Choosing a high-quality hospital

The role of nudges, scorecard design and information

The coalition government is committed to increasing choice and to publishing more information about the quality of care provided by health care organisations. In future, most of this information will be published electronically on the internet. The ‘information revolution’ aims not only to increase transparency but also to inform patient choice, and this, in turn, is expected to drive improvements in the quality of care.

This research examines some of the ways that organisations can help patients to make better use of clinical quality information when deciding which hospital to attend. It is based on a year-long study using focus group discussions and a series of online experiments.

Rational decision theory argues that if individuals are adequately informed, they will make choices that maximise their own interests. However, in practice, when faced with complex decisions, people tend to abandon logic and rely on intuition to guide their decisions. There is increasing interest in various policy circles in the idea that you can use ‘nudges’ to help people make better choices. In this research, we designed an interactive website in which people were presented with information about different hospitals. We experimented with several different nudges with the aim of helping people to pay more attention to information about the clinical quality of services, and to use this information to choose a hospital.
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We aimed to answer the following questions:

- What information do patients use when choosing a hospital?
- What is important to patients when choosing a hospital?
- How does the design of information influence the choices that patients make, and in particular, how do nudges affect people’s decisions?
- Do people make better choices as they become more practised in making decisions (ie, do they learn to make better choices)?

Type of information

People can be easily overwhelmed by the quantity of information available, and spend only a comparatively short amount of time (a few minutes in many cases) consulting this sort of information online. Websites provide opportunities to filter information so that people are only presented with information on those aspects of care that they indicate are most important to them.

We found that while older people (those aged 51 and over) and those with lower levels of education (who had only attained secondary education) were keen to have summative measures, they were also confused by their meaning. Further testing is needed to establish how to combine summative and disaggregated indicators effectively for different people.

Participants in our focus groups were suspicious of terms such as ‘missing data’ or ‘data not available’. Information providers need to improve the presentation of missing data, explaining what ‘data not available’ means and why it is not available.

Focus group participants also made it clear that they wanted information about the individual consultant or doctor who would be treating them, information that was relevant to their condition or treatment, and which helped them to understand the risks they faced by attending a particular hospital. This suggests the need for information at individual clinical level – information not currently available, except in relation to cardiothoracic surgeons.

Preferences

We found that people do not have stable preferences about what is important to them when choosing a hospital. This suggests there is an opportunity for information providers to influence what patients pay attention to by making some aspects of hospital care, such as safety or quality indicators, more salient.

Coaching people about their preferences before making a decision made people use information more systematically, and they were more likely to compare hospitals on the indicators they thought were important rather than trying to take in information about each hospital.
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Decision aids or scorecard designs that elicit preferences and values may help patients to identify what is important – that is, to shape preferences. However, the ability to personalise information so that the support offered can help people to choose ‘the best for me’ is still some way off.

Presentation

The way information is presented can make a difference to how it is used. We made a number of improvements to the design of the scorecard used in the online experiment, which our focus groups and previous research suggested would help.

- We used clear, easily understood labels for indicators that did not require people to ‘drill down’ for further information.
- We used intuitive symbols and labels consistently (ticks rather than traffic lights or colours).
- We applied evaluative labels – eg, ‘poor’, ‘good’, ‘excellent’.

These design features should be adopted by information providers who are presenting comparative quality information for use by the public and patients, particularly for the purpose of making choices between providers.

Information about the quality of health care, whether on organisations or individuals, often involves the use of numerical information, and in some cases, such as the Hospital Standardised Mortality Rate, this involves quite complex statistical information. Our research confirms that only people with high levels of numeracy are able to process this information in order to make a choice.

Ordering

It matters what information you put first. We designed the online scorecard so that the quality measures were first, and these were viewed most frequently, according to the heatmaps.

We also thought that by sorting the options (in this case hospitals) by quality, we might also make it more likely that patients would choose the highest quality hospital. Although sorting hospitals by quality might appear to be a good idea, it actually resulted in people making worse choices. In fact, those who had the options presented by distance did better. Clearly, sorting can have perverse effects, and needs to be carefully tested.

Use of nudges

We were interested in whether different nudges can improve the choices people make, how satisfied people are with the choice they made, and whether nudges can help people to make more informed choices in future. No nudge performed well on all these criteria.
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We used three nudges (in addition to sorting the hospitals by quality and distance): a pre-select nudge (where the highest quality hospital was pre-selected), a preference nudge (where participants were asked to rank the indicators before they were presented with the scorecard) and a feedback nudge (where participants were asked to reconsider their choice if they had not chosen the highest quality hospital).

The pre-select nudge performed worse in terms of choosing the highest quality hospital, but people who had this scorecard did best in terms of making a choice when presented with a similar task a few weeks later, when nudges were not used. The participants who had the pre-select nudge were also quite dissatisfied with their choice, compared with those who had a very simple scorecard (sorted by distance or quality).

Giving people feedback on their selection and asking them to reconsider can increase the proportion that will choose a high-quality hospital, but it does not necessarily help people to make better choices in future, without nudges present.

Making people think about what was important to them in a hospital, and that the quality of hospitals varied, meant that fewer were very satisfied with their choice, and these people did worst when presented with a similar task a few weeks later.

The results also show that nudges have different impacts on different people – the feedback nudge made it more likely that elderly participants would choose the highest quality hospital, but in general, younger participants, particularly those with higher education, appear to have been helped more by the nudges. It appears from the findings that younger participants benefited from information about differences in quality of care and being made to think about what was important to them before making the choice.

Nudges require the information provider to decide on what they are seeking to nudge people towards, and therefore, a normative decision is inherent. However, the ‘best’ hospital on average may not be the ‘best’ choice for any particular individual.

Practise

Choosing a hospital for a surgical procedure is not a task that people face frequently. The results of this research suggest that repeating the exercise meant that people were more likely to choose the highest quality hospital, even when asked to make a choice of hospital again a few weeks later. This applied regardless of age and education. It is likely that younger people are less familiar with health care, so giving them the opportunity to ‘practise’ making a choice increases their awareness of the factors that might be important. This is consistent with the impact of giving people information before they were asked to make a choice, which appeared to help young people most. For older people, while they are more familiar with hospitals, they are perhaps less familiar with the task – that is, using the internet to compare products or services. So giving them the opportunity to practise helped them make a better choice.
Conclusion

This research reinforces the importance of paying attention to what information is presented and how, and cautions against a mantra that ‘more information is always better’.

People find it difficult to make trade-offs between quality, safety, patient experience and location. Our findings suggest that the government should be cautious about the ability of patients (apart from those who are highly numerate) to make these complex decisions without some decision support.

Making people more aware that the quality of hospitals differs, and giving them opportunities to practise making a choice, appears to help people make better decisions. More research is needed to evaluate the effects of different nudges on patient decision-making.

It appears that exposing people to some of the differences in quality between hospitals and forcing them to consider these difficult trade-offs may increase their dissatisfaction with the choice they make. Patients may benefit from information that reassures them that hospitals meet a minimum set of required standards.

There needs to be an evidence-based approach to the public reporting of comparative performance information in future. Simply allowing all the information currently held about the quality of care to be put in the public domain will not result in people making informed choices.