PET – implementation in Scotland after an HTA

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Co-workers

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Background – NHSScotland

- Tax funded
- Free at the point of use
- Population ~5.2 million, budget £6,861.8 million
- Issues of staff recruitment, esp. in cancer
- Devolved power from UK government
- HTBS set up in 2000 to advise on cost-effectiveness

Background – PET in Scotland

- Long-standing and successful medical physics department in Aberdeen
  - John Mallard – prime mover in MRI
- PET scanner purchased in 1998
  - Fundamental and applied research
  - Radio-chemistry laboratory
- Increasing demand for clinical services
- Requirement from SEHD to evaluate PET
The Scottish HTA

- Topic Specific Group
  - Expert advisors
  - Composition was important!
- Expectation of ‘rubber-stamping’
- Unwillingness to look beyond diagnostic accuracy
- Perception that PET scanning is expensive
- Introduction of PET scanning in England and Ireland

The HTA conclusions

- ‘High-level’ outcomes (in particular, increases in patient QALYs)
- Focussed on NSCLC (big issue in Scotland) and HD
- Positive conclusion – PET should be adopted, conditional on further evaluation
- Ambivalent reception - one radiologist described the report as ‘grudging acceptance of the facts’
- Heavily dependent on modelling in lieu of ‘hard’ outcomes
A note

• Similar decision independently made in Northern Ireland (buy a scanner but proceed with evaluation leading to a permanent funding decision in 2005)
• Imagine the joy of our experts!

Implementation

• Separate SEHD working group
• Apparently influenced by the HTA
• BUT – ‘going with the flow’
  – would a negative conclusion have changed the actions?
Implementation

• Calculation that 3 – 4 scanners needed (see the map)
• Private source for FDG (but other ligands?)
• PET or PET-CT a matter for local Cancer Networks
• Recognised the need for further research

Concerns about HTA

• Diagnosis may precede therapy, so PET may be more (cost-) effective tomorrow
  – Only routine use
• Evidence
  – Beyond NSCLC reliant on dubious ‘gold standards’ and (very) long-term outcomes
• Timeliness
  – The PET-CT story
  – Newer applications
Concerns – Implementation process

- Enthusiasm to extend on fragile evidence
- PET-CT!
- Continued reluctance by some experts to go beyond diagnostic efficacy
- Revisiting NSCLC – sensible?
- Small, non-randomised study disease

Questions – I

- How do we include ‘future values’?
- Can we assess diagnosis in a way divorced from therapy?
- Is it possible, or even sensible, to require evidence of benefit in conventional RCTs?
- Are we therefore left with models as the ‘Answer’?
Questions - II

• What do the studies look like that would confirm model-based assessments?
  – Factorial designs
  – Audit
  – Patient and clinician satisfaction
  – Confirm components and make the model public?