Fetal monitoring at home in high-risk pregnancy. An integrated clinical and economic evaluation
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Comparing treatment valuations between and within subjects in clinical trials. Does it make a difference?

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Abstract

Objective: Valuations may be sensitive to biases especially if elicited alongside randomized clinical trials. We investigated the construction of valuations assigned by women who entered a randomized clinical trial and were allocated to in-hospital or domiciliary monitoring.

Methods: Women assigned valuations (0–10 visual analogue scale) to the strategy they had been allocated to and to the alternative strategy. Valuations were expressed as a between-subject difference (assigned by the women allocated to the respective strategies), and as within-subject differences (assigned by all women).

Results: Domiciliary monitoring was valued higher by the women allocated to that strategy (p = 0.10). In-hospital monitoring was valued higher by the women allocated to that strategy (p = 0.02). The average within-subject differences differed by allocated strategy (p < 0.01). The within-subject valuation differences showed large variability between and within groups.

Discussion: An overrepresentation of women favoring domiciliary monitoring and asymmetric treatment experience inflated the average within-subject difference in the domiciliary group but deflated that difference in the in-hospital group.

Conclusion: Neither the average between-subject difference nor the average within-subject differences are free of bias. Within-subject compared to between-subject differences are instructive if patients have free choice or if they are aware of an alternative strategy.
Introduction

Patients' valuations are increasingly applied in health care decisions. Recorded either as trade-offs, utilities, or direct valuations, they may be used to support the allocation of resources from the societal perspective. They may also be used to guide individualized decision making in a clinical setting.\textsuperscript{1,2}

Patients' valuations assigned to mutually exclusive treatment strategies may be sensitive to several biases. For example, patients' valuations may be influenced by clinically irrelevant information or by information that is irrelevant for decision making.\textsuperscript{3} Valuations may also be affected by past experience or existing knowledge, or how they are subjectively processed.\textsuperscript{4} This might result in malformed judgements or mistaken beliefs.\textsuperscript{5-7} Patients may hold 'labile' valuations that may be 'constructed' during the valuation elicitation procedure (stimulus presentation, response mode, context effects).\textsuperscript{8} Moreover, prior experience or treatment experience may not only affect treatment valuations but also induce a preference shift. Women who antenatally and post partum preferred avoiding pain to avoiding anesthesia shifted preferences during labor. The shift differed significantly between experienced and non-experienced women.\textsuperscript{9} Others have found stable preferences after treatment,\textsuperscript{10,11} particularly if patients were treated according to the preferred strategy. For example, Henshaw found that treatment experience influenced preferences as 81% of the women who were indifferent between two options and subsequently allocated randomly, preferred the allocated treatment a posteriori.\textsuperscript{12} Other studies indicate that patients generally report higher valuations than non-patients.\textsuperscript{13,14}

Biased valuations may be particularly relevant to decision making if treatment valuations are elicited alongside a randomized clinical trial. Randomized clinical trials are considered the gold standard in treatment effectiveness research. Patients are informed on multiple strategies at trial entry and they may hold a prior preference for one strategy. As only one treatment is assigned and experienced, patients eventually receive asymmetric information (or asymmetric experience).

Two alternative approaches exist to compare patient's valuations of mutually exclusive treatment strategies. One approach is similar to the comparison of treatment strategies in randomized clinical trials. Patients' valuations are taken as an outcome measure comparable to measures of disease activity, morbidity, or health-related quality of life. Patients who have entered the trial are asked to assign valuations a posteriori to the strategy they had been allocated to randomly, which is the strategy they have experienced. The distributions of valuation scores in both groups are then compared to produce the average between-subject difference.

In the second approach, individual patients are asked to assign valuations to multiple treatment strategies,\textsuperscript{15} whether or not they actually have experienced those strategies. In this approach, patients' valuations can be obtained as individual within-subject differences in valuations, that may be used in individualized decision making or, if averaged, in societal decision making.
We investigated the effect of asymmetric treatment experience on treatment valuations assigned by high-risk pregnant women who had entered a randomized clinical trial comparing in-hospital and domiciliary antenatal fetal monitoring. All women had experienced one of the monitoring strategies. All women were asked to assign valuations to the strategy allocated and to the strategy not allocated. We compared their valuations both as an average between-subject valuation difference and as average within-subject valuation differences.

**Patients and methods**

**Setting**
The valuation study was conducted alongside a randomized clinical trial. Between September 1992 and June 1994, 150 consecutive high-risk pregnant women were allocated randomly to either conventional in-hospital monitoring (electronic antenatal fetal monitoring by unstressed cardiotocography) \( n=74 \) or domiciliary monitoring \( n=76 \). Women allocated to in-hospital monitoring were hospitalized and monitored daily according to the hospital's conventional treatment practice as long as they were at high risk. Women allocated to domiciliary monitoring were monitored daily at their homes by a midwife using portable equipment. Once a week they visited the hospital's antenatal clinic for a monitoring session and a routine antenatal visit. Domiciliary monitored women stayed at home unless clinical or social reasons required hospitalization. Regardless of the allocated strategy, all women were to deliver in the hospital.

**Patients**
Of the 150 high-risk women who entered the clinical trial, 20 women were excluded from the valuation study because of language problems or because they delivered before the first monitoring session. The questionnaire was distributed to 61 women in the in-hospital monitoring group and 69 women in the domiciliary monitoring group. Twenty-two women in the in-hospital monitoring group and 16 women in the domiciliary monitoring group did not respond to the questionnaire. Two incomplete questionnaires, one in each group, were excluded from analysis. Eventually the valuations of 38 women in the in-hospital monitoring group and 52 women in the domiciliary monitoring group were analyzed (response rates: 62% vs. 75%, \( p=0.107 \)). Nulliparous women and caucasian women were slightly overrepresented in the group that responded (Table 1).

**Procedure**
At trial entry, women were informed extensively on both monitoring strategies, the potential consequences, and on the scientific aim of the trial. Seven weeks after the delivery, women with sufficient knowledge of Dutch who had actually experienced one of the monitoring strategies were requested by written questionnaire to assign two valuations, one valuation to each monitoring strategy.
### Comparing Treatment Valuations Between and Within Subjects in Clinical Trials

#### Table 1. Women's characteristics at entry

<table>
<thead>
<tr>
<th>Respondent's characteristic</th>
<th>Response (n=90)</th>
<th>Non-response (n=40)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In-hospital (n=38)</td>
<td>Domiciliary (n=52)</td>
</tr>
<tr>
<td>Mean maternal age (years) (SD)</td>
<td>31.1 (4.4)</td>
<td>29.9 (5.4)</td>
</tr>
<tr>
<td>Caucasian origin</td>
<td>27 (71%)</td>
<td>26 (50%)</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>0 (0%)</td>
<td>2 (4%)</td>
</tr>
<tr>
<td>Secondary/high school</td>
<td>30 (79%)</td>
<td>40 (77%)</td>
</tr>
<tr>
<td>College/university</td>
<td>8 (21%)</td>
<td>10 (19%)</td>
</tr>
<tr>
<td>Mean gestational age (weeks) (SD)</td>
<td>38.5 (3.2)</td>
<td>38.3 (3.2)</td>
</tr>
<tr>
<td>Parity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>26 (68%)</td>
<td>30 (58%)</td>
</tr>
<tr>
<td>≥ 1</td>
<td>12 (32%)</td>
<td>22 (42%)</td>
</tr>
<tr>
<td>Spontaneous abortion in history</td>
<td>8 (21%)</td>
<td>11 (21%)</td>
</tr>
<tr>
<td>Abortion in history</td>
<td>13 (34%)</td>
<td>18 (35%)</td>
</tr>
<tr>
<td>Ectopic pregnancy in history</td>
<td>1 (3%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Adverse neonatal outcome in history*</td>
<td>4 (11%)</td>
<td>5 (10%)</td>
</tr>
</tbody>
</table>

* Hospitalized at NICU, handicapped, or neonatal mortality.

The questionnaire (see Appendix A) was phrased in Dutch. Both monitoring strategies and their consequences were described concisely. At the time of the valuation study, the clinical outcomes were expected to be equal for both monitoring strategies. This expectation was mentioned explicitly in the questionnaire.

Each woman was asked to assign two valuations by putting a mark on each of two uncalibrated 100mm visual analogue scales (VAS). The left side anchor was labelled "valued extremely negative", the right one was labelled "valued extremely positive". The first valuation referred to the allocated monitoring strategy, i.e. the strategy that the women had actually experienced. The second valuation referred to the alternative, not allocated, monitoring strategy. The hypothetical nature of the valuation assigned to the alternative strategy was acknowledged in the phrasing of the question. Both visual analogue scales were identical in all other respects.

#### Analysis

On each VAS, the distance from the left anchor to the mark was measured and transformed into a 0-10 valuation score, a higher score implying a higher valuation. The valuations of the in-hospital and domiciliary monitoring strategies as recorded by each group were summarized using descriptive statistics. The *average between-subject valuation difference* was calculated as the difference between the average valuation of domiciliary monitoring as recorded by the domiciliary monitoring group, and the average valuation of in-hospital monitoring as recorded by the in-hospital monitoring group.
Valuations were also compared within subjects. The individual *within-subject valuation difference* was calculated as the difference between the valuation that each individual woman assigned to domiciliary monitoring and her valuation of in-hospital monitoring. A positive difference implied that domiciliary monitoring was valued higher than in-hospital monitoring. For each monitoring group as well as for the group as a whole, the average within-subject valuation differences were calculated. Individual variability in valuation differences was examined.

The average between-subject valuation difference and the difference between the average within-subject valuation differences were tested for significance using Student’s two sample *t*-test. The effect of obstetric history, maternal characteristics, allocated monitoring strategy, antenatal care characteristics, mode of delivery, and neonatal outcomes, on the within-subject and between-subject valuation differences were investigated by stepwise regression analysis. Log transformation was used to correct for skewness. A two-tailed *p* < 0.05 was considered statistically significant.

**Results**

<table>
<thead>
<tr>
<th>Valued strategy</th>
<th>Allocated monitoring strategy</th>
<th>p value†</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domiciliary (n=52)</td>
<td>In-hospital (n=38)</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Domiciliary monitoring</td>
<td>7.9 (2.2)</td>
<td>7.1 (2.4)</td>
</tr>
<tr>
<td>In-hospital monitoring</td>
<td>4.7 (2.7)</td>
<td>6.2 (2.9)</td>
</tr>
<tr>
<td>Average within-subject valuation difference</td>
<td>3.2 (3.2)</td>
<td>0.9 (4.0)</td>
</tr>
</tbody>
</table>

* Values are mean (SD) valuation scores recorded on a 0–10 visual analogue scale; a higher score implies a higher valuation. † *p* values obtained using Student’s two sample *t*-test.

**Table 2. Average valuations per allocated monitoring strategy**

**Valuations**

Table 2 shows for each group the average valuations of the in-hospital and domiciliary monitoring strategies recorded at approximately 7 weeks after the delivery. In both groups, women on average assigned higher valuations to domiciliary monitoring than to in-hospital monitoring. The women allocated to domiciliary monitoring and those allocated to in-hospital monitoring did not record significantly different valuations to domiciliary monitoring. In contrast, the in-hospital monitoring strategy was valued significantly lower on average by the domiciliary monitoring group than by the women actually allocated to that strategy.
Between-subject versus within-subject valuation difference
The difference between the average valuation of domiciliary monitoring as recorded by the domiciliary monitoring group (7.9), and the average valuation of in-hospital monitoring as assigned by the in-hospital monitoring group (6.2), resulted in an average between-subject valuation difference of 1.7 in favor of domiciliary monitoring (95% confidence interval (CI): 0.67 to 2.77).

The average within-subject valuation difference was 2.2 in favor of domiciliary monitoring (95% CI: 1.44 to 2.99). The average within-subject valuation difference and the average between-subject valuation difference were not statistically significant (1.7 vs 2.2, p=0.21). The average within-subject valuation difference differed by allocated monitoring strategy. In the domiciliary monitoring group, the average within-subject valuation difference was 3.2 (95% CI: 2.28 to 4.08) in favor of domiciliary monitoring, versus 0.9 (95% CI: 0.41 to 2.23) in favor of domiciliary monitoring in the in-hospital monitoring group. This difference was highly significant (p < 0.01).

Between and within-group variability
Figure 1 and figure 2 depict the individual pairs of valuations obtained from the in-hospital monitoring group and the domiciliary monitoring group, respectively. In total, 67% of the women valued domiciliary monitoring higher than in-hospital monitoring. This proportion was higher in the domiciliary monitoring group (77%) than in the in-hospital monitoring group (53%). A minority (28%) of the women (42% in the in-hospital monitoring group and 17% in the domiciliary monitoring group) valued in-hospital monitoring higher than domiciliary monitoring. The valuations were not only more concentrated in the upper left triangle, they were also significantly more 'distant' from the diagonal (mean valuation difference: 3.0 (SD 1.9)) than the valuations in the lower triangle (mean valuation difference: 1.5 (SD 1.5)) (p=0.001).

Prognostic model
Three variables in favor of domiciliary monitoring were prognostic of the within-subject valuation difference: allocated to domiciliary monitoring (p < 0.001), caucasian origin (p=0.001) and an adverse neonatal outcome in a previous pregnancy (admitted to NICU, handicapped, or neonatal mortality) (p=0.014). This model explained 18% of total variance. Allocated monitoring strategy was the only significant predictor (p=0.014) of the between-subject valuation difference, explaining 6% of total variance. Maternal and neonatal outcomes, e.g. mode of delivery, Apgar scores, Prechtl's neurologic optimality score and admitted to NICU or the neonatology ward, were not prognostic in either model, suggesting that hindsight bias was absent.
Valuations of domiciliary fetal monitoring and in-hospital monitoring obtained from 38 high-risk pregnant women allocated to in-hospital monitoring. The diagonal indicates equal valuations. A symbol in the upper left triangle represents a woman who values domiciliary monitoring higher than in-hospital monitoring. A symbol in the lower right triangle represents a woman who values in-hospital monitoring higher than domiciliary monitoring.

**Figure 1.** Paired valuations

**Discussion**

We compared the treatment valuations of two monitoring strategies obtained from women who were randomized to one of these strategies. Women assigned valuations both to the allocated strategy and the alternative strategy. Both groups valued domiciliary monitoring higher on average than in-hospital monitoring. The within-subject valuations differed significantly depending on the strategy that women actually had experienced.

At least four effects have to be considered in interpreting the results: the visual
Comparing Treatment Valuations between and Within Subjects in Clinical Trials

Valuations of domiciliary fetal monitoring and in-hospital monitoring obtained from 52 high-risk pregnant women allocated to domiciliary monitoring. The diagonal indicates equal valuations. A symbol in the upper left triangle represents a woman who values domiciliary monitoring higher than in-hospital monitoring. A symbol in the lower right triangle represents a woman who values in-hospital monitoring higher than domiciliary monitoring.

Figure 2. Paired valuations

Analogue scale used to elicit valuations, selective participation, selective response, and treatment experience. First, a VAS is supposed to be a continuous linear interval-measurement scale to rank outcomes in order of preference. The distance from the mark to one of its anchors represents the strength of preference. VAS scores, or the difference between them, are comparable if the scale is linear and each anchor is perceived as identical across patients. If these properties are not satisfied, the between-subject and within-subject valuations may not be validly averaged. However, the impact of non-linearity is smaller if the average within-subject valuation difference is used as the deviation from linearity will equally affect both valuations.
Second, prior preferences may have induced a selective participation bias: women who refused participation and those who participated were probably not indifferent between the strategies. A woman who preferred in-hospital monitoring a priori may have refused study participation as refusal assured her of the preferred strategy. A woman who preferred domiciliary monitoring a priori was likely to participate as refusal would have resulted with certainty in the non-preferred strategy. Therefore, women who prefer domiciliary monitoring are probably overrepresented among the trial participants. Selective participation might partially explain the relatively high – possibly inflated – valuations of domiciliary monitoring, and the relatively low – possibly deflated – valuations of in-hospital monitoring in both groups.

Third, in addition, less than perfect response rates may hamper the interpretation of our findings. Only 75% of the women in the domiciliary group – presumably the group that obtained the preferred strategy – responded. More important, the response rate in the in-hospital group (62%) was lower than in the domiciliary group, suggesting a selective response bias. In our study, caucasian and nulliparous women had slightly higher response rates. Among the responders, caucasian women on average assigned higher within-subject valuation differences to domiciliary monitoring. Parity, a potential confounder as multiparous women have prior experience, only affected valuations in women who had previously experienced an adverse neonatal outcome.

Fourth, women allocated to in-hospital monitoring assigned significantly higher valuations to that strategy than the women allocated to domiciliary monitoring. Moreover, most women preferred the strategy allocated. These results suggest that the valuations obtained may also have been influenced by treatment experience. A treatment experience effect may be either the result of learning (gathering strategy-specific information may adjust prior preferences), or the result of cognitive dissonance reduction and ‘acclamation’, or both. If participation was selective, then the in-hospital monitoring group had been allocated to the non-preferred strategy. Their valuations may have been subject to cognitive dissonance reduction: retrospectively, patients tend to emphasize opinions and experiences that are consistent with their actual behavior or the final outcome, and de-emphasize opinions and experiences that contradict them. This might have induced inflated valuations of in-hospital monitoring and possibly deflated valuations of domiciliary monitoring. Similarly, if the domiciliary monitoring group was allocated to the preferred strategy, ‘acclamation’ might have inflated their valuations of domiciliary monitoring and possibly deflated their valuations of in-hospital monitoring.

On balance, selective participation and treatment experience produce different outcomes depending on the strategy initially allocated. In the domiciliary group, selective participation, learning, and ‘acclamation’ might have inflated the valuation of domiciliary monitoring but also have deflated the valuation of in-hospital monitoring. Both effects inflate the average within-subject valuation difference in that group. However, in the in-hospital monitoring group, the average within-subject valuation difference might have been inflated by selective participation but also deflated by learning or cognitive dissonance reduction. These opposite effects tend to mitigate the average within-subject valuation difference in that group.
Selective participation bias and asymmetric treatment experience are typical of randomized clinical trials in which patients hold prior preferences and the preferred strategy can only be obtained through trial participation.\textsuperscript{12,22,24-27} It is questionable whether a change of study design can prevent selective participation and inflated or deflated valuations due to asymmetric treatment experience, without jeopardizing the estimation of clinical effectiveness.

In a cross-over design, patients are allocated to ordered multiple strategies. Selective participation is prevented since all patients experience both strategies. As the valuations assigned may be subject to a sequence order effect, valuation differences may depend on the allocated treatment ordering. More important, a cross-over design is not always suitable to compare clinical effectiveness validly.

In a Zelen-design, patients are randomized before informed consent is obtained.\textsuperscript{28} If the conventional strategy is allocated, no consent is sought and patients are not informed on the existence of an alternative strategy. If the experimental strategy is allocated, informed consent must be obtained and patients are informed on the existence of the conventional strategy. In our case, a Zelen-design might have prevented selective participation and cognitive dissonance reduction in the in-hospital monitoring group only. Selective participation and ‘acclamation’ might still exist in the domiciliary monitoring group.

In the partially randomized design, patients are assigned to the strategy for which they express a strong prior preference.\textsuperscript{24} Only patients who are indifferent a priori between the strategies are randomized. Selective participation is prevented but valuations assigned a posteriori may still be inflated or deflated due to asymmetric treatment experience. Henshaw found that the majority of women who selected the preferred strategy a priori, also preferred that strategy a posteriori. Moreover, the majority of women who were indifferent and allocated randomly, preferred that strategy a posteriori.\textsuperscript{12}

Alternatively, one may fully concentrate on valuations elicited before treatment assignment. Inflated or deflated valuations due to ‘acclamation’ or cognitive dissonance are avoided but so is learning by experience. Prior preferences may still exist and prior experience or prior information collected from other sources than experience may be asymmetrically distributed across patients. Moreover, patients and non-patients may assign different valuations.\textsuperscript{13}

We found that the average within-subject valuation differences differed significantly by allocated strategy. Although the overall average within-subject valuation difference did not differ significantly from the average between-subject valuation difference, calculating average within-subject valuation differences alongside average between-subject valuation differences can be instructive.

First, each valuation difference captures different information regarding the strategy not allocated. In the between-subject approach, the comparison of valuations comes close to a blinded outcomes comparison analogous to the comparison of treatment effectiveness. In the within-subject approach, patients are asked explicitly to
value the alternative strategy that they did not or will not experience. This can be relevant if both strategies will co-exist in the future, e.g. in case of variation in treatment practice. Generally, patients who are aware of the existence of an alternative will value multiple strategies accordingly.

Second, valuations varied widely between and within groups and a considerable minority of women favored in-hospital to domiciliary monitoring. Hence, to conclude that domiciliary monitoring is the preferred strategy because both groups assigned higher valuations to that strategy, may be unjustified. To avoid a “tyranny of the majority”-policy as enforced by the average between-subject difference only, analysis of within-subject valuation differences could support individualized decision making, e.g. incorporating patients’ preferences into flexible practice guidelines.

Our results do not justify any strong recommendation on what approach should be followed in future projects. Neither the average between-subject valuation difference nor the average within-subject valuation differences are likely to be free of bias. Another study design probably cannot prevent bias. As no gold standard for ‘true’ unbiased valuation can be defined, it is unlikely that empirical evidence can answer which method should be used. We feel that measuring both between-subject and within-subject valuations may be instructive. Eventually, the approach that is chosen should be based on the valuation problem at hand and the decision problem that it is supposed to guide.

Acknowledgement

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COMPARING TREATMENT VALUATIONS BETWEEN AND WITHIN SUBJECTS IN CLINICAL TRIALS

References


Appendix A. The valuation questionnaire

In this questionnaire, we ask YOUR OPINION about two types of monitoring a high-risk pregnant woman in this trial may acquire: domiciliary fetal monitoring and in-hospital fetal monitoring. Although it is expected that domiciliary fetal monitoring and in-hospital fetal monitoring are equal in clinical outcome, we would like to learn your opinion on this.

Domiciliary fetal monitoring and in-hospital fetal monitoring have the following characteristics:

**DOMICILIARY FETAL MONITORING**
- The pregnant woman keeps bedrest at home but delivers in the hospital;
- To guarantee that the pregnant woman complies to bedrest at home, the partner, family, neighbours, friends and/or acquaintances should take over part of the household activities. In some cases professional home help may be enlisted to take over the other part of the household activities;
- A research-midwife visits the pregnant woman daily at home to monitor the baby by CTG ('heart film'). She will inform the pregnant woman on her pregnancy and answers her questions, if any;
- In case of complications, the pregnant woman will be admitted to the hospital;
- In case the pregnant woman suspects any complications, she must always contact the hospital's medical staff;
- The pregnant woman visits the hospital's antenatal clinic once a week for routine antenatal surveillance.

**IN-HOSPITAL FETAL MONITORING**
- The pregnant woman keeps bedrest in the hospital, and delivers in hospital;
- The pregnant woman will be nursed and cared for by the nursing staff. The pregnant woman should manage the transfer of the household activities;
- The baby is daily monitored by CTG ('heart film') in the obstetrical ward. The physician in charge or the nursing staff will inform the pregnant woman on her pregnancy and answer her questions, if any;
- In case of (suspected) complications the pregnant woman must always contact the ward's medical staff;
- Routine antenatal surveillance takes place while being in hospital.

In the following questions, we ask you to record your overall-valuation for IN-HOSPITAL FETAL MONITORING and DOMICILIARY FETAL MONITORING. Please do record your valuation by putting a mark on the line and between both extremes, on the position were you feel it is most appropriate.
First, we provide an example how you may record your valuation.

**EXAMPLE**

<table>
<thead>
<tr>
<th>valued</th>
<th>valued</th>
</tr>
</thead>
<tbody>
<tr>
<td>extremely</td>
<td>extremely</td>
</tr>
<tr>
<td>negative</td>
<td>positive</td>
</tr>
</tbody>
</table>

(Note: the next two questions were posed to the women allocated to domiciliary monitoring.)

1. Record your overall-valuation of *domiciliary monitoring* as you have experienced in the antenatal period. Please give an answer by putting a mark on the line on the position where you feel it is most appropriate.

<table>
<thead>
<tr>
<th>valued</th>
<th>valued</th>
</tr>
</thead>
<tbody>
<tr>
<td>extremely</td>
<td>extremely</td>
</tr>
<tr>
<td>negative</td>
<td>positive</td>
</tr>
</tbody>
</table>

2. Imagine that you had not been monitored domiciliary, but instead had been monitored *in the hospital*. What would your overall-valuation of in-hospital monitoring be, if you imagine this type of monitoring?

<table>
<thead>
<tr>
<th>valued</th>
<th>valued</th>
</tr>
</thead>
<tbody>
<tr>
<td>extremely</td>
<td>extremely</td>
</tr>
<tr>
<td>negative</td>
<td>positive</td>
</tr>
</tbody>
</table>

**END OF QUESTIONNAIRE**