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Health economic modelling of long term depression services in Sheffield

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Context

- Costs and health benefits of changes to the current NHS service for people with long term depression
  - Potentially cost effective changes to be trialled in a pilot study
  - Model to be updated with pilot study evidence
  - Model to be adaptable
- Multidisciplinary team
- Cost-effectiveness framework
  - Time to system entry/treatment, rather than constrained resources

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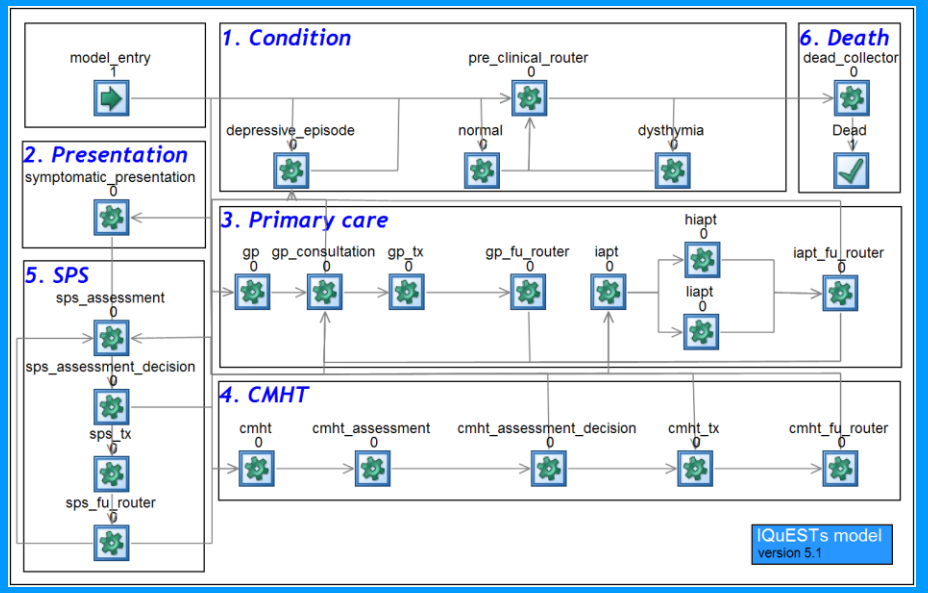

Methods (1)

- Conceptual model developed
  - Interviews
  - Sheffield follows NICE ‘stepped care’ model
  - Primary, secondary and tertiary care - pathways are complex
- Routine data from NHS Trust
  - Generally poor quality
  - Data on treatments provided and time taken to move through system
  - No evidence for higher steps (Specialist Psychotherapy Services)
- Discrete event simulation based on step care model developed
  - Informed by routine data, literature evidence and (a lot of) assumptions
  - Validated by team and advisory workshops

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Methods (2)

- A workshop identified three changes for modelling
  1. Self-referral by patient back to therapist when relapsed
  2. Widening availability of therapy to non-psychological therapies
  3. Management to reduce drop out
- Epidemiological evidence to estimate natural history
  - Relapsing/remitting condition
  - 1^0 = medical treatment and 'IAPT' psychological therapy (PT)
  - 2^0 and 3^0 = more advanced and combined medical and PTs
  - Treatments effective by reducing the severity and/or length of depressive episode, and/or by increasing the time to relapse
  - Benefits via improving therapy, quicker therapy, or reducing drop out

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Results and next steps

- Model built in Simul8
  - NICE Methods Guide followed
- Non-therapy and reduce drop-out options likely to be cost effective (£20k per QALY threshold)
- Self-referral option £29k per QALY
- Piloting the options is appropriate
- Factorial design undertaken
  - Found interactions between options
  - Highlight important design issues for each option, this has fed into pilot study design
- Model to be presented to local commissioners, and updated after pilot study

