

What Make Comparative Effectiveness Data Compelling?

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

Health Industry Forum June 24, 2010



Question and Answer

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

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



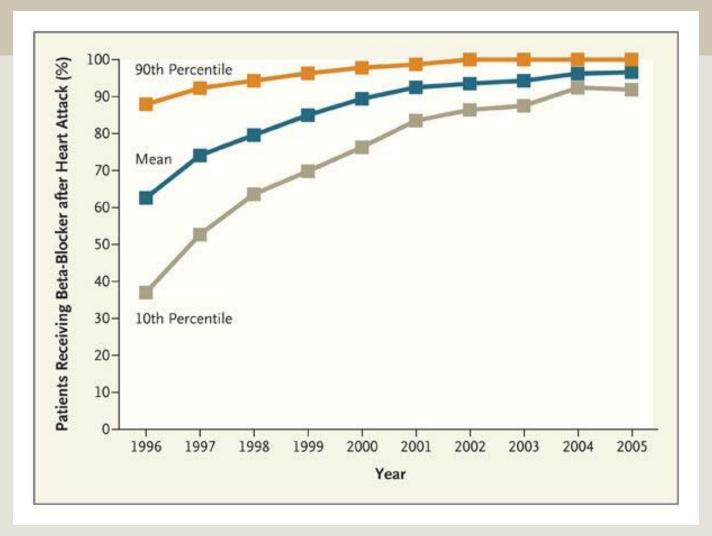
- Where have good data been used?
- Why aren't "good" data always used?
- What should our expectations be with Comparative Effectiveness Research (CER)?



- Where have good data been used?
- Why aren't "good" data always used?
- What should our expectations be with CER?

Use of Beta Blockers after AMI over Time

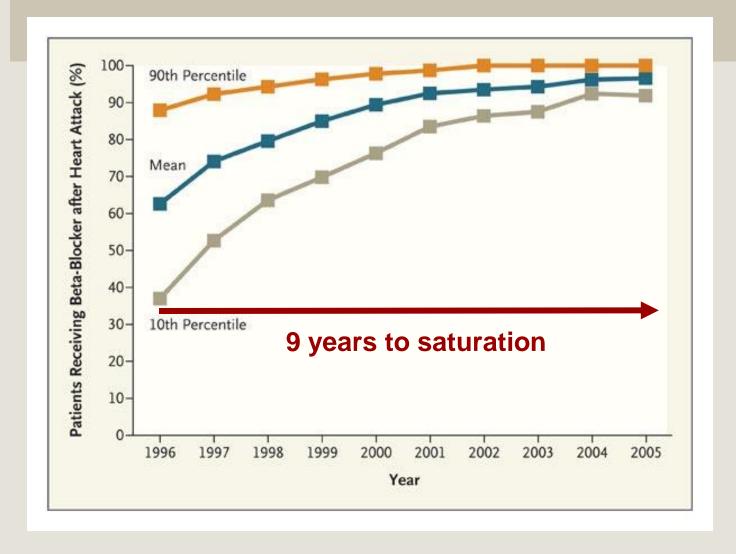




Lee T. N Engl J Med 2007;357:1175-1177

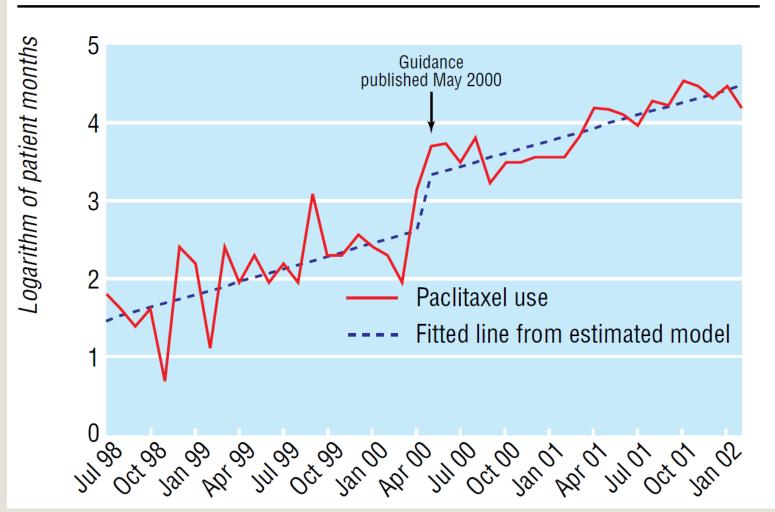
Delays: Use of Beta Blockers over Time







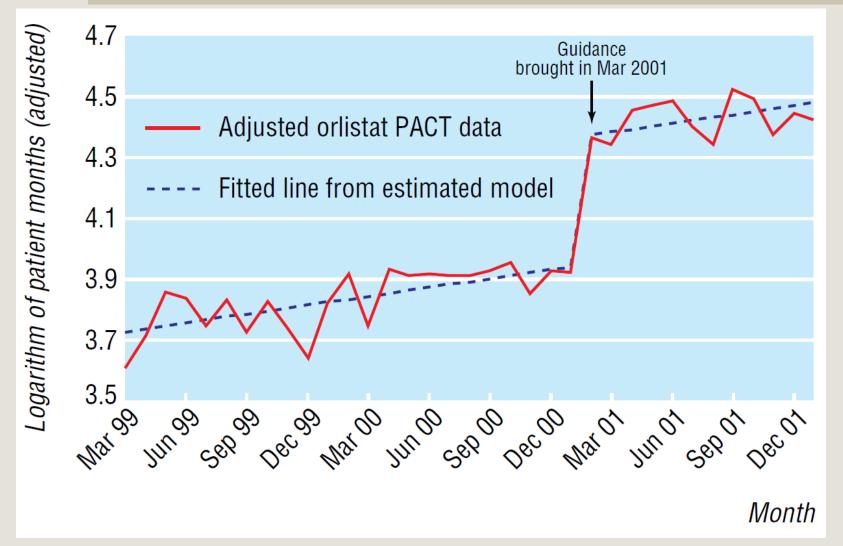
Taxanes in Breast Cancer Recommended by NICE



Sheldon TA et al. BMJ 329: Oct 30, 2004; http://www.nice.org.uk/guidance/index.jsp?action=article&o=32231; http://www.nice.org.uk/nicemedia/live/11778/43414/43414.pdf

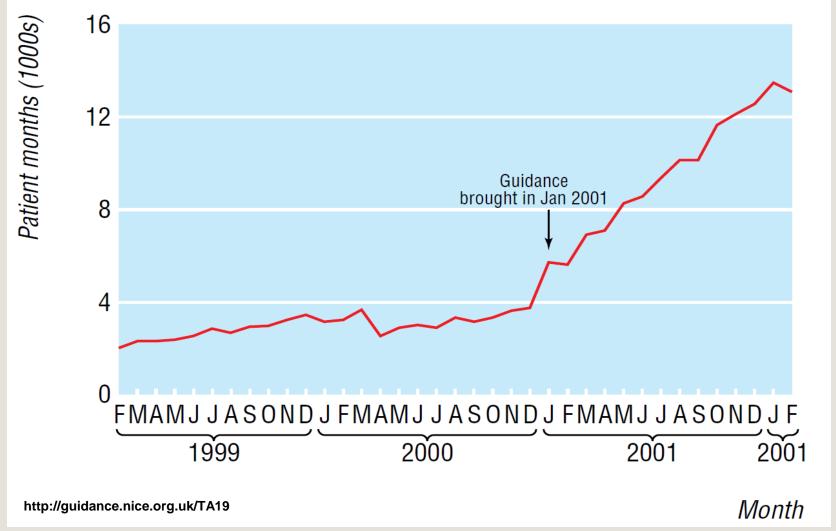


Orlistat for Obesity: Initially Recommended by NICE





Drugs for Alzheimer's Disease: Recommended





- 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

HARVARD MEDICAL SCHOOL

Patient Factors: Choice as Asssessed 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"



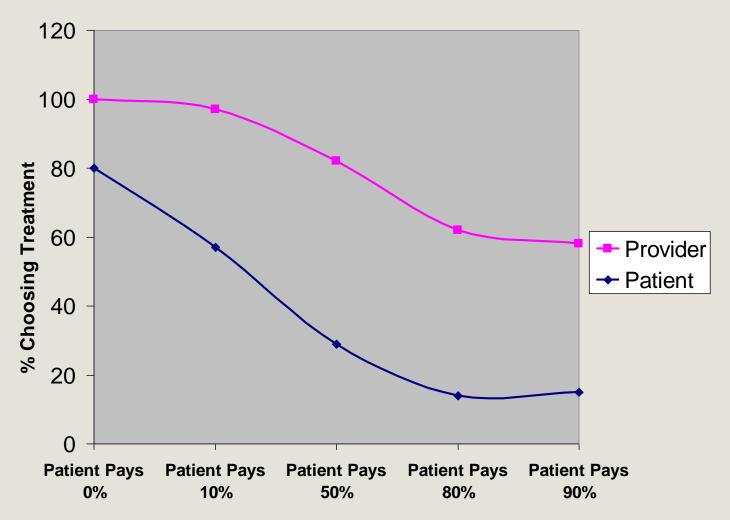
More data will not help here



Patient Factors: Cost

Patient Factors: Money (Likelihood of Prescribing or Taking Medical Rx for Osteoporosis)







Physician Factors

- Personality and style of reasoning
- Experience



MD Experiences in F/U of Patients with Acute Coronary Syndrome

- 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**



- Where have good data been used?
- Why aren't "good" data always used?
- What should our expectations be with CER?

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...



