

Technology Appraisals and Stakeholder Engagement

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Dr Melinda Goodall

Associate Director – Technology Appraisals

Centre for Health Technology Evaluation

Melinda.goodall@nice.org.uk, www.nice.org.uk

Outline

- Introduction to Technology Appraisals
- How topics are selected
- Stakeholder engagement
- Technology Apprialsals decision making

Centre of Health Technology Evaluation

Guidance Teams

**Technology
Appraisals**

Highly
Specialised
Technologies

Diagnostic
Assessment
Programme

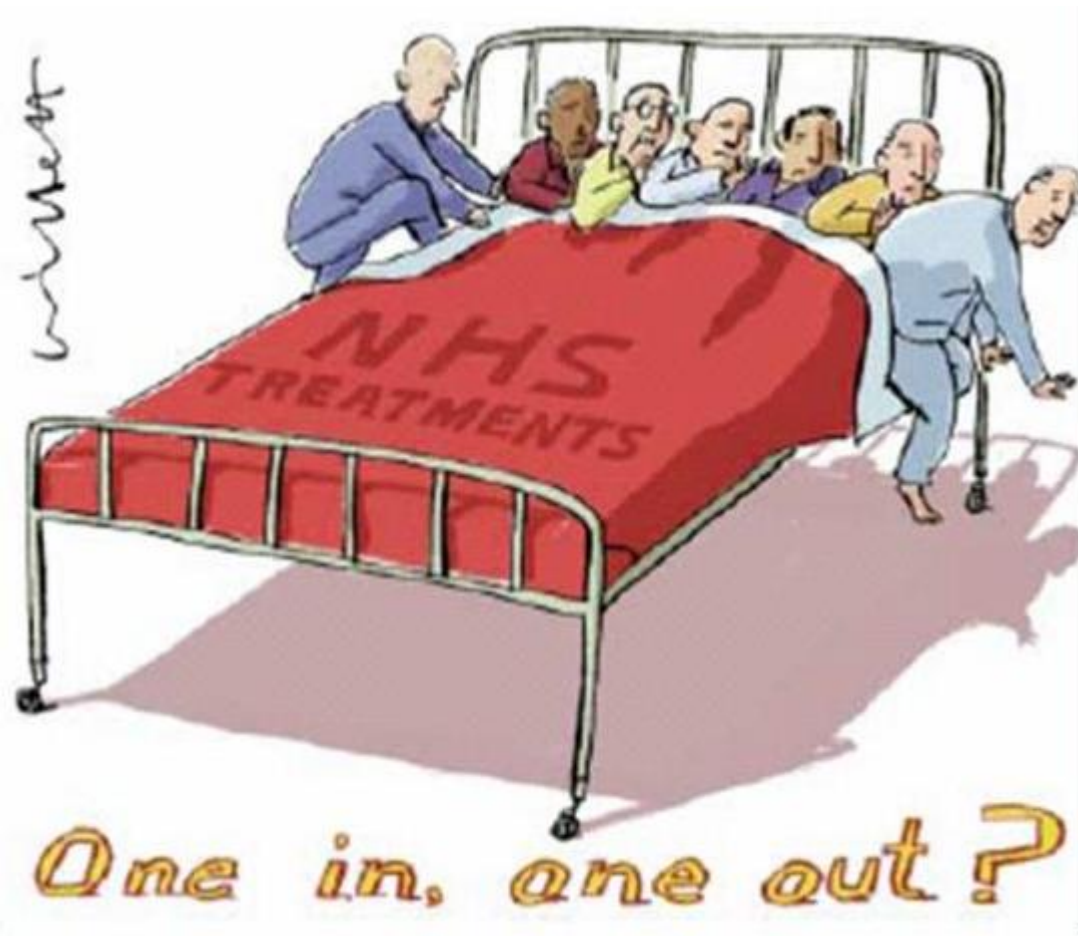
Medical
Technologies
Evaluation
Programme

Interventional
procedures



You have the right to drugs and treatments that have been recommended by NICE for use in the NHS, if your doctor says they are clinically appropriate for you.

Why does NICE appraise technologies?



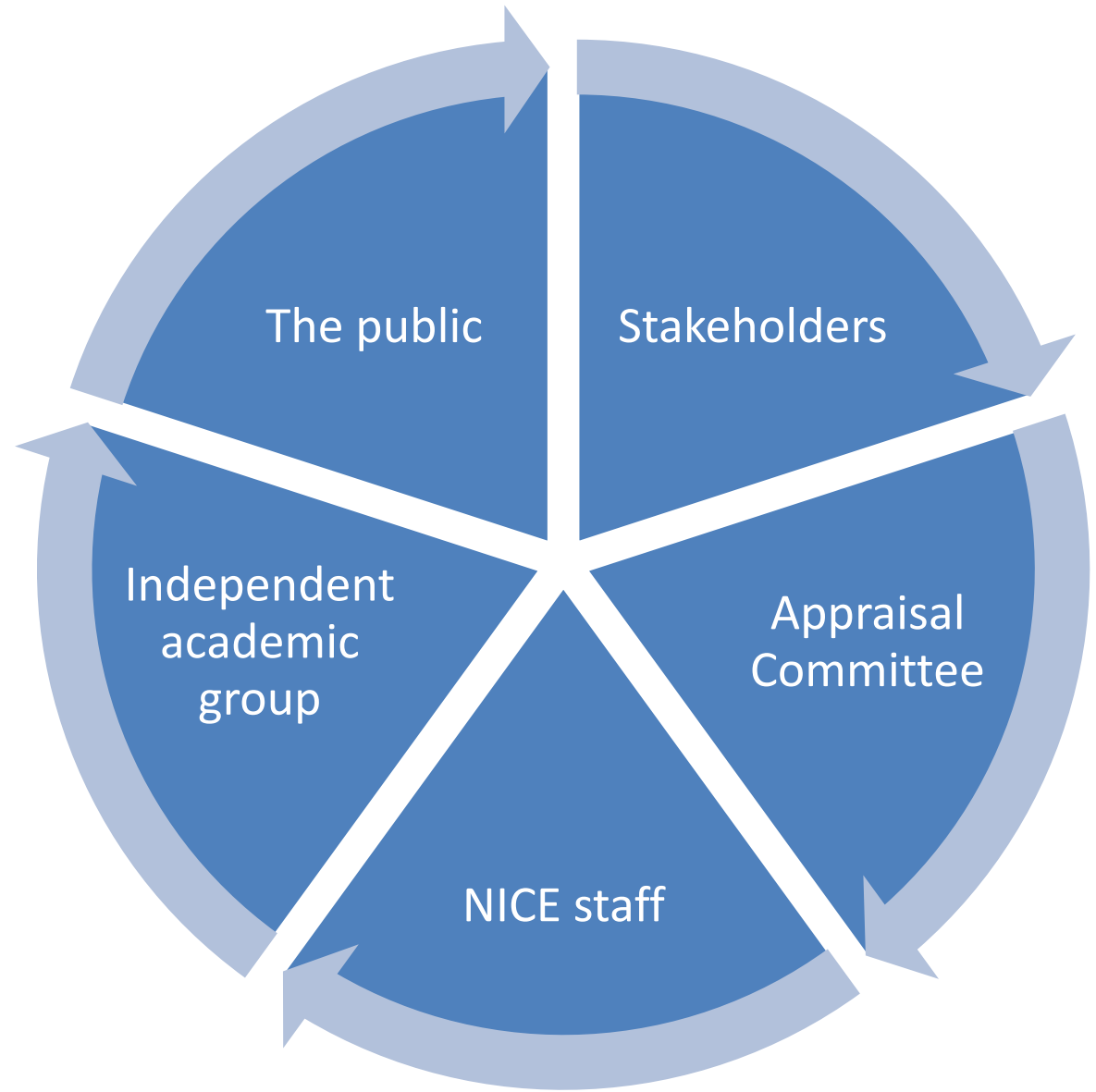
Topic selection

- If the technology is likely to:
 - result in a **significant health benefit**, taken across the NHS as a whole, if given to all patients for whom it is indicated?
 - result in a significant **impact on other health-related** Government policies (for example, reduction in health inequalities)?
 - have a significant **impact on NHS resources** (financial or other) if given to all patients for whom it is indicated?
- Is there significant **inappropriate variation** in the use of the technology across the country?
- Is NICE likely to be able to **add value** by issuing national guidance? For example, in the absence of such guidance is there likely to be significant controversy over the interpretation or significance of the **available evidence on clinical and cost effectiveness?**

Prioritisation Criteria (TAs only)

- 1. Population 1-5** The larger the population, the more important a technology is for evaluation.
- 2. Disease severity 1-5** Severity of condition impacts on importance of evaluation; takes into account: life expectancy; how far the individual is away from perfect health; and health states that incur social stigma
- 3. Resource impact 1-5** potential resource impact of guidance including cost of implementing guidance, including any additional service, facilities or staff requirements.
- 4. Claimed therapeutic benefit 1-5** extent to which a new technology claims measurable therapeutic benefit over currently available NHS treatments.

Groups involved in an appraisal



Stakeholders

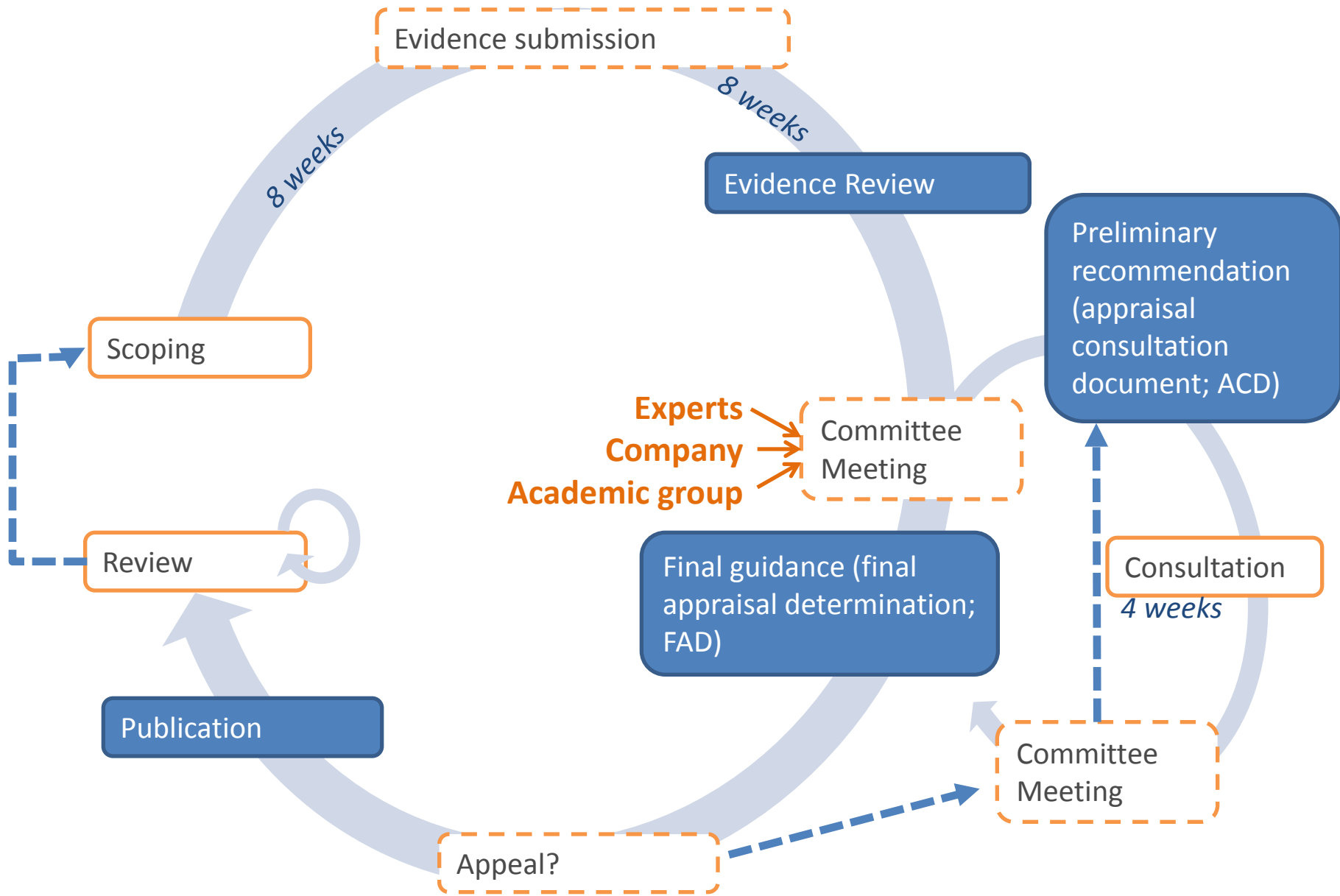
Consultees

- Company
- Patient groups
- Professional groups
- Department of Health
- NHS England
- Commissioners

Commentators

- Comparator companies
- The public
- Research groups
- Guideline groups
- Public health groups
- British National Formulary
- Wales/ Scotland/
Northern Ireland

etc.....



Conflicts of interest

- Committee members and NICE staff
 - Declare conflicts
 - If conflicted, cannot take part or receive paperwork
- Patient and clinical experts
 - Declare conflicts
 - Can attend as an expert, but must make conflict clear



- Drugs
- Resource use and technology/tests
- Cost of managing adverse events
- Costs of disease progression

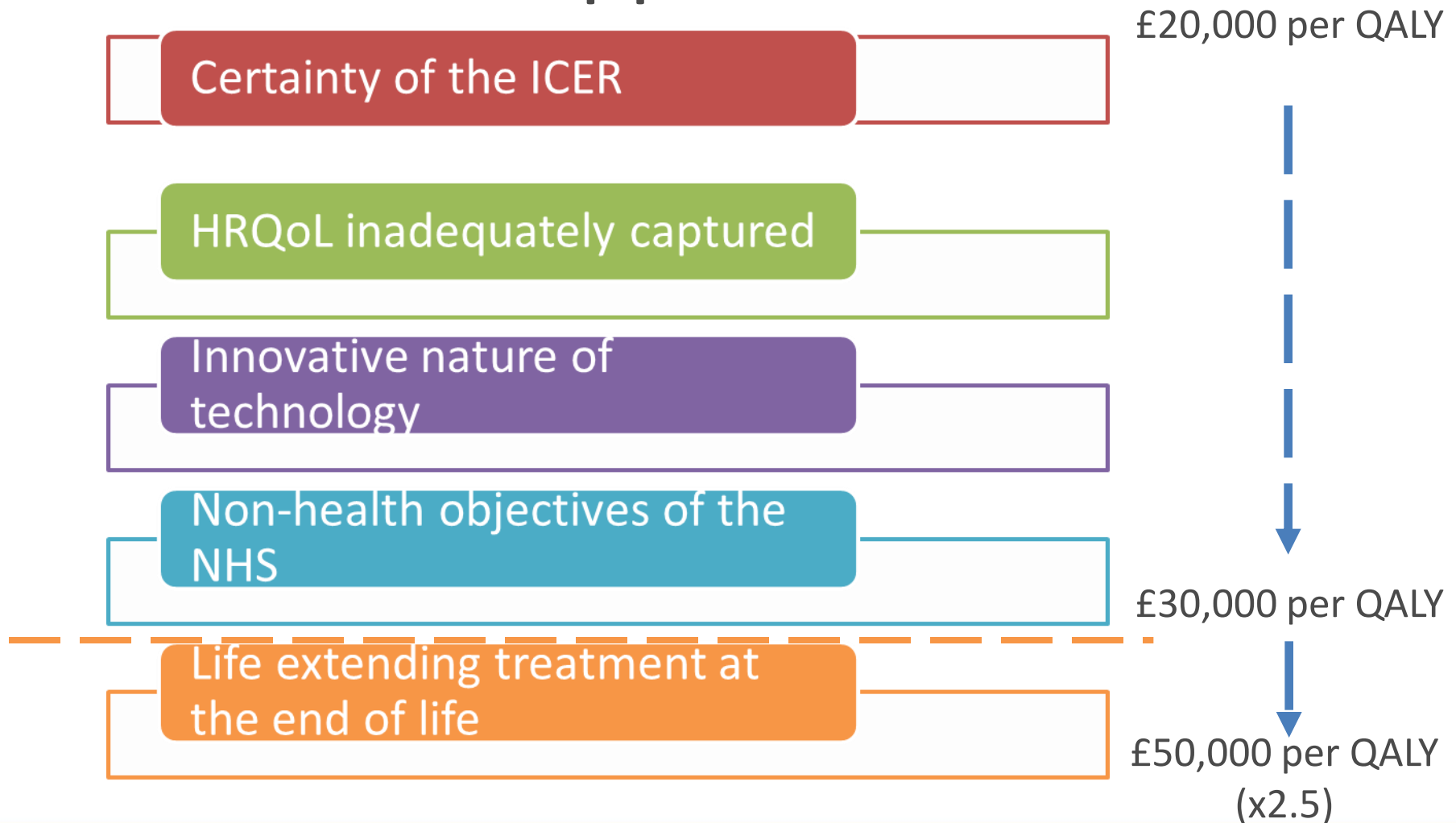
- Length of life
- Quality of life
- Impact of adverse events

Model output

$$\text{ICER} = \frac{\text{difference in cost}}{\text{difference in benefit}}$$

(incremental cost effectiveness ratio)

Flexible decision making: current approach



Looking beyond the ICER

application of special circumstances

Table 1

Application of 'special circumstances' in the appraisal of some products with incremental cost-effectiveness above £30 000 per quality adjusted life year

| Topic | ICER ('000s) | Severity | End of life* | Stakeholder persuasion | Significant innovation | Disadvantaged population | Children |
|---|--------------|----------|--------------|------------------------|------------------------|--------------------------|----------|
| Riluzole (motor neurone disease) | 38–42 | ✓ | ✓ | ✓ | | | |
| Trastuzumab (advanced breast cancer) | 37.5 | ✓ | | | ✓ | | |
| Imatinib (chronic myeloid leukaemia) | 36–65 | ✓ | | | ✓ | | |
| Imatinib (gastrointestinal stromal tumour) | | ✓ | ✓ | | ✓ | | |
| Pemetrexed (malignant mesothelioma) | 34.5 | ✓ | ✓ | | | ✓ | |
| Ranizumab (age-related macular degeneration) | >>30 | | | ✓ | ✓ | | |
| Omalizumab (severe asthma) | >30 | ✓ | | ✓ | ✓ | | |
| Sunitinib (advanced renal cancer) | 50 | ✓ | ✓ | ✓ | ✓ | | |
| Lenalidomide (multiple myeloma) | 43 | ✓ | ✓ | | ✓ | | |
| Somatotropin (growth hormone deficiency) | n/a | | | ✓ | ✓ | | ✓ |
| Chronic subcutaneous insulin infusion (childhood Type 1 diabetes) | n/a | | | ✓ | | | ✓ |

*End-of-life considerations have only been explicitly taken into account since January 2009 on the basis of supplementary advice from the Institute to the Appraisals Committee. ICER, incremental cost-effectiveness ratio (£ per quality-adjusted life year).

“rather than apply formal ‘equity weightings’ on QALYs and ICERs, NICE expects their committees to exercise their collective judgement in the application of these special considerations when the ICER exceeds £20,000–30,000 per QALY”

Thank you

Any Questions?