

CHOOSING A HIGH-QUALITY HOSPITAL

The role of nudges, scorecard design and information

APPENDICES

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These appendices relate to the main report *Choosing a high-quality hospital: The role of nudges, scorecard design and information* which can be downloaded from www.kingsfund.org.uk/hospitalchoice

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Appendix 1: Preference nudge – additional information

Information

Hospitals vary greatly on several indicators. Some indicators tell you how good is the quality of care provided at the hospital. Other indicators measure how safe is the care provided at the hospital. Finally you have information on the patients' experience at the hospital.

Usually hospitals that are excellent or good on some indicators are also poor on other indicators. Typically no hospital is poor or excellent across all indicators.

You will need to make trade-offs between quality of care, safety and patient experience and think what is relatively more important and relevant for your decision of a good hospital to cure your problem.

Which indicators will I see?

There are three indicators which tell you how good the quality of clinical care provided at the hospital is. The first tells you the hospital's level of mortality measured as the ratio of actual to expected deaths at this hospital. This is known as the standardized mortality ratio. Numbers greater than 100 mean that actual deaths are higher than expected deaths so a higher mortality ratio, whereas numbers less than 100 mean that actual deaths are lower than expected deaths, and therefore a lower mortality ratio.

The second indicator tells you about the risk of having to return to hospital urgently measured as the percentage of people having a planned operation in this hospital who have to return urgently within one month – lower percentages mean lower risk of readmission. The third indicator tells you how many people treated in this hospital reported an improvement in health after having surgery – the more people the better.

There are then two indicators which tell you how safe the care provided at the hospital is. The first indicator tells you how many patients that received planned care in the hospital got an MRSA blood infection – the fewer infections the better. The second indicator tells you how many patients developed a wound infection after surgery at this hospital – again the fewer infections the better.

Finally you are given information about how other patients rated three aspects of the care they received in the hospital and how far the hospital is from where you live.

Preferences

Below you will see a list of indicators on which hospitals differ. Please rank all indicators from 1 to 9 in order of importance to you. For example, select “1” for the indicator which is the most important to you when choosing a hospital, and “9” for the indicator which is the least important to you. Note that you cannot assign the same number to more than one indicator. The indicator ranked “9” means that it is the one that is least important but does not mean that it is not important at all.

	<i>Most important</i>					<i>Least important</i>				
1. What is the ratio of actual to expected deaths at this hospital?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8	9	
2. How many people treated in this hospital reported an improvement in health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8	9	
3. What percentage of people having a planned operation in this hospital return urgently within one month?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8	9	
4. How many MRSA blood infections for elective patients are there in this hospital?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8	9	
5. How many people develop a wound infection after surgery at this hospital?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8	9	
6. How did inpatients score the level of dignity and respect shown to them?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8	9	
7. How did inpatients score the cleanliness of the treatment areas in the hospital?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8	9	
8. How did inpatients score their involvement in decisions about their care?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8	9	
9. How far is the hospital from me?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8	9	

Appendix 2: Scorecard data and questionnaires

Scorecard data

Table 1 Sort-by-distance (the same ordering of hospital was also present in Preference nudge and Feedback nudge) hospital choice 1 phase 1

	Hospital S	Hospital X	Hospital Y	Hospital W	Hospital V
How good is the quality of care provided at the hospital?					
What is the ratio of actual to expected deaths at this hospital? (Known as the standardized mortality ratio)	107.5 POOR •	93.7 GOOD ••	99.6 GOOD ••	74.3 EXCELLENT •••	96.0 GOOD ••
How many people treated in this hospital reported an improvement in health ?	35 in 100 people POOR •	53 in 100 people GOOD ••	41 in 100 people POOR •	55 in 100 people GOOD ••	65 in 100 people EXCELLENT •••
What is the risk of having to return to hospital urgently within one month of a planned operation?	9.9% POOR •	9.1% POOR •	7.3% GOOD ••	1.3% EXCELLENT •••	6.7% GOOD ••
How safe is the care provided at the hospital?					
How many MRSA blood infections for elective patients are there in this hospital?	4.6 in 10,000 bed days POOR •	0.6 in 10,000 bed days EXCELLENT •••	2.3 in 10,000 bed days GOOD ••	1.6 in 10,000 bed days GOOD ••	0 in 10,000 bed days EXCELLENT •••
How many people develop a wound infection after surgery at this hospital?	11 in 1,000 people GOOD ••	23 in 1,000 people GOOD ••	18 in 1,000 people GOOD ••	0 in 1,000 people EXCELLENT •••	48 in 1,000 people GOOD ••
What patients think about the hospital?					
How did inpatients score the level of dignity and respect shown to them?	9.8 out of 10 EXCELLENT •••	8.7 out of 10 GOOD ••	9.3 out of 10 EXCELLENT •••	8.2 out of 10 GOOD ••	8.9 out of 10 GOOD ••
How did inpatients score the cleanliness of the treatment areas in the hospital?	7.4 out of 10 GOOD ••	7.9 out of 10 GOOD ••	8.4 out of 10 GOOD ••	8.1 out of 10 GOOD ••	9.8 out of 10 EXCELLENT •••
How did inpatients score their involvement in decisions about their care?	9.2 out of 10 EXCELLENT •••	7.2 out of 10 GOOD ••	9.1 out of 10 EXCELLENT •••	6.4 out of 10 POOR •	8.9 out of 10 GOOD ••
Location					
How far is the hospital from me?	2 miles	9 miles	9 miles	12 miles	18 miles

Table 2 Sort-by-quality (the same order of hospitals was present in Preselect nudge) hospital choice 1 phase 1

	Hospital W	Hospital V	Hospital X	Hospital Y	Hospital S
How good is the quality of care provided at the hospital?					
What is the ratio of actual to expected deaths at this hospital? (Known as the standardized mortality ratio)	74.3 EXCELLENT ***	96.0 GOOD **	93.7 GOOD **	99.6 GOOD **	107.5 POOR •
How many people treated in this hospital reported an improvement in health ?	55 in 100 people GOOD **	65 in 100 people EXCELLENT ***	53 in 100 people GOOD **	41 in 100 people POOR •	35 in 100 people POOR •
What is the risk of having to return to hospital urgently within one month of a planned operation?	1.3% EXCELLENT ***	6.7% GOOD **	9.1% POOR •	7.3% GOOD **	9.9% POOR •
How safe is the care provided at the hospital?					
How many MRSA blood infections for elective patients are there in this hospital?	1.6 in 10,000 bed days GOOD **	0 in 10,000 bed days EXCELLENT ***	0.6 in 10,000 bed days EXCELLENT ***	2.3 in 10,000 bed days GOOD **	4.6 in 10,000 bed days POOR •
How many people develop a wound infection after surgery at this hospital?	0 in 1,000 people EXCELLENT ***	48 in 1,000 people GOOD **	23 in 1,000 people GOOD **	18 in 1,000 people GOOD **	11 in 1,000 people GOOD **
What patients think about the hospital?					
How did inpatients score the level of dignity and respect shown to them?	8.2 out of 10 GOOD **	8.9 out of 10 GOOD **	8.7 out of 10 GOOD **	9.3 out of 10 EXCELLENT ***	9.8 out of 10 EXCELLENT ***
How did inpatients score the cleanliness of the treatment areas in the hospital?	8.1 out of 10 GOOD **	9.8 out of 10 EXCELLENT ***	7.9 out of 10 GOOD **	8.4 out of 10 GOOD **	7.4 out of 10 GOOD **
How did inpatients score their involvement in decisions about their care?	6.4 out of 10 POOR •	7.5 out of 10 GOOD **	7.2 out of 10 GOOD **	9.1 out of 10 EXCELLENT ***	9.2 out of 10 EXCELLENT ***
Location					
How far is the hospital from me?	12 miles	18 miles	9 miles	9 miles	2 miles

Table 3 Sort-by-distance (the same ordering of hospital was also present in preference and feedback nudges); all information is revealed at once; hospital choice 2 phase 1

	Hospital N	Hospital M	Hospital L	Hospital O	Hospital P
How good is the quality of care provided at the hospital?					
What is the ratio of actual to expected deaths at this hospital? (Known as the standardized mortality ratio)	72.1 EXCELLENT ••	98.1 GOOD ••	105.4 POOR •	78.7 EXCELLENT •••	97.6 GOOD ••
How many people treated in this hospital reported an improvement in health ?	38 in 100 people POOR •	42 in 100 people POOR •	56 in 100 people GOOD ••	58 in 100 people GOOD ••	70 in 100 people EXCELLENT •••
What is the risk of having to return to hospital urgently within one month of a planned operation?	6.5% GOOD ••	9.0% POOR •	8.9% POOR •	1.9% EXCELLENT •••	4.4% GOOD ••
How safe is the care provided at the hospital?					
How many MRSA blood infections for elective patients are there in this hospital?	1.8 in 10,000 bed days GOOD ••	0.2 in 10,000 bed days EXCELLENT •••	4.1 in 10,000 bed days POOR •	0.7 in 10,000 bed days EXCELLENT •••	2.6 in 10,000 bed days GOOD ••
How many people develop a wound infection after surgery at this hospital?	21 in 1,000 people GOOD ••	50 in 1,000 people POOR •	13 in 1,000 people GOOD ••	5 in 1,000 people EXCELLENT •••	1 in 1,000 people EXCELLENT •••
What patients think about the hospital?					
How did inpatients score the level of dignity and respect shown to them?	8.1 out of 10 GOOD ••	8.8 out of 10 GOOD ••	9.4 out of 10 EXCELLENT •••	8.5 out of 10 GOOD ••	9.2 out of 10 EXCELLENT •••
How did inpatients score the cleanliness of the treatment areas in the hospital?	8.3 out of 10 GOOD ••	9.8 out of 10 GOOD ••	7.3 out of 10 GOOD ••	7.7 out of 10 GOOD ••	8.5 out of 10 EXCELLENT •••
How did inpatients score their involvement in decisions about their care?	6.2 out of 10 POOR •	7.7 out of 10 GOOD ••	9.7 out of 10 EXCELLENT •••	8.0 out of 10 GOOD ••	9.3 out of 10 EXCELLENT •••
Location					
How far is the hospital from me?	1 mile	4 miles	9 miles	10 miles	15 miles

Table 4 Sort-by-quality (the same order of hospitals was present in preselect nudge) hospital choice 2 phase 1

	Hospital O	Hospital P	Hospital N	Hospital L	Hospital M
How good is the quality of care provided at the hospital?					
What is the ratio of actual to expected deaths at this hospital? (Known as the standardized mortality ratio)	78.7 EXCELLENT ***	97.6 GOOD **	72.1 EXCELLENT ***	105.4 POOR .	98.1 GOOD **
How many people treated in this hospital reported an improvement in health ?	58 in 100 people GOOD **	70 in 100 people EXCELLENT ***	38 in 100 people POOR .	56 in 100 people GOOD **	42 in 100 people POOR .
What is the risk of having to return to hospital urgently within one month of a planned operation?	1.9% EXCELLENT ***	4.4% GOOD **	6.5% GOOD **	8.9% POOR .	9.0% POOR .
How safe is the care provided at the hospital?					
How many MRSA blood infections for elective patients are there in this hospital?	0.7 in 10,000 bed days EXCELLENT ***	2.6 in 10,000 bed days GOOD **	1.8 in 10,000 bed days GOOD **	4.1 in 10,000 bed days POOR .	0.2 in 10,000 bed days EXCELLENT ***
How many people develop a wound infection after surgery at this hospital?	5 in 1,000 people EXCELLENT ***	1 in 1,000 people EXCELLENT ***	21 in 1,000 people GOOD **	13 in 1,000 people GOOD **	50 in 1,000 people POOR .
What patients think about the hospital?					
How did inpatients score the level of dignity and respect shown to them?	8.5 out of 10 GOOD **	9.2 out of 10 EXCELLENT ***	8.1 out of 10 GOOD **	9.4 out of 10 EXCELLENT ***	8.8 out of 10 GOOD **
How did inpatients score the cleanliness of the treatment areas in the hospital?	7.7 out of 10 GOOD **	8.5 out of 10 GOOD **	8.3 out of 10 GOOD **	7.3 out of 10 GOOD **	9.8 out of 10 EXCELLENT ***
How did inpatients score their involvement in decisions about their care?	8.0 out of 10 GOOD **	9.3 out of 10 EXCELLENT ***	6.2 out of 10 POOR .	9.7 out of 10 EXCELLENT ***	7.7 out of 10 GOOD **
Location					
How far is the hospital from me?	10 miles	15 miles	1 mile	9 miles	4 miles

Table 5 Sort-by-distance hospital choice 3 phase 2

	Hospital B	Hospital F	Hospital Q	Hospital D	Hospital R
How good is the quality of care provided at the hospital?					
What is the ratio of actual to expected deaths at this hospital? (Known as the standardized mortality ratio)	96.1 GOOD ••	97.2 GOOD ••	80.0 EXCELLENT •••	108.1 POOR •	75.5 EXCELLENT •••
How many people treated in this hospital reported an improvement in health ?	45 in 100 people POOR •	54 in 100 people GOOD ••	57 in 100 people GOOD ••	68 in 100 people EXCELLENT •••	37 in 100 people POOR •
What is the risk of having to return to hospital urgently within one month of a planned operation?	9.1% POOR •	1.9% EXCELLENT •••	2.1% EXCELLENT •••	8.7% POOR •	6.4% GOOD ••
How safe is the care provided at the hospital?					
How many MRSA blood infections for elective patients are there in this hospital?	1.7 in 10,000 bed days GOOD ••	0.8 in 10,000 bed days EXCELLENT •••	0.1 in 10,000 bed days EXCELLENT •••	4.2 in 10,000 bed days POOR •	2.4 in 10,000 bed days GOOD ••
How many people develop a wound infection after surgery at this hospital?	44 in 1,000 people POOR •	19 in 1,000 people GOOD ••	3 in 1,000 people EXCELLENT •••	11 in 1,000 people GOOD ••	1 in 1,000 people EXCELLENT •••
What patients think about the hospital?					
How did inpatients score the level of dignity and respect shown to them?	8.5 out of 10 GOOD ••	8.4 out of 10 GOOD ••	8.2 out of 10 GOOD ••	9.2 out of 10 EXCELLENT •••	9.6 out of 10 EXCELLENT •••
How did inpatients score the cleanliness of the treatment areas in the hospital?	9.8 out of 10 EXCELLENT •••	7.7 out of 10 GOOD ••	8.3 out of 10 GOOD ••	7.1 out of 10 GOOD ••	8.5 out of 10 GOOD ••
How did inpatients score their involvement in decisions about their care?	6.3 out of 10 POOR •	9.5 out of 10 EXCELLENT •••	6.3 out of 10 POOR •	7.6 out of 10 GOOD ••	9.4 out of 10 EXCELLENT •••
Location					
How far is the hospital from me?	2 miles	4 miles	7 miles	10 miles	15 miles

Table 6 Sort-by-quality hospital choice 3 phase 2

	Hospital Q	Hospital F	Hospital R	Hospital B	Hospital D
How good is the quality of care provided at the hospital?					
What is the ratio of actual to expected deaths at this hospital? (Known as the standardized mortality ratio)	80.0 EXCELLENT ***	97.2 GOOD **	75.5 EXCELLENT ***	108.1 POOR •	96.1 GOOD **
How many people treated in this hospital reported an improvement in health ?	57 in 100 people GOOD **	54 in 100 people GOOD **	37 in 100 people POOR •	68 in 100 people EXCELLENT ***	45 in 100 people POOR •
What is the risk of having to return to hospital urgently within one month of a planned operation?	2.1% EXCELLENT ***	1.9% EXCELLENT ***	6.4% GOOD **	8.7% POOR •	9.1% POOR •
How safe is the care provided at the hospital?					
How many MRSA blood infections for elective patients are there in this hospital?	0.1 in 10,000 bed days EXCELLENT •	0.8 in 10,000 bed days EXCELLENT ***	2.4 in 10,000 bed days GOOD **	4.2 in 10,000 bed days POOR **	1.7 in 10,000 bed days GOOD ***
How many people develop a wound infection after surgery at this hospital?	3 in 1,000 people EXCELLENT ***	19 in 1,000 people GOOD **	1 in 1,000 people EXCELLENT ***	11 in 1,000 people GOOD **	44 in 1,000 people POOR •
What patients think about the hospital?					
How did inpatients score the level of dignity and respect shown to them?	8.2 out of 10 GOOD **	8.4 out of 10 GOOD **	9.6 out of 10 EXCELLENT ***	9.2 out of 10 EXCELLENT ***	8.5 out of 10 GOOD **
How did inpatients score the cleanliness of the treatment areas in the hospital?	8.3 out of 10 GOOD **	7.7 out of 10 GOOD **	8.5 out of 10 GOOD **	7.1 out of 10 GOOD **	9.8 out of 10 EXCELLENT ***
How did inpatients score their involvement in decisions about their care?	6.3 out of 10 POOR ***	9.5 out of 10 EXCELLENT **	9.4 out of 10 EXCELLENT ***	7.6 out of 10 GOOD •	6.3 out of 10 POOR **
Location					
How far is the hospital from me?	7 miles	4 miles	15 miles	2 miles	10 miles

Questionnaires

Questionnaire 1 after choice of hospital 1 in phase 1

Taken from : <http://expilab.gravitasresearch.com/HTML/q01.html>

Please answer these questions as accurately as possible.

Your answers are confidential and used for academic research only.

Perception of choice

	<i>Not at all</i>	<i>Extremely</i>
1. How satisfied are you with the choice you made?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
2. How confident are you that you made the right choice?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
3. To what extent do you think you made an informed choice?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
4. How difficult was it to choose?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
5. To what extent would you prefer to leave the decision to someone else?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10

Knowledge questions

6. What is the standardised mortality ratio of the hospital you chose compared to other hospitals?	<i>Worse</i>	<i>Same</i>	<i>Better</i>	<i>Don't know</i>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. How did inpatients score the cleanliness of the hospital you chose compared to other hospitals?	<i>Worse</i>	<i>Same</i>	<i>Better</i>	<i>Don't know</i>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. How many MRSA blood infections for elective patients are there in the hospital you chose compared to the other hospitals?	<i>Fewer</i>	<i>Same</i>	<i>More</i>	<i>Don't know</i>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. How far is the hospital you chose compared to other hospitals?	<i>Further</i>	<i>Same</i>	<i>Closer</i>	<i>Don't know</i>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. How do you feel about the information you were given?	<i>Too little information</i>	<i>Right amount</i>	<i>Too much information</i>	
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	

Influences on choices

11. Please select the 3 indicators which influenced your choice the most:

- Mortality ratio
- MRSA blood infection
- Dignity and respect
- Risk of having to return to hospital
- Wound infection
- Cleanliness
- Reported improvement in health
- Location
- Involvement in decision

Difficulty in choices

13. Which indicators did you have most trouble understanding or interpreting
(select all that apply from the list of 9)

- Mortality ratio
- MRSA blood infection
- Dignity and respect
- Risk of having to return to hospital
- Wound infection
- Cleanliness
- Reported improvement in health
- Location
- Involvement in decision

Knowledge of differences in quality

Please read the following statements and indicate the extent to which you agree or disagree with each of them

	<i>Totally disagree</i>				<i>Totally agree</i>		
14. No hospital can be excellent on all indicators. A hospital that is poor on some indicators is bound to be good or excellent on some other indicators.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
15. There is a big difference between a poor and a good hospital. I would never choose a hospital with a poor rating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
16. There is not much difference between an excellent and good hospital. Both are good enough for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

Summative indicators

17. How useful would you have found an indicator that summarized all three quality indicators, e.g. level of mortality, risk of having to return to hospital, and people reporting health improvement?
- Very useful
- Useful
- Not useful
- Misleading
- Don't know
18. How useful would you have found an indicator that summarized both safety indicators, e.g. risk of MRSA blood infection and risk of wound infection?
- Very useful
- Useful
- Not useful
- Misleading
- Don't know

Why chose hospital

11. The most important reason why I picked that hospital is because...
(select one from the list):
- it was the best on quality
- it was the best on safety
- it had the best patient ratings
- it was the best overall, all things considered
- it was the closest one
- I did it randomly
- I do not know

Demographic questions

- Age group?
- 18–34
- 35–50
- 51–65
- 65+
- Gender
- Male
- Female
- What is the highest level of education you have achieved?
- Primary School
- Secondary School/High School Certificate
- Some College Education, but not Graduate
- Graduate/Post-graduate
- None

Gross household income is the combined money income of all those earners in a household before taxes or expenses are deducted. Which of these bands best reflects your total gross annual HOUSEHOLD income?

- | | |
|--------------------|--------------------------|
| Less than £10,000 | <input type="checkbox"/> |
| £10,000 to £24,999 | <input type="checkbox"/> |
| £25,000 to £39,999 | <input type="checkbox"/> |
| £40,000 to £74,999 | <input type="checkbox"/> |
| £75,000 or more | <input type="checkbox"/> |
| Prefer not to say | <input type="checkbox"/> |
| Don't know | <input type="checkbox"/> |

Final questionnaire at the end of phase 1

Taken from : <http://expilab.gravitasresearch.com/HTML/q04.html>

Please answer these questions as accurately as possible

- How often do you use the Internet?

Rarely, 1-3 times a month	<input type="checkbox"/>
Quite regularly, 1-3 times a week	<input type="checkbox"/>
At least once a day	<input type="checkbox"/>
Always connected	<input type="checkbox"/>
- In the last year, how many times have you visited the GP concerning your own health?

1-3 times	<input type="checkbox"/>
4-6 times	<input type="checkbox"/>
7 or more times	<input type="checkbox"/>
I did not go to the GP in the last year	<input type="checkbox"/>
- In the last year, how many times have you and other members of your family been referred to a hospital?

1-3 times	<input type="checkbox"/>
4-6 times	<input type="checkbox"/>
7 or more times	<input type="checkbox"/>
I did not go to the hospital last year	<input type="checkbox"/>
- How many times have you been offered a choice of hospital in your life?

1-3 times	<input type="checkbox"/>
4-6 times	<input type="checkbox"/>
7 or more times	<input type="checkbox"/>
I have never had to choose a hospital	<input type="checkbox"/>
- When you seek out health information, how likely are you to use the internet or to look at information online?

Very unlikely	<input type="checkbox"/>
Very likely	<input type="checkbox"/>
Not applicable	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Numeracy questions

- 6. Imagine that we roll a fair, six-sided die 1,000 times. Out of 1,000 rolls, how many times do you think the die would come up even (2, 4, or 6)? _____
- 7. In the BIG BUCKS LOTTERY, the chance of winning a £10.00 prize is 1%. What is your best guess about how many people would win a £10.00 prize if 1,000 people each buy a single ticket to BIG BUCKS? _____
- 8. In the ACME PUBLISHING SWEEPSTAKES, the chance of winning a car is 1 in 1,000. What percent of tickets to ACME PUBLISHING SWEEPSTAKES win a car? _____%

Questionnaire 2 after choice of hospital 3 in phase 2

Taken from: <http://expilab.gravitasresearch.com/phase2/q02.html>

Please answer these questions as accurately as possible.

Opinion of choices made

Please read the following statements and indicate the extent to which you agree or disagree with each of them

	<i>Totally disagree</i>				<i>Totally agree</i>		
14. No hospital can be excellent on all indicators. A hospital that is poor on some indicators is bound to be good or excellent on some other indicators.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
15. The quality of care varies a lot between hospitals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
16. I know which hospitals are available to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
17. I know the benefits of each hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
18. I know the disadvantages of each hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
19. I am clear about which benefits matter most to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
20. I am clear about which disadvantages matter most to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
21. I am clear about which is more important to me (the benefits or the disadvantages)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
22. I am clear about the best choice for me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
23. I feel sure about what to choose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7
24. I would like the best hospital to be pre-selected for me on the website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

- | | | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 25. If a hospital were pre-selected to me as highest quality, I would trust this recommendation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. I would like to be prompted if I don't choose the highest quality hospital | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27. If I were to make a hospital choice in the future, I would seek more information on my options rather than before participating in this study | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 28. If I were to make a hospital choice in the future, I would find it easier to choose now rather than before participating in this study | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29. I have enough expertise to make an informed decision of this type | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Questionnaire 3 after choice of hospital 3 in phase 2

Taken from: <http://expilab.gravitasresearch.com/phase2/q03.html>

Please answer these questions as accurately as possible.

- | I feel confident that I can: | <i>Not at all confident</i> | | | <i>Very confident</i> | |
|---|-----------------------------|--------------------------|---|--------------------------|--------------------------|
| 30. Get the facts about the hospital choices available to me | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 0 | 1 | 2 | 3 | 4 |
| 31. Get the facts about the benefits of each hospital | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 0 | 1 | 2 | 3 | 4 |
| 32. Get the facts about the benefits and disadvantages of each hospital | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 0 | 1 | 2 | 3 | 4 |
| 33. Understand the information enough to be able to make a choice | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 0 | 1 | 2 | 3 | 4 |
| 34. Make a better hospital choice in the future | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 0 | 1 | 2 | 3 | 4 |
| 35. Select the statement you agree more with: | | | | | |
| “I want to attend the best possible hospital. No matter how far it is.” | <i>Agree more</i> | <i>Agree more</i> | “I want to attend the same hospital as my friend. She had a good experience there.” | | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Appendix 3: Heatmaps: average time spent in each cell in milliseconds

Sort-by-Distance (With and without Information)



Sort-by-Quality (With and without Information)



Default Nudge



Preference Nudge



Feedback Nudge



Appendix 4: Heatmaps: number of clicks in each cell

Sort-by-Distance (With and without Information)



Sort-by-Quality (With and without Information)



Default Nudge



Preference Nudge



Feedback Nudge



Appendix 5: Trade-off questions

12a. Select the factor you consider more important when choosing a hospital

How good is the quality of care provided at the hospital?	<i>More important</i>	<i>More important</i>	How safe is the care provided at the hospital?
	←	→	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12b. Select the factor you consider more important when choosing a hospital

How good is the quality of care provided at the hospital?	<i>More important</i>	<i>More important</i>	What patients think about the hospital?
	←	→	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12c. Select the factor you consider more important when choosing a hospital

How good is the quality of care provided at the hospital?	<i>More important</i>	<i>More important</i>	Location
	←	→	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12d. Select the factor you consider more important when choosing a hospital

How safe is the care provided at the hospital?	<i>More important</i>	<i>More important</i>	What patients think about the hospital?
	←	→	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12e. Select the factor you consider more important when choosing a hospital

How safe is the care provided at the hospital?	<i>More important</i>	<i>More important</i>	Location
	←	→	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12f. Select the factor you consider more important when choosing a hospital

What patients think about the hospital?	<i>More important</i>	<i>More important</i>	Location
	←	→	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>