

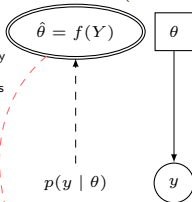
Uncertainty analysis

- Assesses the impact of uncertainty (eg in parameters or model structure) on the economic results
- Mandatory in many jurisdictions (including NICE, in the UK)
- Fundamentally Bayesian!

Statistical model

- Estimates relevant **population** parameters θ
- Varies with the type of available data (& statistical approach!)

1. Estimation (base-case)



2. Probabilistic sensitivity analysis

$$p(\theta) \leftrightarrow g(\hat{\theta})$$

Economic model

- Combines the parameters to obtain a population average measure for costs and clinical benefits
- Varies with the type of available data & statistical model used

Decision analysis

- Summarises the economic model by computing suitable measures of "cost-effectiveness"
- Dictates the best course of actions, given current evidence
- Standardised process