fraught with difficulty, we find that the average management scores in NHS hospitals look lower than in the private sector (manufacturing, retail and private hospitals). The main difference lies in people management, with the NHS doing particularly badly in this dimension.

Competition and management practices

With management scores varying dramatically across hospitals, which factors lead to better management practices?

Several interesting findings emerge from our research. For example, management appears to be better in

hospitals where senior managers have some clinical training. This makes sense as such managers are better able to understand, communicate with and challenge powerful senior doctors. Drawing more senior managers from clinical ranks, as is done in the United States, would be a good policy move.

We also investigate the impact of competition on hospital management. There have been many policy reforms in recent years to increase patient choice between hospitals and create more effective competition. And one of the

strongest findings from our work on the manufacturing sector is that competition stimulates better management and higher productivity.

In healthcare, competition is based on geography – hospitals tend to compete with other local hospitals. We find that hospitals with many other hospitals nearby tend to have significantly better management practices.

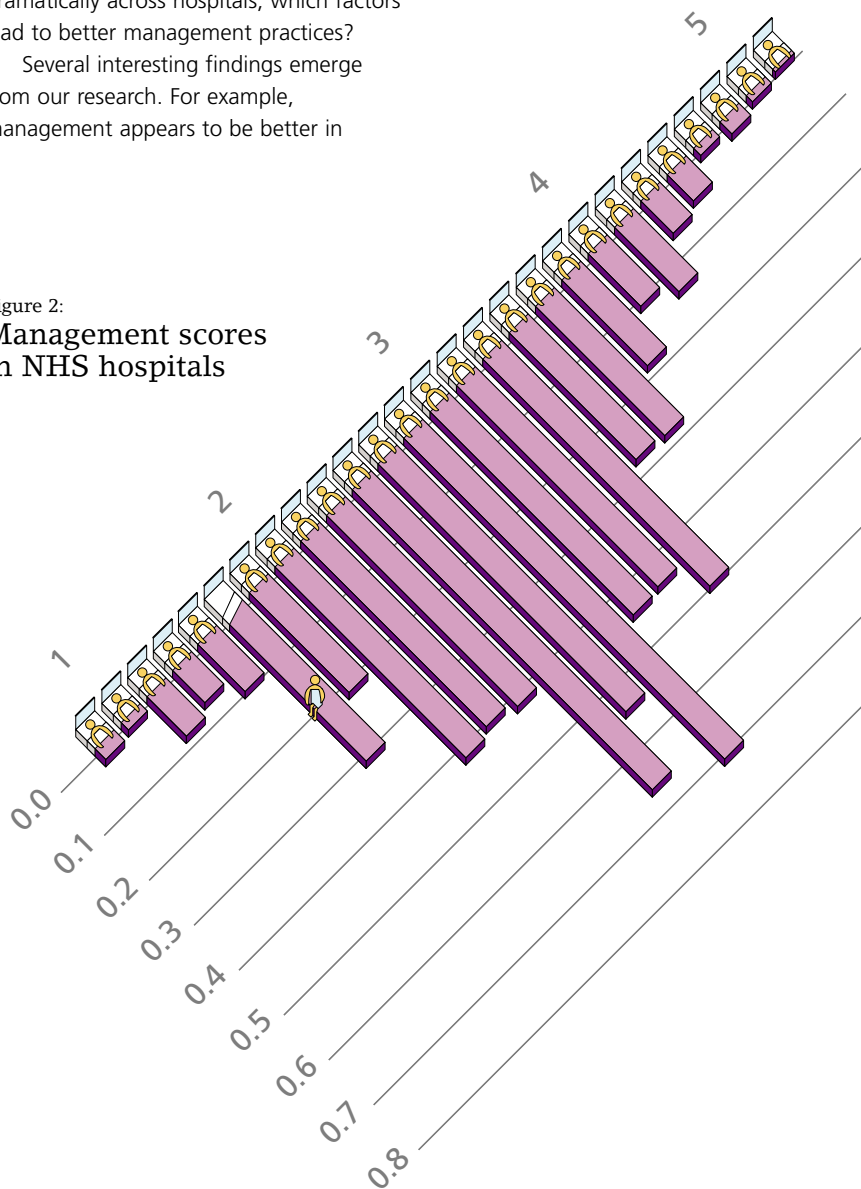
But how do we know that it is really the number of rival hospitals driving up management quality rather than some other factor? For example, a larger share of elderly people in a particular part of the country will increase demand for hospital services. This will increase the number of hospitals without necessarily increasing competitiveness.

We try to control for as many of these factors as possible. We know, for example, the characteristics of patients coming to the hospital, the healthiness of the local area and so on. But of course there may always be something we miss. To deal with this problem, we use the fact that the number of hospitals in an area has a large political component. In particular, the closure of a hospital is usually highly contentious. We show that, all else equal, hospitals located in marginal constituencies are much less likely to be closed than hospitals in safe seats.

Thus, the political structure of constituency boundaries becomes a ‘natural experiment’, which we can use to compare some areas with more hospitals (where political competition is fierce and no one wants to be blamed for hospital closure) and other near-identical areas with fewer hospitals (where there is little political competition).

Using this experimental approach only strengthens our conclusion that competition has a large effect in improving managerial quality in hospitals.

Figure 2: Management scores in NHS hospitals



Note: This is the distribution of the average management score by hospital from 1 (=worst practice) to 5 (=best practice). The management scores are based on 161 interviews of NHS managers and clinicians in 100 English acute hospitals.

Just as in the manufacturing sector, there is large variation in management practices between hospitals

We asked our interviewees to note some of the most surprising comments they hear. This quote was horrifyingly illustrative of the badly managed hospital it came from:

Interviewer:

'Do staff sometimes end up doing the wrong sort of work for their skills?'

NHS manager:

'You mean like doctors doing nurses' jobs, and nurses doing porter jobs? Yeah, all the time. Last week, we had to get the healthier patients to push around the beds for the sicker patients.'

Future directions for research

With the data available to us so far, we have established that competition improves the quality of hospital management. But how does it have this effect?

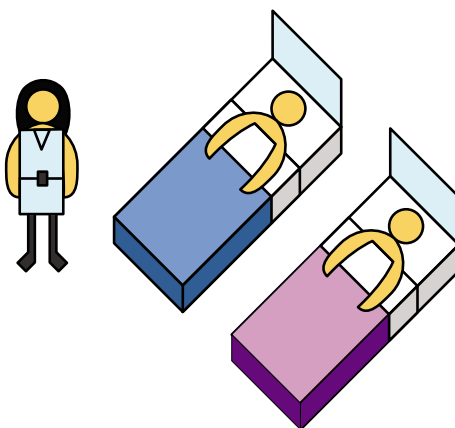
One possibility is that the channel works simply through product market competition: as recent reforms have tried to implement a 'quasi-market' for healthcare services, hospitals now have an incentive to provide better care to attract patients. In a more competitive environment, hospitals will therefore have a stronger incentive to improve the quality of their management practices.

Even in a regulated environment, where monitoring agencies and regulators decide how well a hospital is performing, the number of hospitals will have an impact. In an area with many hospitals, it is easier to assess the performance of each hospital by comparing it with its neighbours.

Finally, a more competitive environment might provide a more attractive labour market for high-quality managers. With more hospitals nearby, it is easier for managers to look out for better employment opportunities.

But whatever the exact mechanism, having more local rivals does appear to have advantages for management and patient care.

Hospitals faced with a larger number of nearby competing hospitals have much better management practices



This article summarises a forthcoming CEP Discussion Paper: 'The Impact of Competition on Management Practices in Public Hospitals' by Nick Bloom, Carol Propper, Stephan Seiler and John Van Reenen.

The research on management in manufacturing is detailed in: 'Measuring and Explaining Management Practices across Firms and Countries' by Nick Bloom and John Van Reenen, *Quarterly Journal of Economics* 122(4): 1351-1408 (earlier version available as CEP Discussion Paper No. 716: <http://cep.lse.ac.uk/pubs/download/dp0716.pdf>). More recent work is in the latest issue of the *Journal of Economic Perspectives*.

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Management seems to be better in hospitals where managers have some clinical training