Case Study #1: Patient and Provider Targeted Strategies for De-Implementation

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Conflicts of Interest

- I have no conflicts of interest.
- Opinions are my own.

Agenda

- Rationale for patient and provider strategies
- Options for patient and provider strategies
- Effectiveness of patient-targeted strategy
- Effectiveness of provider-targeted strategy
- Challenges for de-implementation

Rationale

- To be effective, interventions to reduce overdiagnosis must change decisions at the level of the individual patient-provider interaction.
- One hypothesis is that decisions for over-testing (and thus over-diagnosing) are driven by the patient.
- Another hypothesis is that these decisions are driven by the provider.

Options for Interventions Targeting Patients or Providers

(Could be based on a service or a population; Colla C NEJM 2014)

- 1. Education/Information
  - Shared decision-making
  - Decision aids
  - Public education campaigns (Choosing Wisely)
  - Groups of providers working together
  - Guidelines, provider report cards
- 2. Incentives, Disincentives, and Behavioral Economics
  - Financial (e.g., value-based insurance design, P4P, risk sharing)
  - Public reporting for providers or provider groups
  - Prior authorization or other barriers
  - Delayed decisions
  - Nudges; framing

Patient-Targeted Strategy: Education

(Sheridan SL et al. JAMA Int Med 2016)

- RCT with 4 arms, patients ages 50-85
- One page decision support about 3 non-recommended services, just before provider visit, in 4 different formats
- Services: PSA screening (men ages 50-69); osteoporosis screening (low risk women ages 50-64); CRC screening (ages 76-85)
- Formats: words, numbers, numbers + narrative, numbers + framed presentation

Patient-Targeted Strategy

- RCT results:
  - Little change in intention to be screened from baseline (high intention at baseline)
  - No difference among formats or services
  - Improved screening knowledge and in perceived net benefit of screening

Patient-Targeted Strategy: Education

(Stacey D et al. Cochrane Database 2014)

- Cochrane Systematic review, 2014: Decision aids for people facing health treatment or screening decisions
  - 115 studies involving 34,444 participants
  - DAs resulted in lower decisional conflict; reduced passive people; some studies showed improved communication and satisfaction
  - DAs have a variable effect on choices (e.g., small negative effect on PSA screening)

Patient-Targeted Strategies: Effectiveness

- Education/information: Small, if any, effect on actual behavior; may be necessary but not sufficient
- Incentives: Uncertain; concern that, if not designed carefully, could reduce appropriate care/testing as well as inappropriate

Provider-Targeted Strategy: Guidelines

(Snyderman AL et al. JAMA Int Med 2016)

- Patients diagnosed with cancer (2004-2011)
- SEER-Medicare database (large cohorts)
- Variation among providers in use of non-recommended services/testing; overuse ranged from 14% for one service to 41% for another
- Strong association between a patient receiving a non-recommended service and whether a prior patient received the same service
- Suggests strong effect of “practice style”

Provider-Targeted Strategy: Choosing Wisely (Charlesworth CJ et al. JAMA Int Med 2016)

- Oregon claims database for Medicaid and commercially insured people for 2013
- 13 measures of low-value care from Choosing Wisely and NICE
- 14.9% of Medicaid and 11.4% of commercially insured people had at least 1 low-value service in 2013
- Low-value services for Medicaid and commercially insured people were strongly associated, suggesting local practice patterns

Provider-Targeted Strategies: Effectiveness

- Need further study, especially on incentives and behavioral economics interventions.
- Neither guidelines nor public education (even through professional associations) alone appear to be more than marginally effective.
- Financial incentives such as QOF in UK appear to have limited effectiveness for increasing care.

Challenges for Patient and Provider-Targeted Strategies

- Culture – for both patients and providers
  - Idea of “awareness”; idea of “high risk”; disease terminology; more is better; earlier is better; fear of missing a diagnosis; desire for labeling
- Financial incentives for a single service may be complex to define – trying not to reduce appropriate care.
- Malpractice concerns for physicians in USA
- Psychology: losing something you are already doing (confirmation bias, loss aversion, the affect heuristic)

Challenges for Patient and Provider Targeted Strategies

- Measurement: needed for assessment of extent of over-testing and for monitoring
  - We need a list of services that should not be done for specific groups; few evidence-based lists are available. (USPSTF is pulling back; Choosing Wisely is not strongly evidence-based.)
  - To determine appropriateness of testing for individual patients, one needs nuanced clinical information. This is complex and usually not available.

Thank you