

E: Buying information

Uncertainty analysis application:

- May be useful to buy information to reduce uncertainty.

Previous Medicaid example:

Current approach (C):

- Focus on health care only
- Cost = \$20 M
- Benefit = \$100 M

Proposed alternate approach (A):

- Integrated delivery of health care and other services
- Cost = \$40 M
- Benefits uncertain:

Probability	State	Benefit
40%	Succeeds and works well (S)	\$200M
60%	Does not work well (F)	\$60M

Conclusion was to stick with C

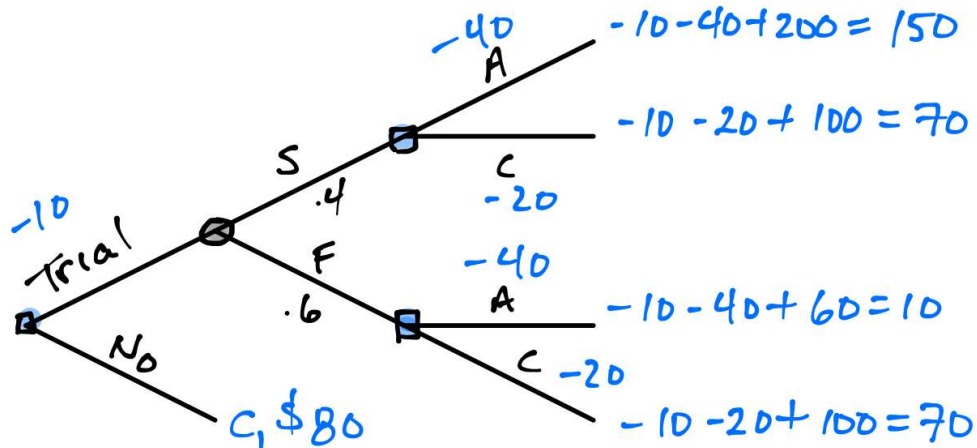
Extension:

Suppose possible to run a trial of policy A:

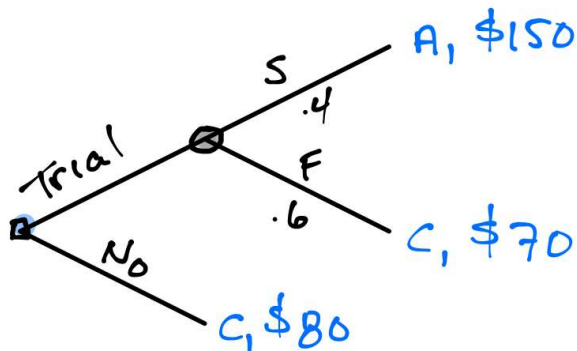
- Trial would cost **\$10 M**
- Would show whether **S** or **F** would occur
- Same S, F probabilities as policy
- Could then choose C or A **after** result known

Revised tree:

Decision about trial is now first:

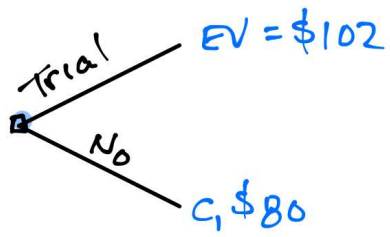


Evaluating the two right-most nodes:



Evaluating the new right-most node:

$$EV = 0.4 * 150 + 0.6 * 70 = 102$$



Conclusion:

Conduct the trial: EV is \$22 million higher than C

Exercise on GC