Institute for Health and Clinical Excellence (NICE) in the United Kingdom found that cost effectiveness ratios submitted by manufacturers were significantly lower than analyses of identical technologies performed by assessors from an academic centre.[3]

Publication bias

We found relatively few published incremental cost effectiveness ratios between $50 000/QALY and $100 000/QALY. There are three possible explanations. Firstly, they may reflect the true distribution of cost effectiveness ratios for healthcare interventions. Secondly, analysts may not be interested in studying interventions with mid-range cost effectiveness ratios or some journals may not want to publish such studies. Thirdly, some cost effectiveness analyses may be modelled to yield favourable ratios or studies with unfavourable ratios may be suppressed. Our results support concerns about the presence of significant and persistent bias in both the conduct and reporting of cost effectiveness analyses.[4 5] It could be argued that all cost effectiveness analyses should be registered before they start, but this may be unrealistic given the way they are currently conducted.[6]

Recent attempts to standardise the conduct and reporting of economic analyses and modelling studies may help prevent the manipulation of studies.[7 8–10] Electronic publishing could enhance transparency in modelling by making technical appendices available. Furthermore, distribution of the underlying decision analysis models to the public should be considered.

Journal editors and reviewers can help reduce publication bias. Potential conflicts of interest of study sponsors and authors need to be scrutinised. Journal editors may show bias by publishing studies with positive results but not studies with negative results, although this may not be common. However, differences between economic analyses may also reflect a more fundamental difference in the studies.[11]

Conclusions

More rigour and openness is needed before decision makers and the public can be confident that cost effectiveness analyses are conducted and published in an unbiased manner.

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What is already known on this topic

Cost effectiveness analysis is widely used to inform policy makers about the efficient allocation of resources

Various thresholds for cost effectiveness ratios have been proposed to identify good value, but the distribution of published ratios with respect to these thresholds has not been investigated

What this study adds

Two thirds of published cost effectiveness ratios were below $50 000 per quality adjusted life year (QALY) and only 21% were above $100 000/QALY

Published cost effectiveness analyses are of limited use in identifying health interventions that do not meet popular standards of "cost effectiveness"

Corrections and clarifications

Hanging in the balance
This news article by Rebecca Coombes gave the wrong age group for the bowel cancer screening programme in Scotland, due to be rolled out in 2007 (*BMJ* 2006;332:384, 18 Feb). The programme will target people aged 50-74 years (not 50-69, as we stated).

Obituary: Sir John Peel
Two errors occurred in this obituary by Caroline Richmond (*BMJ* 2006;332:366, 11 Feb). Firstly, Sir John Peel was born in Surbiton, not Bradford. Secondly, we were wrong to state that his third wife, Sally Barton, was a widow when she married him.

Optimising prenatal diagnosis of Down's syndrome
A last minute change made by editorial staff in this editorial by James P Neilson and Zarko Alfirevic resulted in an error in describing the detection of Down's syndrome (*BMJ* 2006;332:433-4, 25 Feb). The statement in the fifth paragraph that refers to full karyotyping "picking up more truly positive cases of Down's syndrome" is wrong. In fact, qf-PCR (quantitative fluorescent polymerase chain reaction) will detect all true cases of Down's syndrome.

Please do not resuscitate: Automatic refusal is as harmful as offering resuscitation to all
The authors of this letter, Carmelo Aquilina and colleagues (*BMJ* 2006;332:608-9, 11 Mar), have asked us to clarify that the penultimate author is Joyce (not Catherine) Tarrant.