Design Your Markov Model

Capstone Exercise 5

Objectives

- Use your decision problem, strategies, and decision tree from slides 3, 4, and 5
- Determine the health states of the decision problem

  > *These become your Markov states*

- Determine the transitions

  > *Which state(s) does your population move in and out of? Is there an order?*

- Determine parameters
  - Population – who?
  - Cycle length – how long does it take to move through the states?
  - Time horizon – how far into the future?
  - Probabilities (fill these in later)

Deliverables

- Create slide for final presentation that displays your decision problem as a Markov schematic
- Slide 6 – bubble diagram graphic, parameter table headers, transition matrix framework

> Your draft bubble diagram should indicate the various health/intervention states and directional pathways between states.

The parameter table should list the parameters needed to define and run the model – ages, costs, utility weights, time horizon – it does not need parameter estimates yet.

Use the transition matrix to define the health/intervention states that the population can move between – probability estimates are not needed yet