

**The elicitation of patient and physician preferences for calculating consumer-based
composite measures on Hospital Report Cards: Results of two discrete choice
experiments**

Supplemental material

Supplemental material 1. Results from literature review and qualitative research steps for the patients related DCE experiment (selected measures are indicated in *italics*)

| Hospital information criteria | Relevance of information for hospital choice | | | |
|-------------------------------------------|----------------------------------------------|---------------------------------------------|-------------|-------------------------------------|
| | Literature Review [#] | Mailed survey before qualitative interviews | | Qualitative interviews [#] |
| | | Mean | SD | |
| 1 Distance (home to hospital) | High | 3.05 | 1.16 | Middle |
| 2 Ownership | High | 2.65 | 1.01 | Low |
| 3 University hospital/teaching hospital | High | 3.45 | 1.07 | Middle |
| 4 <i>The number of cases treated</i> | <i>Middle</i> | <i>4.50</i> | <i>0.74</i> | <i>High</i> |
| 5 <i>Endocert Certificate</i> | <i>High</i> | <i>4.75</i> | <i>0.43</i> | <i>Middle</i> |
| 6 Mortality rate | Middle | 3.95 | 1.28 | Low |
| 7 <i>Postoperative complication rate</i> | <i>High</i> | <i>4.45</i> | <i>0.74</i> | <i>High</i> |
| 8 General complication rate | High | 4.05 | 0.86 | Low |
| 9 <i>Confirmed diagnosis rate*</i> | - | <i>4.80</i> | <i>0.51</i> | <i>Middle</i> |
| 10 <i>Prevention of falls measures*</i> | - | <i>4.30</i> | <i>0.64</i> | <i>Middle</i> |
| 11 <i>Mobility at hospital discharge*</i> | - | <i>4.35</i> | <i>0.79</i> | <i>Middle</i> |
| 12 <i>Inability to walk at discharge*</i> | - | <i>4.25</i> | <i>0.94</i> | <i>Middle</i> |
| 13 1-year revision rate | Middle | 3.90 | 1.18 | Low |

* Those measures were added based on the German hospital quality report 2020 but were not identified by means of the literature review.

[#] Relevance was rated as low, middle, or high based on study results or semi-structured interviews.

Supplemental material 2. Importance of different information items for the hospital decision among patients (n = 322) and referring physicians (n = 187)

(p value was calculated using t tests)

| Information items for the hospital decision | Importance of different information items [Mean (SD)]* | | | Most important information item [§] [n (%)] | |
|---------------------------------------------|-----------------------------------------------------------|--------------------------------------|-------|---------------------------------------------------------|--------------------------------------|
| | Patients (n = 299-314) | Referring physicians (n = 187) | p | Patients (n = 265) | Referring physicians (n = 181) |
| Confirmed diagnosis (hip surgery) rate | 4.65 (0.80) | 3.67 (1.23) | <.001 | 118 (44.5%) | 13 (7.2%) |
| Endocert Certificate | 4.09 (1.03) | 3.05 (1.16) | <.001 | 32 (12.1%) | 9 (5.0%) |
| The number of cases treated | 4.35 (0.90) | 4.09 (0.98) | .002 | 62 (23.4%) | 65 (35.9%) |
| Complication rate | 4.54 (0.81) | 4.19 (1.06) | <.001 | 18 (6.8%) | 53 (29.3%) |
| Mobility at hospital discharge | 4.60 (0.73) | 3.31 (1.18) | <.001 | 35 (13.2%) | 4 (2.2%) |
| Prevention of falls measures | 4.29 (0.97) | n.a. | n.a. | 0 (0.0%) | n.a. |
| 1-year revision surgery rate | n.a. | 4.00 (1.21) | n.a. | n.a. | 37 (20.4%) |

* Importance of items is rated on a 1–5 scale [1 not all important; 5 extremely important]

§ Which information was most important for your hospital choice?

Supplemental material 3. Parameters estimated from the multinomial logit (MNL) models (Discrete Choice Experiment; patients vs. physicians)

| Attributes | Patients (n = 322) | | | | Referring physicians (n = 187) | | | |
|-----------------------------------|--------------------|--------|-------|-------|--------------------------------|-------|-------|-------|
| | Coeff. | SE | z | p | Coeff. | SE | z | p |
| Confirmed diagnosis rate | 0.437 | 0.033 | 13.24 | <.001 | 0.390 | 0.052 | 7.54 | <.001 |
| Endocert Certificate | 0.341 | 0.033 | 10.23 | <.001 | 0.310 | 0.047 | 6.62 | <.001 |
| The number of cases treated | 0.547 | 0.036 | 15.07 | <.001 | 0.696 | 0.051 | 13.61 | <.001 |
| Complication rate | 0.560 | 0.037 | 15.08 | <.001 | 0.546 | 0.050 | 10.83 | <.001 |
| Mobility at hospital discharge | 0.551 | 0.036 | 15.15 | <.001 | 0.236 | 0.046 | 5.14 | <.001 |
| Prevention of falls measures | 0.431 | 0.035 | 12.35 | <.001 | n.a. | n.a. | n.a. | n.a. |
| 1-year revision surgery rate | n.a. | n.a. | n.a. | n.a. | 1.014 | 0.053 | 19.10 | <.001 |
| <i>Model constant (Intercept)</i> | 0.325 | -0.045 | -7.29 | <.001 | n.a. | n.a. | n.a. | n.a. |