



Online Healthcare Modeling Course

Get hands-on instruction in building and analyzing health economic models in TreeAge Pro.

Learn practical modeling techniques you can apply directly to your own models.

No advanced modeling knowledge is required.

Agenda

1. Introduction

- Understand how treatment options, patient pathways and outcomes are represented in a health economic model.
- Navigate the **TreeAge Pro** interface.

2. Build Decision Trees

- Build a model that represents **treatment strategies** and **patient pathways**.
- **Configure** the model and add **model inputs**.
- Calculate **average outcomes per patient** to compare strategies.

3. Perform Cost-Effectiveness Analysis

- Compare strategies based on **expected costs and effectiveness**.
- Identify the preferred strategy using **Cost-Effectiveness Analysis (ICER/NMB)**.

4. Build and Analyze Markov Models

- Build **Markov models** to represent **disease progression over time**.
- Add key **health states** and **events** to the model structure.
- Review how patients progress over time using **Cohort Analysis**.
- Build and analyze a Markov model in a **hands-on exercise**.

5. Assess Uncertainty with Sensitivity Analysis

- Study the impact of **individual parameter uncertainty** on model results.
- Identify which parameters have the greatest impact using **Tornado Diagrams**.

6. Assess Uncertainty with Probabilistic Sensitivity Analysis (PSA)

- Evaluate the **combined impact of parameter uncertainty** to assess confidence in your model results.

7. Determine a Cost-Effective Price with Threshold Analysis

- Explore how changes in price affect cost-effectiveness and determine the maximum price that meets cost-effectiveness thresholds.