Aim
To assess the safety and effectiveness of the procedure and under what circumstances public funding should be supported for the procedure.

Conclusions and results
Safety
The complication rate is relatively high, but considered acceptable due to excellent outcomes of the procedure. The most common complications are necrosis of the skin overlying the graft site, protrusion of the donor cartilage and chest deformities where the donor cartilage was harvested.

Effectiveness
Only one case study (level IV evidence) is available and higher level evidence is unlikely to become available. The procedure is considered to be effective in producing a more normal looking ear than the alternative (Branemark implant), although total ear reconstruction has slightly higher complication rates. There is some uncertainty about the timing of the surgery for patients seeking the procedure to correct a congenital deformity.

Cost-effectiveness
The procedure is complex and surgery is time consuming. There was insufficient data to perform rigorous cost-benefit analysis.

Recommendations
Public funding should be supported.

Method
MSAC conducted a systematic review of the biomedical literature from 1975 to 1999 by accessing biomedical electronic databases, the Internet and international health technology agency websites.

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