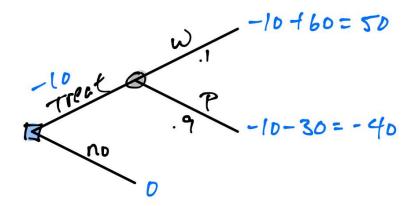
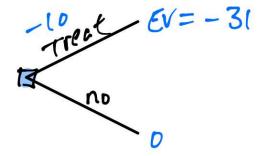
Solution: Value of information

Part 1: Treat or do nothing?

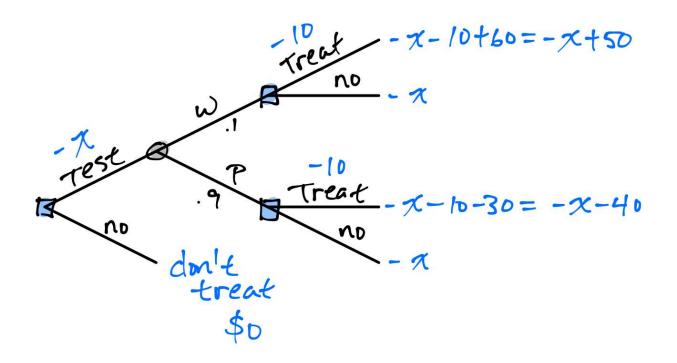


$$EV = 0.1*50 + 0.9*(-40) = -31$$

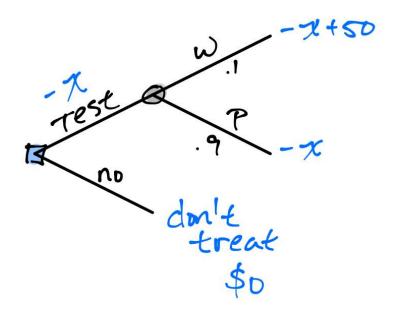


Conclusion: would not treat

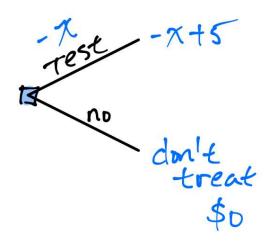
Part 2: Test or not?



Simplifying the right nodes:



$$EV = 0.1*(-X+50) + 0.9*(-X) = -X + 5$$



Conclusion: maximum WTP (X) is \$5k