Modelling the cost-effectiveness of alternative upper age limits for breast cancer screening in England and Wales

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Figure 1: Predicted number of breast cancer cases detected and over-diagnosis per 100,000 women invited in each age group to screening (compared with the previous screening strategy).
Figure 2: Incremental life years, QALYs and costs per 100,000 women invited to screening (compared with the previous screening strategy).
Figure 3: Univariate Sensitivity Analysis: testing the robustness of basecase conclusion that screening up to age 78 most cost effective strategy.

Recall rate → 10%
Utility → weight - 10% & duration = 3yr
Discounting → 0%
Cost → scrn mam (£40.4) and invitation (£11.9)
Discounting → 5%
Utility → weight - 10% & duration = 2yr
Recall rate → 7%
Cost → scrn mam (£14.9) and invitation (£1.5)
Suv → web
Suv → gomp
Cost → scrn mam (£40.4) and invitation (£1.5)
Utility → duration = 3 yr
Utility → weight - 10% & duration = 1yr
Utility → duration = 2 yr
Utility → no disutility recall or scrn mam
Utility → no disutility recall
Cost → recall (£341)
Utility → duration = 1 yr
Suv → exp
Cost → primary treatment -20%
Cost → primary treatment +20%
Growth rate → (0.2)
Cost → recall (£77)
Cost → no palliative care cost
Utility → constant weight in gen pop = 0.7
Cost → all management -20%
Cost → all management +20%
Growth rate → (0.8)
Utility → weight + 10% & duration = 1yr
Sensitivity → all (upper range)
Uptake rate → 100%
Utility → weight - 10%
Utility → weight + 10%
Sensitivity → all (lower range)
Sensitivity → CIS (20%)
Sensitivity → CIS (80%)
Utility → weight + 10% & duration = 2yr
Suv → loglog
Recurrence rate → +20%
Sensitivity → invasive (0.5)
Cost → recurrence +20%
Cost → recurrence -20%
Utility → weight + 10% & duration = 3yr
Recurrence rate → -20%
Utility → no disutility scrn mam
Cost → attendance -20%
Cost → attendance +20%
Sensitivity → invasive (0.3)

ICER (£15,072 per QALY gained)