

Drug Development: Meeting Future Societal Requirements

Converting Outcome Data into Inputs for Cost-Effectiveness Models

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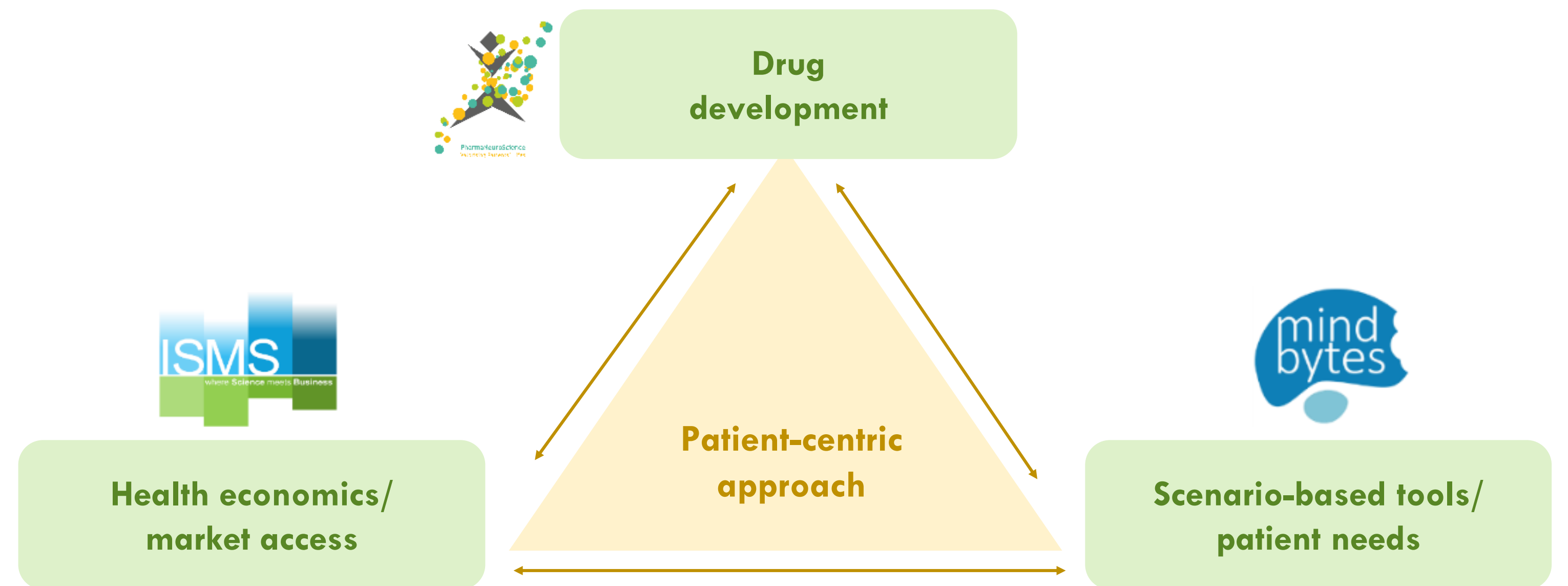
Objectives

Objective is to translate outcome data in health economic evidence

- Development of a tool to identify unmet need through converting real-life data into dynamic patient flows
- Application of the real-life flow in cost-effectiveness modelling in line with HTA requirements to fine-tune policy towards the highest need

Approach: Three Companies aligned to Meet Future Market Access Requirements

Multidisciplinary approach of three companies focusing on future societal needs

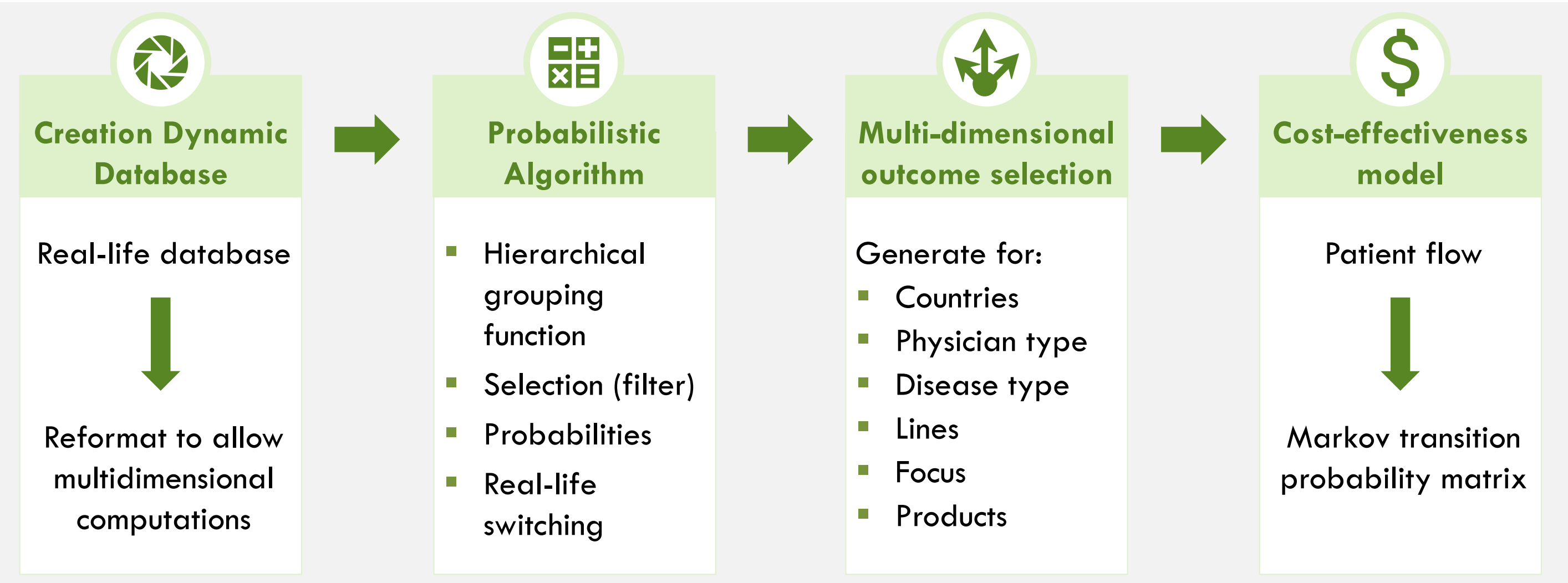


Methodology: Probabilistic Statistics, Hierarchical Grouping and Filters Allow Targeted Computations of Patient Pathways

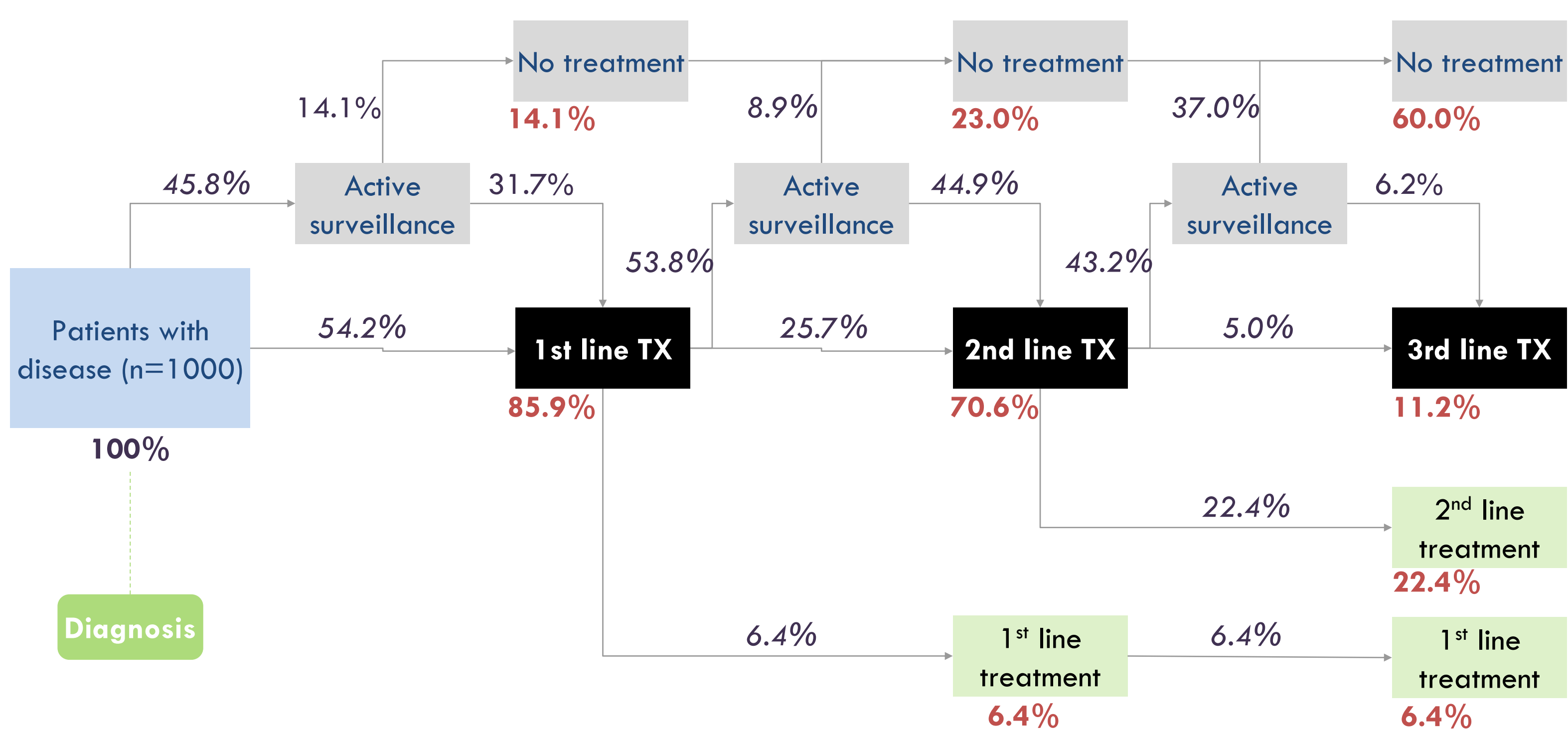
Dynamic Markov Generation

Database with incomplete patient data
Full patient pathway with transition probabilities between decision points
Generation Markov transition probability matrix to create specific cost-effectiveness models

Translate data from real-life databases into dynamic data for cost-effectiveness analyses

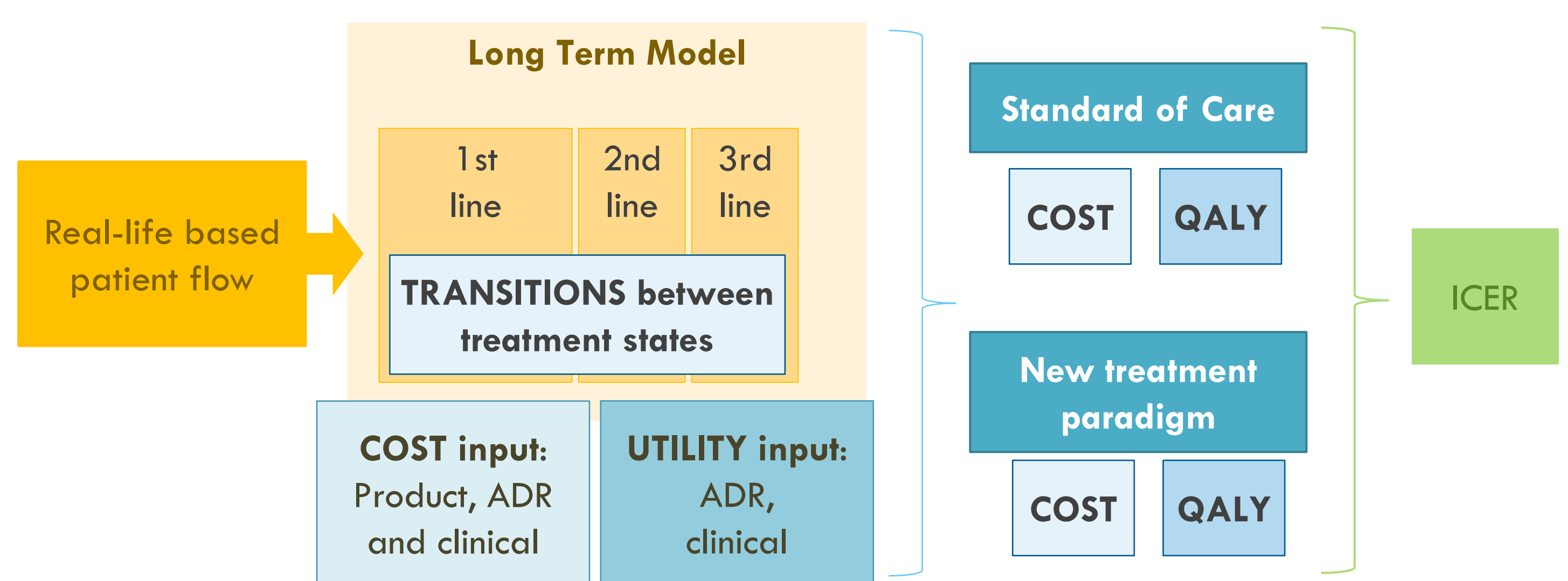


Mapping specific patient pathways



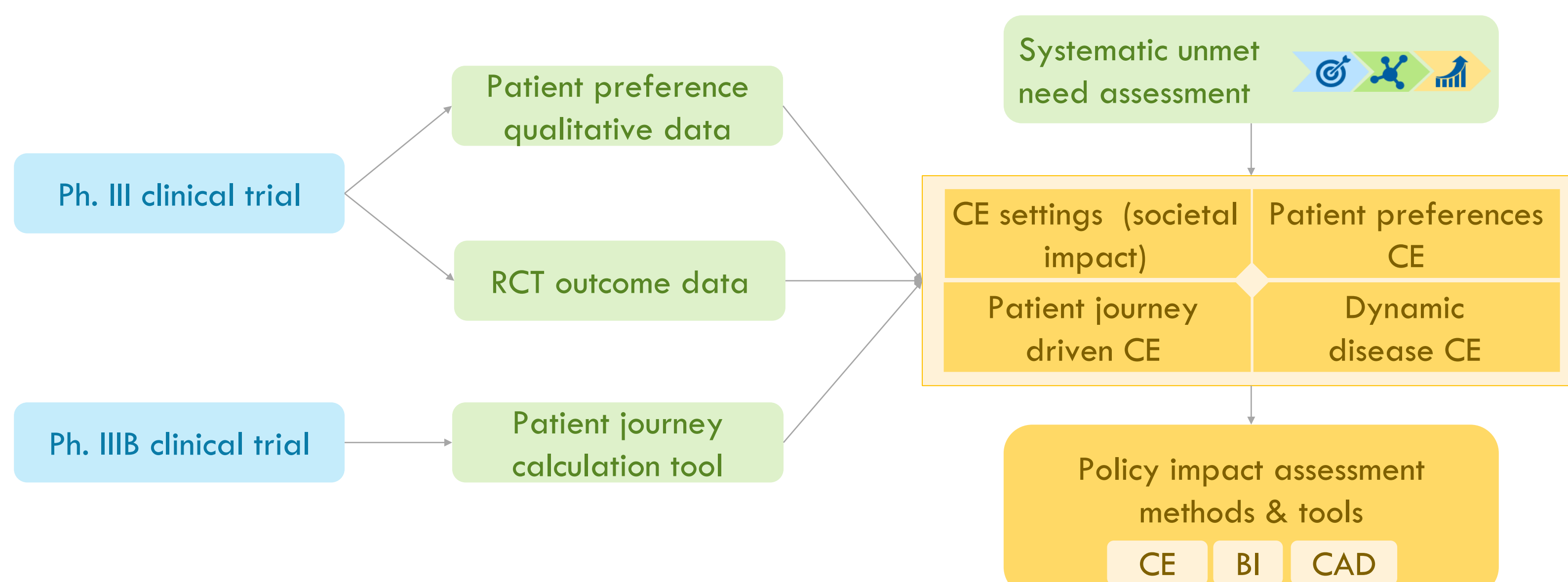
Dynamic database analysis of patient outcome data to identify unmet need and quantify cost-effectiveness

- Define unmet need in terms of subgroups or disease subtypes
- Quantify cost-effectiveness of new treatment paradigm
- Fine-tune policy towards patients with greatest unmet need



Integration of Dynamic Data into Toolset Allowing to Meet Future Societal / HTA Requests

Integration of this methodology into broad patient-centric and societal perspective



Future Directions

- Dynamic inputs can be utilized together to create a more accurate representation of unmet need
- Cost-effectiveness analysis can incorporate dynamic data to quantify added value for society
- New picture of unmet need and treatment value can be used to adapt policy
- This methodology can also provide the basis for clinical trial design