What Make Comparative Effectiveness Data Compelling?

Barbara J. McNeil, M.D. Ph.D
Harvard Medical School

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Question and Answer

▪ Q: What make data compelling, regardless of the source?

▪ A: Their strength, reliability and generalizability—no short cuts here
Outline

- Where have good data been used?
- Why aren’t “good” data always used?
- What should our expectations be with Comparative Effectiveness Research (CER)?
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- Why aren’t “good” data always used?
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Use of Beta Blockers after AMI over Time

Delays: Use of Beta Blockers over Time

9 years to saturation

Lee, TH. NEJM 2007; 357: 1175

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Taxanes in Breast Cancer
Recommended by NICE

Orlistat for Obesity: Initially Recommended by NICE

- **Adjusted orlistat PACT data**
- **Fitted line from estimated model**

Guidance brought in Mar 2001

Logarithm of patient months (adjusted)

Mar 99, Jun 99, Sep 99, Dec 99, Mar 00, Jun 00, Sep 00, Dec 00, Mar 01, Jun 01, Sep 01, Dec 01

Month
Drugs for Alzheimer’s Disease: Recommended

http://guidance.nice.org.uk/TA19
Outline

- Where have good data been used?
- Why aren’t “good” data always used?
  - Delays in going from info to guidelines
  - **Patient factors**: choice, trust in MD, cost
  - **Physician factors**: patient comorbidities, ignorance, reasoning patterns, biases/preferences
  - **Hospital factors**
- What should we do when data are questionable?
Patient Factors: Choice
Patient Factors: Choice as Assessed by Focus Groups

- “Everything my doctor prescribes is right”
- “Published guidelines are too inflexible for me”
  - “they cripple medical advantage”
- “More care is always better”
- “More costly care is better”

More data will not help here
Patient Factors: Cost
Patient Factors: Money (Likelihood of Prescribing or Taking Medical Rx for Osteoporosis)

Data from Sinsky et al. JGIM 2007; 23: 164
Physician Factors

- Personality and style of reasoning
- Experience
Observation: Physician styles of thinking and prescribing can “trump” data and guidelines
- MDs who score high on “intuitive thinking” or “experiential” styles act independently
- MDs with “rational” style follow guidelines

Conclusion: Education of MDs with rational thinking must coincide with production and hopeful use of new data
Hospital Factors

- Even with convincing data on AMI, some hospitals don’t use data because (e.g., Beta blockers* or chemo agents**):
  - No goals for improvement*
  - No/little administrative support*
  - No strong MD leadership*
  - Little or poor feedback*
  - Limited experience (e.g., with side effects)**
  - Different preferences for near vs. long term effects**

*Bradley EH et al. JAMA 2001; 285: 2604-2611
**Yet RWF et al. JCO 2007; 25: 3251-3258
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**Answer:** muted unless...
Requirements for CER

 Unimpeachable evidence with attention to all possible misgivings of users regarding data
 Development of educational approaches for physicians when data are appropriate
 Help with development of infrastructure at point of care
 Belief that there is reasonable “value” for money

But, that’s not all…
WHEN DID IGNORANCE BECOME A POINT OF VIEW?

A DILBERT BOOK
BY SCOTT ADAMS