

Aim 3 times and cut once: Will 67% be a passing mark?

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Main points

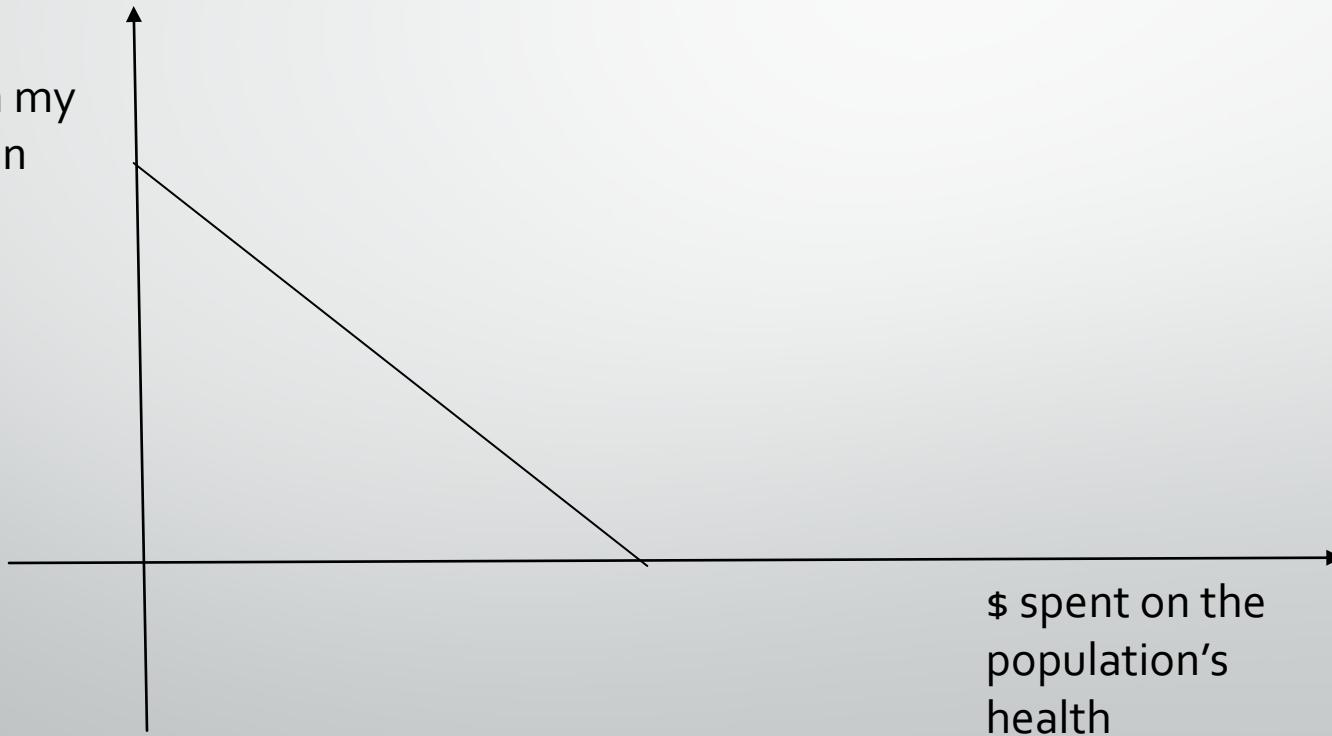
1. Healthcare decisions often involve other considerations besides health
(e.g., equity, hope, will of motivated minority of patients)
2. Current work on opportunity cost ahead of its time
3. No one shares the same objectives (priorities)

Define triple Aim

- PAT: ↑ the patient experience of care (including quality and satisfaction);
- POP: ↑ the health of populations; and
- COST: ↓ the cost of health care.

Opportunity cost

\$ spent on my satisfaction



\$ spent on the population's health

Example

Health Econ. 2012 Mar;21(3):238-51. doi: 10.1002/hec.1704. Epub 2010 Dec 28.

Willingness-to-pay for predictive tests with no immediate treatment implications: a survey of US residents.

Neumann PJ, Cohen JT, Hammitt JK, Concannon TW, Auerbach HR, Fang C, Kent DM.

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Abstract

We assessed how much, if anything, people would pay for a laboratory test that predicted their future disease status. A questionnaire was administered via an internet-based survey to a random sample of adult US respondents. Each respondent answered questions about two different scenarios, each of which specified: one of four randomly selected diseases (Alzheimer's, arthritis, breast cancer, or prostate cancer); an ex ante risk of developing the disease (randomly designated 10 or 25%); and test accuracy (randomly designated perfect or 'not perfectly accurate'). Willingness-to-pay (WTP) was elicited with a double-bounded, dichotomous-choice approach. Of 1463 respondents who completed the survey, most (70-88%, depending on the scenario) were inclined to take the test. Inclination to take the test was lower for Alzheimer's and higher for prostate cancer compared with arthritis, and rose somewhat with disease prevalence and for the perfect versus imperfect test [Correction made here after initial online publication.]. Median WTP varied from \$109 for the imperfect arthritis test to \$263 for the perfect prostate cancer test. **Respondents' preferences for predictive testing, even in the absence of direct treatment consequences, reflected health and non-health related factors, and suggests that conventional cost-effectiveness analyses may underestimate the value of testing.**

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Important invisible work

- “The most relevant threshold is estimated... to be £18,317 per QALY.”
 - Claxton et al. (2013)
- What does that mean for a drug with an ICER of \$183,170 per QALY?
- Opportunity cost, a foregone or long gone conclusion?

then fund treatments based on this (e.g., if the ICER $< \lambda$ for that particular disease) (22)
This idea has been sharply contested on theoretical grounds (23):

Hoch, Briggs, and Willan (2002) note the crucial role of λ in determining solutions to the constrained maximization problem facing decision-makers but suggest that this may be overcome ‘if the decision maker can be assumed to know λ .’ But how do decision-makers determine λ ? Have they developed or discovered a scientific approach that does not require information on the incremental costs and benefits of all programs? Do they have a solution to the problems of indivisibilities and nonconstant returns to scale in programs? Or is this simply a convenient (albeit invalid) way for analysts to deal with the problem they are unable to solve for themselves?

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Different objectives

	Patients / MDs	Health Care Payer	Academic Economists
Optimize	max PAT/MD utility	min COST	max POP health
Subject to	POP health	POP health	COST
Lower priority	COST	PAT	PAT

Main point

- 2/3 of the Triple Aim is possible on a good day, unless objective functions align (e.g., delisting an expensive drug with serious side effects).
- Even using CEA will not reduce costs; it will simply help us spend our money more efficiently.



IMPOSSIBLE

Who says nothing is impossible?
I have been doing that the whole day!!!