



Building Evidence for Clinical Preventive Services: VA Reflections as Funder and Consumer

David Atkins, MD, MPH

Some Unique Perspectives on Prevention from VA

- As an integrated health care system with nation EHR, we do a good job at delivering A & B recommended services
 - High levels colon cancer screening, alcohol screening, smoking cessation, etc.
- Delivering services at scale can be a challenge
 - We are acutely aware of burden on primary care teams of reminders and prompts
- Electronic health record with 9 million Veterans may offer unique opportunities for addressing certain evidence gaps
- Where needed, VA will invest in large, definitive, national trials
 - CONFIRM study: 50,000 Veterans randomized to colonoscopy vs. annual Fecal Immunochemical Testing (FIT) by 2017
 - Being followed for 10 years to assess cancer incidence and mortality
 - PIVOT trial: Surgery vs. watchful waiting for low-risk prostate cancer

How Big a Problem Are I Recommendations?

- 46 different I recommendations
 - Counseling (6), Screening (35), Preventive medications (5)
- Of 46 I recommendations, 20 reflect a subpopulation of an intervention that has been judged effective (B recommendation) or ineffective (D recommendations) for a different population
- Example: Statins for primary prevention in patients with 10-year risk of heart disease 10%
 - Age 45-74 – B recommendation
 - Age 75+ -- I recommendation
- Example: Screening for gonorrhea and chlamydia
 - Sexually active women age 24 and younger: B recommendation
 - Sexually active men: I recommendation

Problems With I Recommendations

- Multiple ways to I recommendations:
 - Limited effectiveness of interventions (e.g., tobacco cessation in teens, cognitive impairment in seniors, suicide screening)
 - Questionable value of earlier intervention (vision screening in older adults)
 - Conflicting evidence of existing studies (calcium/vitamin D for fracture prevention)
 - Limited treatment evidence in lower-risk subgroups (AAA screening in women, osteoporosis in men)
 - Subclinical vs. clinical endpoints (glaucoma treatment, osteoporosis treatment in men)
 - Variable impact of screen detected disease (thyroid dysfunction, iron-deficiency)

How Does VA Consider Priority Gaps as a Funder

- Is this an important problem for our population?
- Is this an intervention that we can deliver at scale if effective?
 - Feasible to deliver in primary care
 - Follow-up protocols clear
 - Downstream consequences manageable (e.g., lung cancer screening challenges)
- Is the VA a logical place for a trial ?
- Could VA population-based EHR data answer the question without a prospective RCT?
 - Prospective cohorts studies to identify effects on clinical endpoints
 - Is there sufficient variation in use of a service to compare high and low use populations?
 - Does the initiation of a new service allow a “natural experiment” to determine potential benefits, downstream consequences – e.g. screening for suicide risk with predictive risk score

Random Observations on Reducing I Recommendations

- Few of the current I's are going to be addressed with definitive screening trials.
 - Definitive trials (screening and prevention) with clinical outcomes are expensive
 - Remaining screening targets are not likely to have large effect sizes
- If we considered provider burden, we might conclude the downside of screening outweighs any likely benefit for some I's .
- In other cases, better studies of natural history, burden of disease, targeted populations at risk, or downstream consequences may allow greater extrapolation from populations where evidence exists (e.g., AAA in women)
- Some screening tests could end up becoming part of a more effective self-administered H&P