Stat 536 Final Exam:
Oregon Health Insurance Experiment

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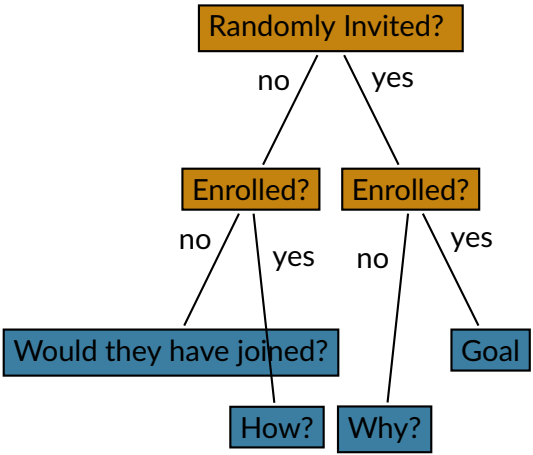
The 2008 Oregon Health Insurance Experiment



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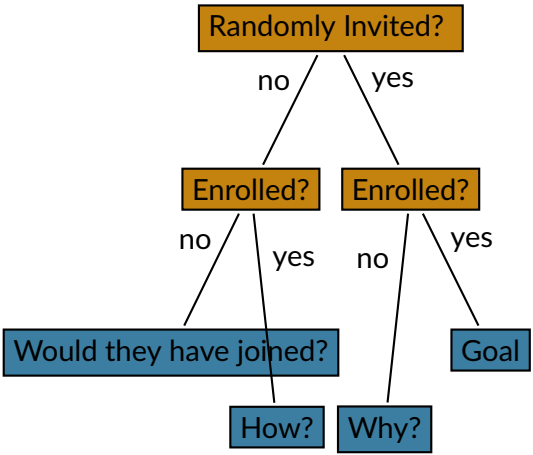

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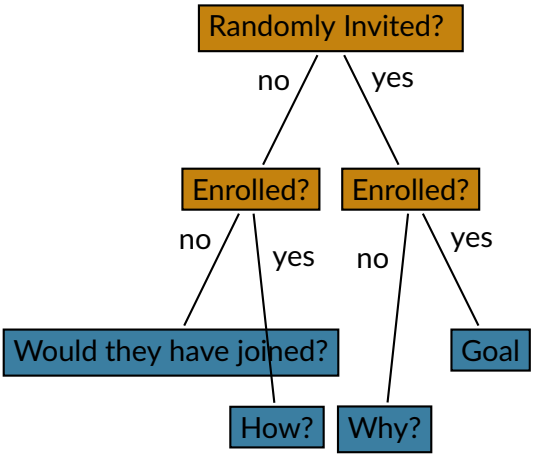

- Expanded their Medicaid coverage by randomly selected 30k names from a waitlist of 90k.
- Not everyone who won the lottery (got invited) joined Medicare.
- Those who don't join Medicaid include two groups
  - Uninsured
  - Privately insured through a job, etc.

Oregon Health Insurance Experiment

- Audience: the director of OHIE's Medicaid expansion
- Goal: an interpretable model and a very-accurate model
- Research questions:
  - How accurately can we forecast participation in Oregon's Medicaid program? How much accuracy do we sacrifice if use an interpretable model instead of a more-complex model?
  - What does the interpretable model tell us? In other words, what "rules of thumb" do we know about who is likely to participate in this current program?
  - Who does this program not work well for? i.e. who is not joining even when invited, and likely not insured otherwise?

Covariates $\mathbf{x}_i$

- Continuous covariates:
  - Age
  - Household income as percent of poverty level

- Categorical covariates:
  - Number of other household members on application (0/1/2)
  - Race/Ethnicity (Black/Hispanic/White/other)
  - Female (yes/no)
  - English materials preferred (yes/no)
  - Signed self up (yes/no)
  - Provided phone number (yes/no)
  - Address is P.O. box (yes/no)
  - Signed up first day (yes/no)