**Supplementary Tables**

Supplementary Table 1: Mean marginal willingness to wait for improvements in imaging characteristics

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Level** | **Mean willingness to wait (weeks)** |
| Waiting time for results | Immediately for 80% cases, instead of 2 weeks | 1.535(95%CI 1.117 to 1.952) |
| Procedure | Handheld scanner, instead of body scanner | 0.913(95%CI 0.547 to 1.278) |
| Side effects | No side effects, instead of minor side effects in 5% cases | 1.926(95%CI 1.467 to 2.385) |
| Further procedures | No further procedures, instead of possible further procedures for 20% cases | 1.696(95%CI 1.246 to 2.146) |

Supplementary Table 2: MXL preference model of respondent choices (all parameters)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Attribute** | **Level** |  |  | **Coeff-icient** | **P value†** | **95% CI Lower** | **95% CI Upper** |
| **Random parameters in utility functions** |  |  |  |  |  |
| Waiting time for scan | Weeks | BWSCANC | \*\*\* | -0.639 | <0.001 | -0.777 | -0.500 |
| Waiting time for results | Immediately for 80% cases  |  |  | 0.490 |  |  |  |
|  | Within 2 weeks | BWRES1 | \*\*\* | -0.490 | <0.001 | -0.686 | -0.294 |
| Procedure | Handheld scanner |  |  | 0.291 |  |  |  |
|  | Body scanner | BPROC1 | \*\*\* | -0.291 | 0.004 | -0.492 | -0.091 |
| Side-effects | No side effects |  |  | 0.615 |  |  |  |
|  | Minor side-effects in 5% cases | BSE1 | \*\*\* | -0.615 | <0.001 | -0.795 | -0.435 |
| Further procedures | No |  |  | 0.541 |  |  |  |
|  | Possible for 20% cases  | BFPROC1 | \*\*\* | -0.541 | <0.001 | -0.744 | -0.339 |
| **Heterogeneity in mean, Parameter:Variable** |  |  |  |  |  |
|  | BWSCANC:AGEY |  | \*\*\* | 0.176 | 0.005 | 0.052 | 0.300 |
|  | BWSCANC: Age≥65yrs |  |  | -0.107 | 0.109 | -0.239 | 0.024 |
|  | BWSCANC:FEMALE |  |  | 0.035 | 0.278 | -0.028 | 0.099 |
|  | BWSCANC:EDUH |  | \*\* | -0.065 | 0.044 | -0.129 | -0.002 |
|  | BWSCANC:SCANN |  |  | 0.033 | 0.483 | -0.059 | 0.124 |
|  | BWSCANC:MRI |  |  | 0.044 | 0.279 | -0.036 | 0.124 |
|  | BWSCANC:CT |  |  | 0.000 | 0.995 | -0.081 | 0.082 |
|  | BWSCANC:US |  | \*\* | -0.086 | 0.026 | -0.161 | -0.010 |
|  | BWSCANC:HOSP |  | \*\* | 0.079 | 0.039 | 0.004 | 0.153 |
|  | BWSCANC:LDIS |  |  | 0.048 | 0.343 | -0.052 | 0.148 |
|  | BWSCANC:SF12H |  | \*\*\* | -0.132 | 0.000 | -0.194 | -0.070 |
|  | BWRES1:AGEY |  |  | -0.115 | 0.213 | -0.295 | 0.066 |
|  | BWRES1: Age≥65yrs |  | \* | 0.165 | 0.083 | -0.021 | 0.351 |
|  | BWRES1:FEMALE |  | \* | 0.086 | 0.067 | -0.006 | 0.179 |
|  | BWRES1:EDUH |  |  | -0.024 | 0.605 | -0.115 | 0.067 |
|  | BWRES1:SCANN |  |  | 0.096 | 0.153 | -0.036 | 0.228 |
|  | BWRES1:MRI |  |  | 0.111 | 0.059 | -0.004 | 0.227 |
|  | BWRES1:CT |  |  | -0.036 | 0.552 | -0.154 | 0.082 |
|  | BWRES1:US |  |  | -0.087 | 0.122 | -0.197 | 0.023 |
|  | BWRES1:HOSP |  | \*\*\* | 0.165 | 0.003 | 0.057 | 0.273 |
|  | BWRES1:LDIS |  |  | 0.143 | 0.054 | -0.002 | 0.288 |
|  | BWRES1:SF12H |  |  | -0.071 | 0.116 | -0.159 | 0.017 |
|  | BPROC1:AGEY |  | \* | 0.177 | 0.062 | -0.009 | 0.364 |
|  | BPROC1: Age≥65yrs |  |  | -0.110 | 0.257 | -0.301 | 0.080 |
|  | BPROC1:FEMALE |  | \*\*\* | 0.168 | 0.000 | 0.076 | 0.260 |
|  | BPROC1:EDUH |  |  | -0.021 | 0.661 | -0.112 | 0.071 |
|  | BPROC1:SCANN |  |  | 0.003 | 0.960 | -0.130 | 0.137 |
|  | BPROC1:MRI |  |  | 0.052 | 0.373 | -0.062 | 0.166 |
|  | BPROC1:CT |  |  | -0.047 | 0.442 | -0.166 | 0.072 |
|  | BPROC1:US |  |  | -0.057 | 0.309 | -0.167 | 0.053 |
|  | BPROC1:HOSP |  |  | -0.027 | 0.632 | -0.137 | 0.083 |
|  | BPROC1:LDIS |  |  | 0.073 | 0.338 | -0.077 | 0.224 |
|  | BPROC1:SF12H |  | \*\*\* | -0.122 | 0.007 | -0.210 | -0.034 |
|  | BSE1:AGEY |  |  | -0.083 | 0.322 | -0.247 | 0.081 |
|  | BSE1: Age≥65yrs |  | \*\* | 0.178 | 0.038 | 0.010 | 0.347 |
|  | BSE1:FEMALE |  |  | 0.006 | 0.892 | -0.078 | 0.089 |
|  | BSE1:EDUH |  |  | 0.007 | 0.876 | -0.076 | 0.090 |
|  | BSE1:SCANN |  | \* | 0.103 | 0.096 | -0.018 | 0.224 |
|  | BSE1:MRI |  |  | 0.013 | 0.810 | -0.092 | 0.117 |
|  | BSE1:CT |  |  | 0.069 | 0.204 | -0.038 | 0.176 |
|  | BSE1:US |  |  | 0.000 | 0.997 | -0.099 | 0.099 |
|  | BSE1:HOSP |  |  | 0.076 | 0.130 | -0.022 | 0.174 |
|  | BSE1:LDIS |  |  | 0.067 | 0.321 | -0.065 | 0.199 |
|  | BSE1:SF12H |  | \*\*\* | -0.109 | 0.008 | -0.190 | -0.029 |
|  | BFPROC1:AGEY |  |  | 0.006 | 0.953 | -0.180 | 0.191 |
|  | BFPROC1: Age≥65yrs |  |  | 0.077 | 0.439 | -0.117 | 0.271 |
|  | BFPROC1:FEMALE |  |  | 0.042 | 0.384 | -0.053 | 0.137 |
|  | BFPROC1:EDUH |  |  | 0.050 | 0.299 | -0.045 | 0.145 |
|  | BFPROC1:SCANN |  |  | 0.004 | 0.950 | -0.131 | 0.140 |
|  | BFPROC1:MRI |  |  | 0.022 | 0.707 | -0.094 | 0.139 |
|  | BFPROC1:CT |  |  | 0.000 | 0.998 | -0.120 | 0.120 |
|  | BFPROC1:US |  |  | -0.048 | 0.405 | -0.159 | 0.064 |
|  | BFPROC1:HOSP |  | \* | 0.093 | 0.099 | -0.018 | 0.204 |
|  | BFPROC1:LDIS |  |  | 0.037 | 0.627 | -0.113 | 0.187 |
|  | BFPROC1:SF12H |  | \*\*\* | -0.126 | 0.007 | -0.217 | -0.035 |
| **Distns. of RPs. Std.Devs** |  |  |  |  |  |  |
|  |  | NsBWSCAN | \*\*\* | 0.408 | <0.001 | 0.334 | 0.483 |
|  |  | NsBWRES1 | \*\*\* | 0.567 | <0.001 | 0.454 | 0.681 |
|  |  | NsBPROC1 | \*\*\* | 0.698 | <0.001 | 0.590 | 0.805 |
|  |  | NsBSE1 | \*\*\* | 0.513 | <0.001 | 0.409 | 0.616 |
|  |  | NsBFPROC | \*\*\* | 0.631 | <0.001 | 0.524 | 0.738 |

† P value: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

Supplementary Table 3: MXL preference model of respondent choices (statistically significant)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute** | **Level** | **Coefficient** | **P value**† | **95% CI Lower** | **95% CI Upper** |
| **Random parameters in utility functions** |
| Waiting time for scan | Weeks | \*\*\*-0.639 | ≤0.001 | -0.777 | -0.5 |
| Waiting time for results | Immediately for 80% cases | 0.490 |   |   |   |
| Within 2 weeks | \*\*\*-0.490 | ≤0.001 | -0.686 | -0.294 |
| Procedure | Handheld scanner | 0.291 |   |   |   |
| Body scanner | \*\*\*-0.291 | 0.004 | -0.492 | -0.091 |
| Side effects | No side effects | 0.615 |   |   |   |
| Minor side effects in 5% cases | \*\*\*-0.615 | ≤0.001 | -0.795 | -0.435 |
| Further procedures | No | 0.541 |   |   |   |
| Possible for 20% cases | \*\*\*-0.541 | ≤0.001 | -0.744 | -0.339 |
| **Heterogeneity in mean, Parameter: Variable\*** |
| Wait for scan:Age≤34yrs | \*\*\* 0.176 | 0.005 | 0.052 | 0.3 |
| Wait for scan:Education after secondary school | \*\*-0.065 | 0.044 | -0.129 | -0.002 |
| Wait for scan:History of ultrasound | \*\*-0.086 | 0.026 | -0.161 | -0.01 |
| Wait for scan:Hospital | \*\* 0.079 | 0.039 | 0.004 | 0.153 |
| Wait for scan:SF-6D>0.7 | \*\*\*-0.132 | 0.000 | -0.194 | -0.07 |
| Wait for results within 2 weeks:Previous hospital admission | \*\*\* 0.165 | 0.003 | 0.057 | 0.273 |
| Procedure body scanner:Male | \*\*\* 0.168 | 0.000 | 0.076 | 0.26 |
| Procedure body scanner:SF-6D>0.7 | \*\*\*-0.122 | 0.007 | -0.21 | -0.034 |
| Side effects minor in 5% cases:Age≥65yrs | \*\* 0.178 | 0.038 | 0.01 | 0.347 |
| Side effects minor in 5% cases:SF-6D>0.7 | \*\*\*-0.109 | 0.008 | -0.19 | -0.029 |
| Further procedures possible for 20% cases:SF-6D>0.7 | \*\*\*-0.126 | 0.007 | -0.217 | -0.035 |
| **Distribution of Random Parameters (Standard Deviations)** |
| Waiting time for scan | \*\*\* 0.408 | ≤0.001 | 0.334 | 0.483 |
| Waiting time for results | \*\*\* 0.567 | ≤0.001 | 0.454 | 0.681 |
| Procedure | \*\*\* 0.698 | ≤0.001 | 0.59 | 0.805 |
| Side effects | \*\*\* 0.513 | ≤0.001 | 0.409 | 0.616 |
|  Further procedure | \*\*\* 0.631 | ≤0.001 | 0.524 | 0.738 |

CI Confidence Interval; SE Standard Error; SF-6D utility index score

\* Only 11 of 55 parameters related to heterogeneity around the mean were statistically significant and are shown in this table (remaining parameters not significant at 5% level; all parameters are shown in Supplementary Table 2)

† P value: \*\*\*, \*\* ==> Significance at 1%, 5% level.

**Supplementary Figures**

Supplementary Figure 1: Example choice set



Supplementary Figure 2: Comparison of mean coefficients for attribute levels from MXL model (specified at 50 Halton draws) based on (i) all responders and (ii) the sub‑group of responders who provided a consistent response to the repeat choice task