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## Section C

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Basic Cost-Effectiveness Concepts

# What is Cost-Effectiveness?

- An analysis comparing the costs and effects of multiple policies, programs, or treatment options, in a way that clearly indicates how much more we have to spend to obtain better health results

# Outline

- Bigger picture elements
- Multiple types of analysis
  - Cost-effectiveness is just one of them
- Basic terms
- Other types of analysis
- Comparative effectiveness and cost-effectiveness

# Bigger Picture

- Cost-effectiveness is one type of economic evaluation
- Economic evaluation includes cost-effectiveness, cost minimization, cost-consequence, and cost-benefit
  - All can be used to inform policy

# Terms

- Incremental cost-effectiveness analysis
- Health utility

# Incremental Cost-Effectiveness Analysis

- Assess a unit price for health improvements
- Change in price divided by change in outcome
- If the outcome is quality adjusted life years (QALYs) we have a cost-utility analysis
- If it is difficult to find a single outcome that summarizes the effect of a program, we can perform a cost-consequence analysis
- Is there an easy way to summarize the effects of obesity?

# Health Utility

- A measure of the willingness to trade off years of life or accept a risk of death to achieve “perfect health” instead of a less than optimal health state
  - Ask about this using a time tradeoff
  - Ask about this using a standard gamble
- Standard instruments
  - EuroQOL (EQ5D), Health Utilities Index Mark 3 (HUI3), Quality of Well Being
  - Understand that there are different domains of health and different weights in each instrument



## Other Terms

- Cost-benefit analysis
- Cost-consequence analysis

# Cost-Benefit Analysis

- All costs and all benefits are measured in dollars
  
- Some are obvious
  - Medical care utilization
  - Avoided utilization
  - Value of lost productivity
  
- Some are not so obvious
  - Well-being of individuals

# Cost-Consequence Analysis

- Think of buying a computer or a car
  - What characteristic do you consider—reflect and pair up and then bring to the group
- There is price and a bunch of characteristics for which each of the alternatives may be better or worse
- If one is better on all non-price characteristics and lower on price then it is the obvious choice, but things don't necessarily work out like that
- Individuals have to apply their own relative weights and criteria for making a decision

# Cost-Effectiveness vs. Comparative Effectiveness

- In the United States, the primary focus of comparative effectiveness is on the comparison of the effects of programs, policies or treatment options
  - In the United States, the primary focus of comparative effectiveness is NOT on cost