Comparative Effectiveness >A vs. B

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Genomic Medicine Centers Meeting 3

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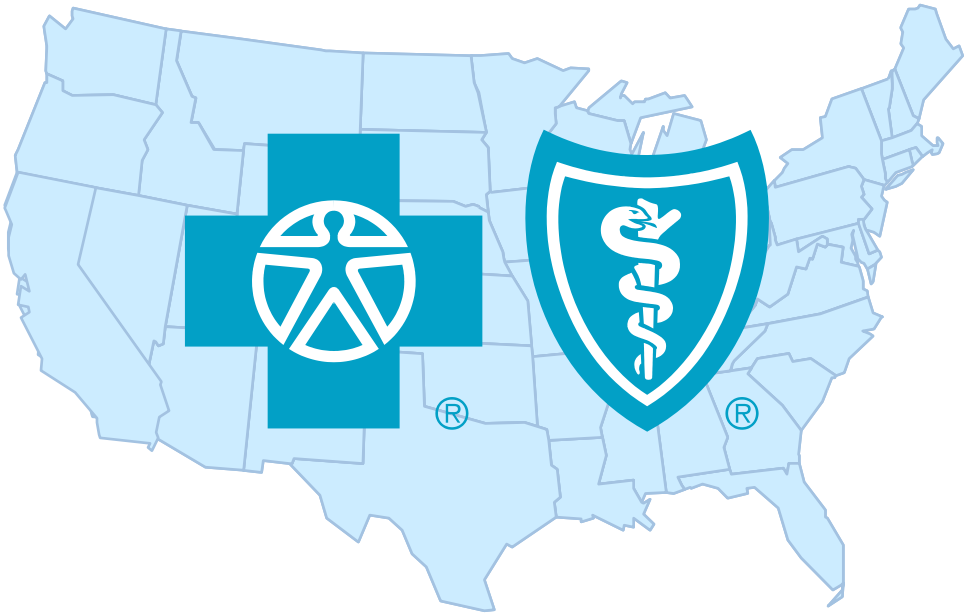
Overview

- BCBSA Technology Evaluation Center (TEC) Perspective
- Déjà vu All Over Again
- Comparative Effectiveness
- Cost in Comparative Effectiveness

Blue Plans Cover Every Community in the Nation



- 38 Blue Cross and/or Blue Shield Plans
- 100 million members
- Contract with 90% of hospitals, 80% of doctors
- 5-million member FEP Program – Largest private health insurance product in world
- Largest processor of Medicare claims in the nation
- 1985 Technology Evaluation Center (TEC)

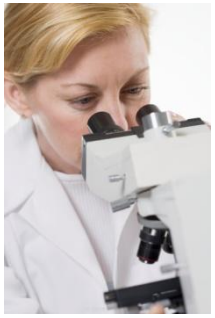
Technology Evaluation Center (TEC)

- Rigorous assessment of clinical evidence, systematic review with quality appraisal: Does this technology improve health?
- Independent, expert Medical Advisory Panel
- TEC Assessments 3-year inventory at ***(www.bcbs.com/tec)***
- Medical Policy Reference Manual (MPRM): a confidential and proprietary inventory of approximately 350 evidence-based policies, updated annually, that is offered to support Blue Plans' operations*
- Dedicated professional staff
- Agency for Healthcare Research and Quality (AHRQ) Evidence-based Practice Center ***(www.ahrq.gov)***
- AHRQ Comparative Effectiveness Research EPC cancer and infectious disease

*Note: Each Plan, acting independently, may adopt the MPRM, in whole or in part, modify it, or reject it, in making that Plan's own medical policy decisions.

Technology Assessment Supports Health Plans and Other Stakeholders in Developing Evidence-based Policies

Tec



Medical Policy

- Based on scientific evidence
- Costs and coverage NOT considered

Coverage Policy

- Determined by purchasers of health plan products
- Cost effectiveness considered

Payment Policy

- Contract between health plans and medical professionals and providers

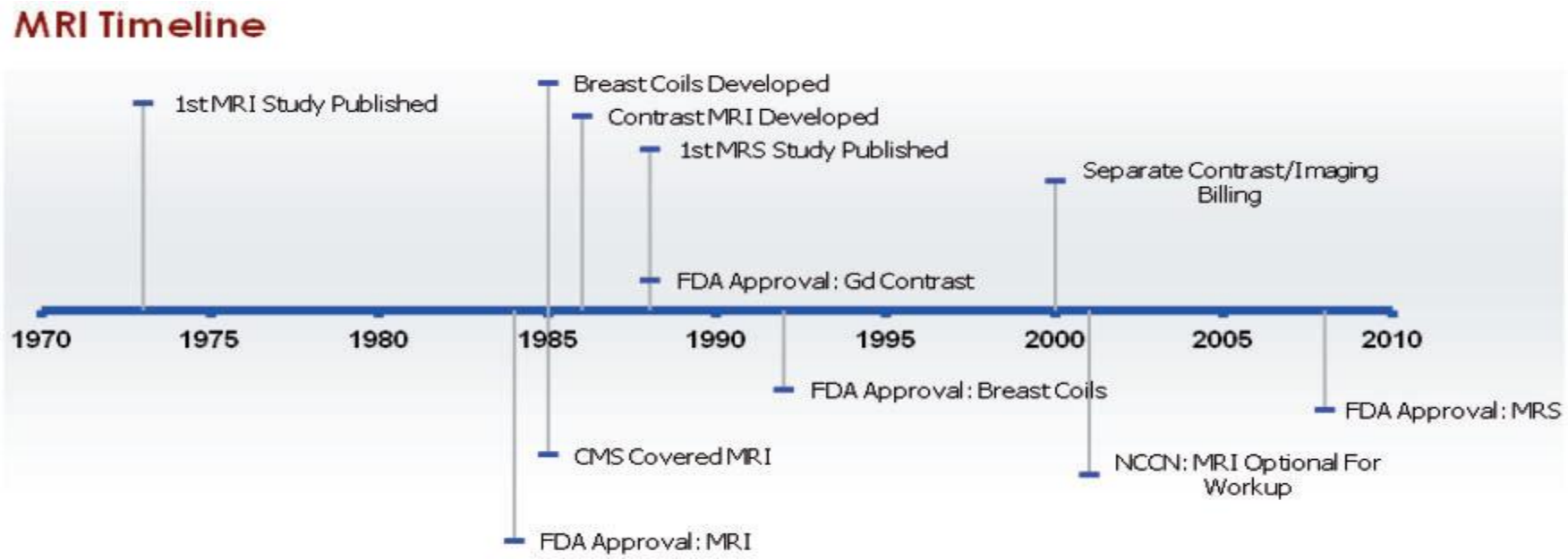
Déjà vu All Over Again

Diagnostic Model a Continuum for Efficacy

	Paraphrased
• Level 1: Technical efficacy	Pretty Picture
• Level 2: Diagnostic accuracy efficacy	Improved Accuracy
• Level 3: Diagnostic thinking efficacy	Improved Diagnosis
• Level 4: Therapeutic efficacy	Improved Treatment
• Level 5: Patient outcome efficacy	Improved Health
• Level 6: Societal efficacy	Improved Efficiency

Fryback & Thornbury (1991) Med Dec Making, 11:88-94

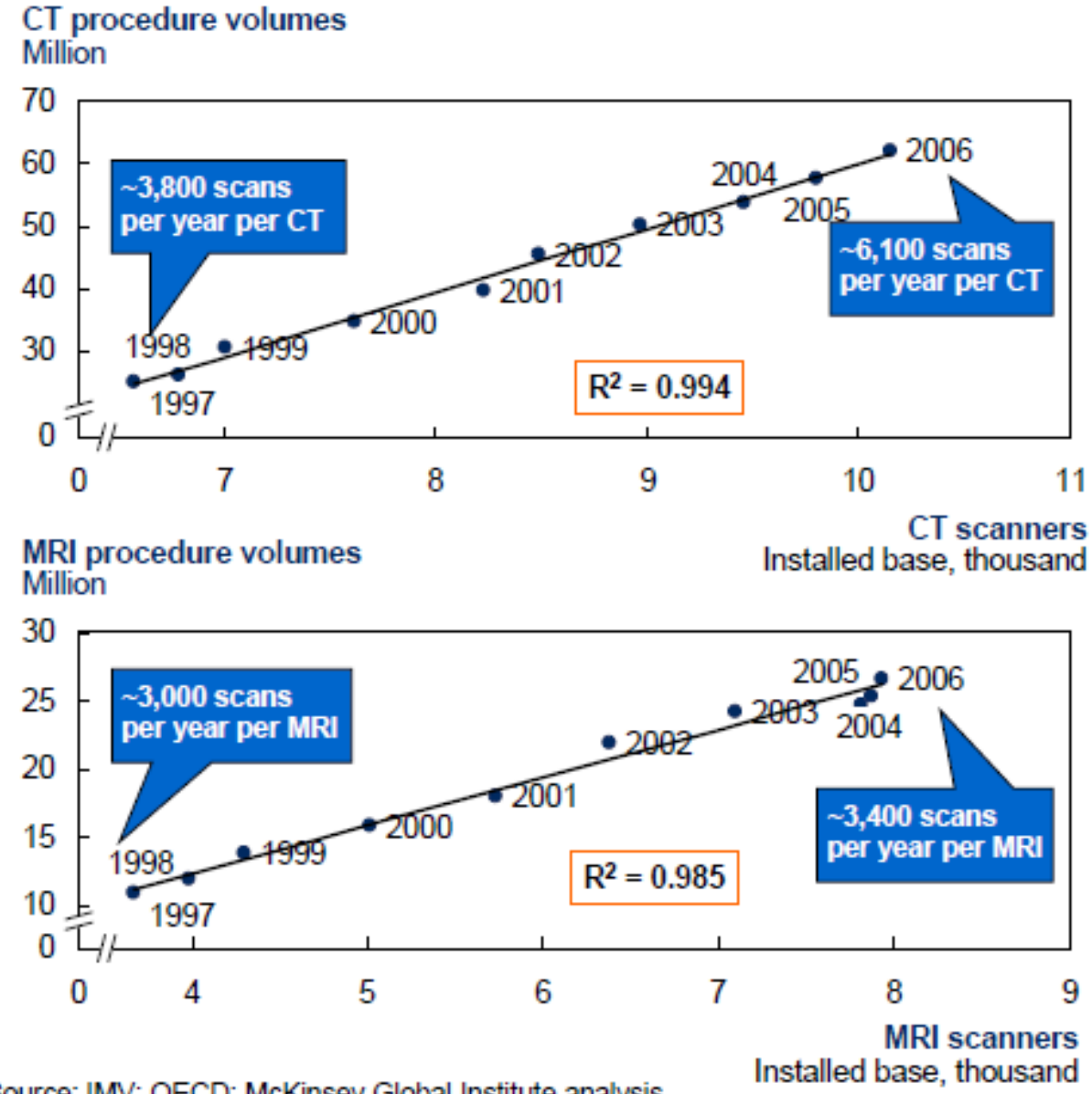
Emergence of Diagnostic Imaging Technologies in Breast Cancer



"Utilization of new imaging technologies is driven by regulatory approval and reimbursement by payers rather than evidence that they provide benefit to patients."

LS Gold, G Klein, L Carr et al. the emergence of diagnostic imaging technologies in breast cancer. *Cancer Imaging* (2012) 12, 13-24.

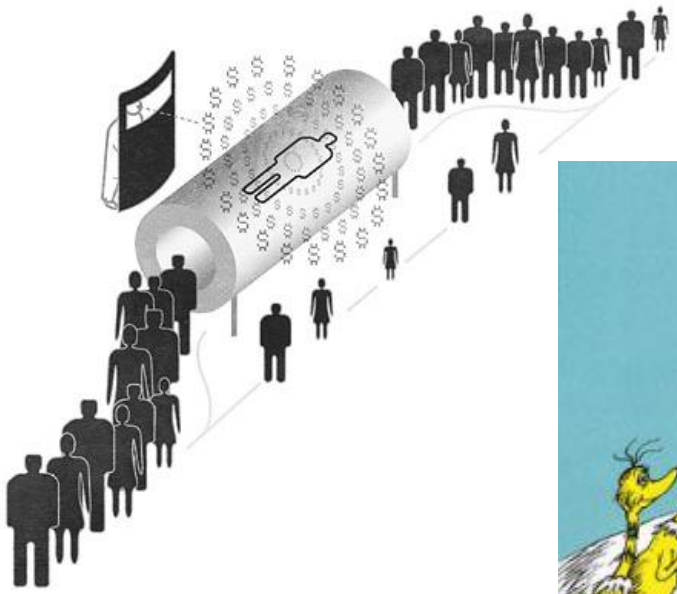
The number of scans has risen along with capacity



- Demand grows in lockstep with a larger installed base
- Improvements in technology result in even greater scan volume per MRI/CT
- Despite increasing supply, Medicare reimbursements grew at 1 percent a year over this period

Source: IMV; OECD; McKinsey Global Institute analysis

Medical “Seussonomics”



Thanks to Peter Bach

Diagnostics, Prognostics, Agnostics

- Patient-centered vs. technology -centered: focus on the clinical decision
- Test results: definitive, suggestive, additive?
- Clinical management strategies are the context; tests and treatments the components
- Diagnostic performance triggers a cascade of consequences; good and bad
- Diagnostic test results are intermediate outcomes
- Treatment outcomes are direct, but also mediated by operator skill, health delivery system, patient adherence

Comparative Effectiveness > A vs. B

Comparative effectiveness addresses strategies to manage a condition, taking into account real-world practice and variations in patient populations.

Institute of Medicine national priorities for comparative effectiveness research

(*http://www.hhs.gov/recovery/programs/cer*)

100 priority topics

- Half compare the care delivery system ("*how* or *where* services are provided")
- One-third address racial and ethnic disparities
- One-fifth address patients' functional limitations and disabilities

Clinical topic priorities

- Cardiovascular and peripheral vascular disease
- Psychiatric and neurologic disorders
- Cancer

(Iglehart JK. N Engl J Med 2009 Jul 23;361(4):325-8)

Patient-Centered Outcomes Research (PCOR)

Patient-Centered Outcomes Research (PCOR) helps people and their caregivers communicate and make informed health care decisions, allowing their voices to be heard in assessing the value of health care options.

This research answers patient-centered questions such as:

1) "Given my personal characteristics, conditions and preferences, what should I expect will happen to me?"
2) "What are my options and what are the potential benefits and harms of those options?"
3) "What can I do to improve the outcomes that are most important to me?"
4) "How can clinicians and the care delivery systems they work in help me make the best decisions about my health and healthcare?"

The Patient-Centered Outcome Research Institute (PCORI) Board of Governors approved on March 5, 2012, in a public vote at its Board meeting in Baltimore the above working definition of "patient-centered outcomes research."

CER > A vs. B: Strategies to Manage a Condition

- Erythropoiesis-stimulating agents: How to manage anemia related to cancer therapy? Who should be treated? Is a higher hemoglobin level an improvement? (*http://www.effectivehealthcare.ahrq.gov/ehc/products/170/707/Epo-Darb-Update_Draft-Research-Review_20110617.pdf*)
- Accelerated partial breast irradiation after breast-conserving surgery: What is the critical length of follow-up to compare recurrence? Is it replacing no radiation therapy or best radiation therapy? What about the use of accelerated whole breast irradiation? (*http://www.bcbs.com/blueresources/tec/vols/24/accelerated-radiotherapy.html*)
- Carotid artery angioplasty and stenting: Safer than endarterectomy for high-risk individuals? Or inferior to best medical therapy? Who benefits from intervention? (*http://www.bcbs.com/blueresources/tec/vols/24/angioplasty-and-stenting-of.html*)

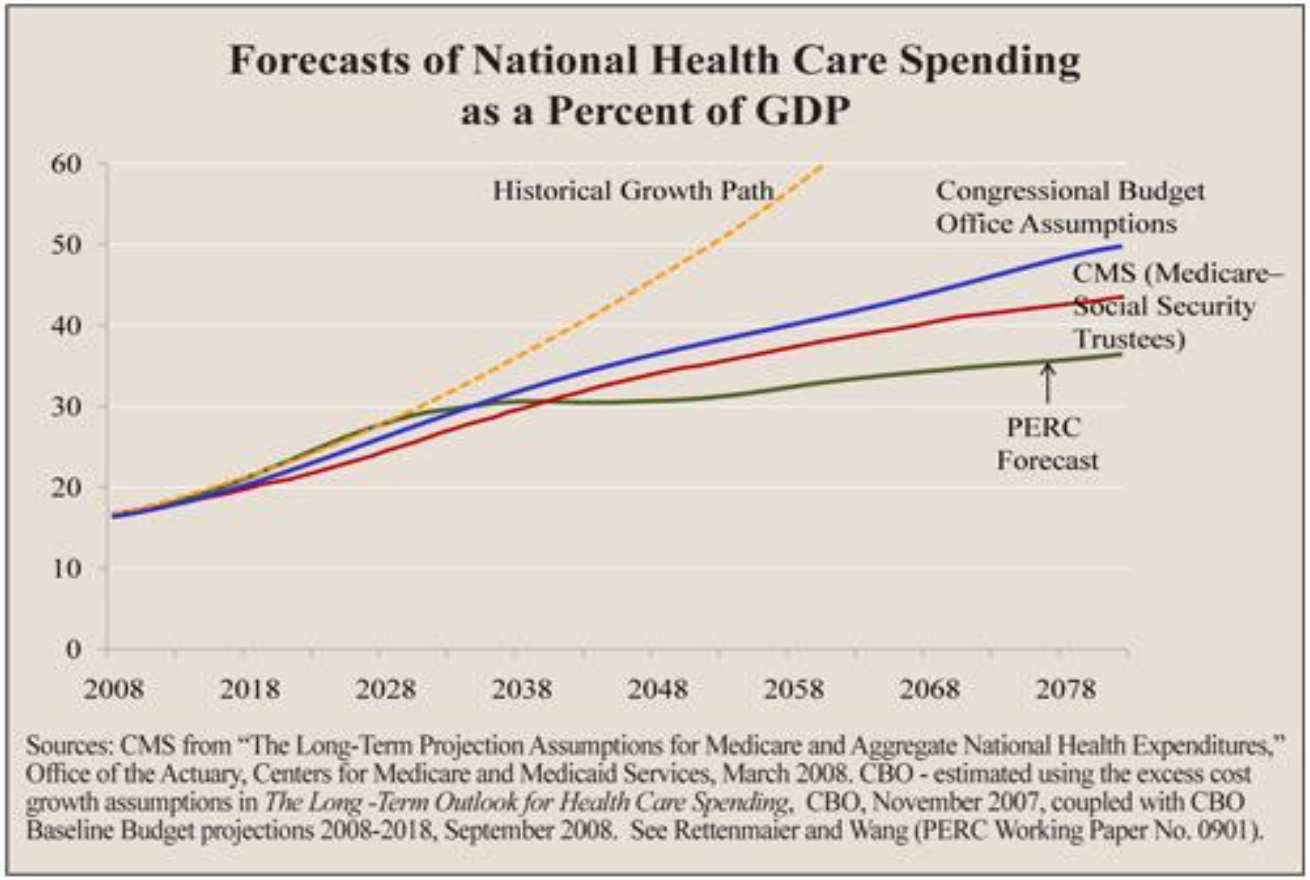
Improving the Evidence Base for Decision Making

Comparative effectiveness "stands on the shoulders" of present knowledge. There are significant obstacles to assessing outcomes.

- Outcome measures don't measure health
- Inconsistent reporting of adverse effects
- Selective reporting and publication bias
- Gap: efficacy versus effectiveness
- Promise and pitfalls of observational data

Cost in Comparative Effectiveness

Projected Spending on Healthcare as Percentage GDP



Source: National Center for Policy Analysis (April 23, 2009) Brief No. 654: (***http://www.ncpa.org/pdfs/ba654.pdf***)

Summary

- Comparative effectiveness addresses strategies to manage a condition, taking into account real-world practice and variations in patient populations.
- Comparative effectiveness includes systems of care delivery to improve outcomes.
- Patient-Centered Outcomes Research gives patients a voice in assessing health care options.
- Tests and treatments are components of clinical management strategies. Starting with the important clinical decision, develop patient-centered rather than technology-centered evidence.
- Comparative effectiveness “stands on the shoulders” of present knowledge. There are significant obstacles to assessing outcomes.
- Cost is the “third rail” of comparative effectiveness research. Value and affordability are intertwined. Sustainable healthcare requires stewardship.