Gaps & opportunities: information gathering

GAP

Key steps to bridge gap

Current State

Desired State

New challenges

- Wider or more complex context than previously (e.g. precision medicine)
- "Big Data"
- Combining varied data types (e.g. administrative, survey, clinical trials)
- Making decisions under multiple uncertainties
- Infectious disease modelling
- Multiple stake-holders, e.g. patients, hospitals and governments
- …

Group discussions

- We will now investigate
  - Gaps and needs
  - priorities
- We will consider these within categories.
- Please discuss in groups and be prepared to report back.

Clarify the modelling gaps & needs

Answer the following questions:

- PROBLEM: What are the issues with current software?

- NEEDS: What can and should the new tools do better?

Data

- Load/save
- Extending existing tools
- Interrogating/viewing
- Cleaning/munging/tidying
- …

Model building

- Types
- Reproducability
- Transparency
- Reuseability
- With existing methods
- Interactive
- Helper functions
- …

Plotting and tables

- Fast, simple plots
- Extending existing methods
- Publication quality
- Modifying
- Types
- …

Prioritisation

- Order tools ideas

- Consider:
  - What is the demand for these tools and by whom?
  - Why do these need to be addressed? What will happen if they aren't?
  - How wide spread is the issue? How long has it been a problem and what the impact?

Data

Model building

Plots and tables