Health technology assessment

Overall aim

To spend money wisely

Three questions

- Does it work?
- How well does it work?
- What does it cost?

Does it work?

- Critical appraisal
- Effect size

A choice… and a decision

- Drug A
- Costs £10 000
- Prolongs life by 2 years

- Drug B
- Costs £20 000
- Prolongs life by 5 years

Utilitarianism

- 'The greatest good for the greatest number'

Quantity and quality

- Prolongs life
- Improves quality of life

Quality of life

- Reduction in disability
- Health state

Health state A

- No problem with mobility
- No problem with self care

- Some problems with usual activities
- Extreme pain
- Severely depressed

Quality adjustment

NHS
Specialised Services

- 5 dimensions:
  - Mobility
  - Self care
  - ‘Usual activities’
  - Pain
  - Anxiety or depression

Health state

NHS
Specialised Services

State A – 0.16

- No mobility problems
- Some problems with usual activity
- No problem with self care

- Severe pain
- Moderate depression

State B – 0.42

- Some mobility problem
- Severe problems with usual activity
- No problem with self care

- **No** pain
- Moderate depression

NICE

NHS
Specialised Services

- National Institute for Clinical (and Public Health) Excellence
- 296 appraisals since March 2000
- Includes orphan drugs
- Separate stream for ultra orphan
- Usually ‘no’ if >£30 000 per QALY

NICE technology appraisals

NHS
Specialised Services

- medicines
- medical devices (for example, hearing aids or inhalers)
- diagnostic techniques (tests used to identify diseases)
- surgical procedures (such as repairing hernias)
- health promotion activities (for example, ways of helping people with diabetes manage their condition).

NICE values

NHS
Specialised Services

- ‘Accountability for reasonableness’ A4R

- Transparent – all documents public
- Allow appeals
- Update if new information

NICE process

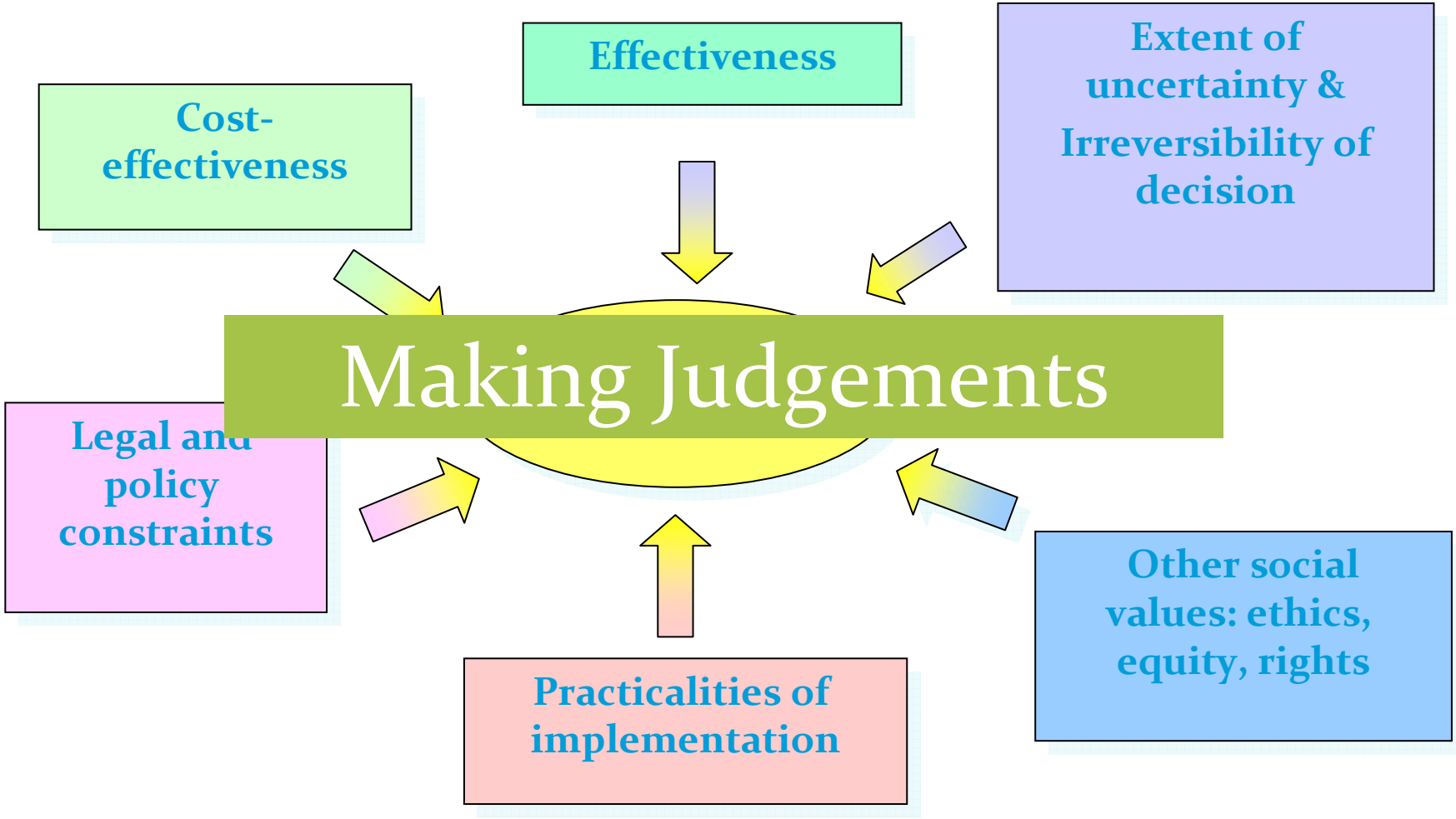
NHS
Specialised Services

- Lay input
- Social value judgements
- End of life

Core principles

- Procedural fairness, methodological rigour and stakeholder buy-in…
  - Transparency: methods, evidence base and decisions are public
  - Independence: insulation from lobbyists and vested interests
  - Inclusiveness: meaningful consultation and broad committee membership
  - Scientific basis: peer review and methods development
  - Timeliness: to meet the needs of decision makers
  - Contestability: appeal mechanisms
  - Review: guidance should be reviewed as evidence changes
  - Conflicts of interest: clear policy for managing vested interests and bias

Factors involved in NICE decision making



Turners syndrome

NHS
Specialised Services

- Growth hormone £100 000

- Gain in quality – 0.10
- … for 50 years = 5 QALY

- £20 000 per QALY

Some issues

Issues

1. NICE cut off is £30k / QALY – what is right for Bulgaria?
2. Utilitarian or a special concern for the most afflicted?
3. Special consideration for end-of-life? What else?