

# The Science of Screening

Increasing the Understanding of  
Clinicians and the Public

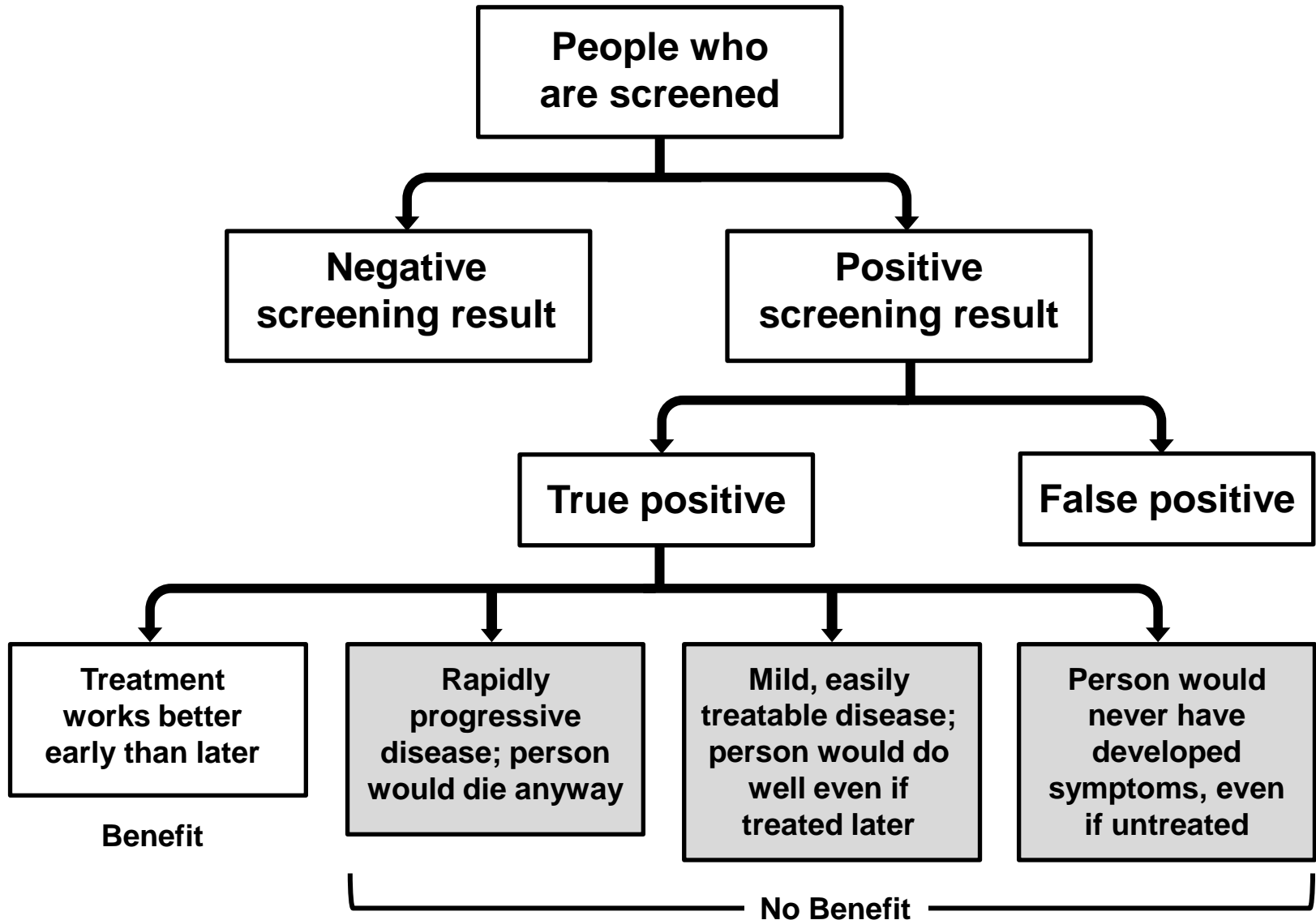
# Primary Care in Transition

- 1. Providing more information; helping patients make better decisions and prioritize
- 2. Focus on value: getting more health for the health care dollar

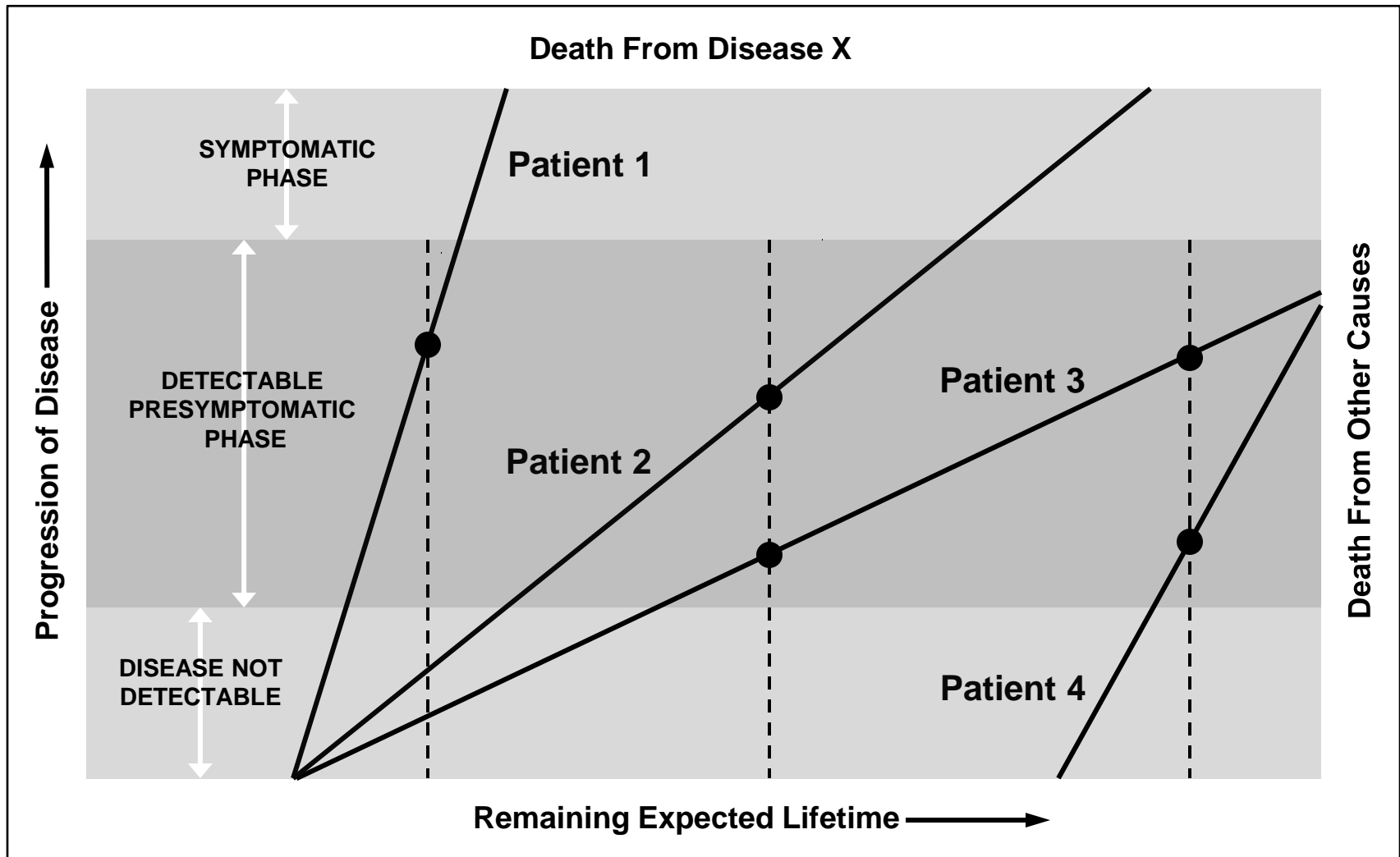
# Agenda

- Giving information about science of screening, helping patients make better decisions and prioritize
  - A few points about the science of screening
- Focus on Value
  - A Value Framework for Cancer Screening
    - Ovarian cancer screening
    - Stopping age for breast cancer
- Bottom line: improving understanding

# The Screening Cascade



# Cancers are Heterogeneous



# Value Framework

- Doesn't try to find every cancer, but rather seeks to find the screening strategy that best balances benefits on the one hand with harms and costs on the other.

# Ovarian Cancer

- Difficult problem
- Screening doesn't work well for some problems
- Randomized controlled trial:
  - No benefit
  - Causes harms
  - Costs money

# Ovarian Cancer

- Solution for clinicians (help people prioritize):
  - Handout for patients about low value screening, offer to discuss
  - Otherwise, don't bring it up, be ready to discuss if asked
  - Many other issues to discuss



# Stopping Age for Breast Cancer Screening

- Incidence and mortality mostly go up with age
- Probability of benefit is 2 in 1,000 at 16 years after 5-10 years of screening
- Probability of at least 1 false positive is over 50%
- Probability of overdiagnosis when screening at age 70 is greater than 10/1,000
- Our tools for determining life expectancy are crude

# Stopping Age for Breast Cancer Screening

## Solution for Clinicians

- 1. Stop at age 70 if healthy; stop earlier if have severe competing risk of another condition.
- 2. Discuss overall screening plan at age 40, including stopping age; continue to bring up stopping age as implement screening plan
  - Handout about low value screening
  - Discuss how focus of screening/prevention changes with age

# Helping Clinicians and the Public Understand Screening

- Messages:
  - Sometimes less is more.
  - Screening can harm you.
  - Finding cancer earlier is not always a good thing.
  - Overuse of screening is one of the reasons your health insurance premiums are so high.
  - Look at “Choosing Wisely”
- Bottom line: It will take awhile.

# References

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