## **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