

# Understanding Episodes of Care

Presented by

***Physicians Advocacy Institute, Inc.***

Presenters:

**Robert A. Greene, MD, FACP**

*CEO & Chief Medical Officer, Focused Medical Analytics, LLC*

**Gregory H. Partridge**

*Vice President for Technical Affairs, Focused Medical Analytics, LLC*

Guest Speaker:

**Elaine Kirshenbaum, MPH**

*Vice President of Policy, Planning & Member Services, Massachusetts Medical Society*

**June 22, 2007**

**Orchard Room, O'Hare Hilton**

**Chicago, IL**

**UNDERSTANDING EPISODES OF CARE**  
**An Educational Video for Physicians**  
**Released: January 1, MMVIII**  
**Expiration Date: January 1, MMVIX**

**Self-Study Continuing Education Course**  
**Presented by: Physicians Advocacy Institute, Inc.**

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**Learning Objective**

This self-study continuing education video entitled “Understanding Episodes of Care,” is the result of a workshop offered by the Physicians Advocacy Institute, Inc., (PAI) on June 22, 2007. The goal of this video is to educate physicians about what “Episode of Treatment Groupers (ETGs) are and how they are used by health plans to rate physicians.

Upon completion of this activity, the participant should be able to:

- Define terminology involved in “episodes of care,” as currently defined by those deploying the methodology and software to evaluate physician “efficiency.”
- Explain how the methodology works. This involves many inputs and outputs of “efficiency” as defined by health plans. Physicians must understand the intricacies of formulas and health plan data that is encapsulated in claims data used to derive the ratings. This particularly means that physicians must learn the shortcomings of using claims data alone for such evaluations.
- Engage health plans in a meaningful dialog related to physicians’ patient population and the necessity for risk adjustment to take into account sicker patients or special needs assessments of physicians’ patient populations.
- Defend their quality of care decisions and patient advocacy. Physicians can demand information and due process from health plans but only if they are armed with the knowledge to do so.

Physicians across the country face the roll-out and implementation of numerous, multi-faceted and different approaches to the “rating” of their “efficiency” by health plan payers. These programs have many different names: pay for performance; performance measurement; profiling; ratings; scores; and efficiency measures. Efficiency Scores of physicians are being computed through highly technical computer software that is proprietary and not available to physicians. Physicians, who are busy every day delivering patient care, have little time to delve into the complicated intricacies of the formulas and computations used to provide the public and employers with “ratings” that so drastically affect the professional reputations and future careers of physicians.

There is a critical need for physicians to engage in this debate, and especially to engage the intellectual capital needed to understand the methodology being used by health insurers to judge physicians' performance and publicly report these "scores" and "ratings."

Understanding the entire topic of "episodes of care," which is the backbone methodology of every health insurer rating program, is the only way that physicians can have a meaningful dialogue with private payers about their "ratings," in order to make sure that the data is accurate and patients' choices are well informed. Physicians can't challenge third party payer data unless they understand the underlying methodology. This is why state medical associations across the country and the Physicians Advocacy Institute, Inc. (PAI) have determined that "Understanding Episodes of Care" is such a priority issue.

### **Disclosure of Relevant Financial Relationships of Planners and Authors**

Policies and standards of the Texas Medical Association, the Accreditation Council for Continuing Medical Education, and the American Medical Association require that speakers and planners for continuing medical education activities disclose any relevant financial relationships they may have with commercial entities whose products, devices or services may be discussed in the content of the CME activity.

Speakers have disclosed the following relationships:

Robert A. Greene, MD, FACP	Focused Medical Analytics: ownership interest, CEO Ingenix-Symmetry United Health Care: honoraria and position on advisory board.
Gregory H. Partridge	Focused Medical Analytics: ownership interest, VP Technical Affairs

The remaining planners of the session, the presenters, and the physicians who have commented on the video have no relevant relationships to disclose.

### **Accreditation**

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of Texas Medical Association and Physicians Advocacy Institute, Inc. The Texas Medical Association is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

### **Hour Designation**

The TMA designates this educational activity for a maximum of 3 *AMA PRA Category 1 Credits*<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

**Who is PAI?**

The Physicians Advocacy Institute, Inc., (PAI) is a not-for-profit 501(c) (6) advocacy organization established in 2006 with funds from the Multi-District Litigation (MDL) class action settlements against major national for-profit health insurers. The PAI's primary mission is two-fold: to guarantee compliance with the settlements by these health insurers; and to develop projects and tools for the future that guarantee the viability of physicians' medical practices and the ability of physicians to deliver quality patient care. Specifically, the final settlement between plaintiffs and the Prudential Insurance Company of America indicates that settlement funds will be used "to address issues relating to abuses of managed care," through assuring compliance and "identifying and addressing future health plan practices that burden the ability of Class Members to be paid fairly for their services."

The PAI has underwritten the costs for the faculty who originally presented this workshop on June 22, 2007 and the production costs of the video by BROADCAST PRODUCTIONS of Schaumburg, Illinois.

**Date of Release:** This video will be released on January 1, MMVIII and expires January 1, MMVIX.

**Target Audience:** The target audience is practicing physicians of all medical specialties and their practice staff.

**Hardware/Software Requirements:** This video is produced as a DVD that may be utilized on all DVD players and computers. A handbook that follows the video presentation will be posted on the following website for downloading: [ncmedsoc.org](http://ncmedsoc.org).

**Faculty Credentials:** Faculty credentials are presented in the accompanying handbook and are summarized below:

**Robert A. Greene, MD, FACP, Co-founder, CEO and Chief Medical Officer of Focused Medical Analytics through December 31, 2007 and at the time of video production.** Effective January, 2008, Dr. Greene is the Vice President of Clinical Analytics for UnitedHealthcare, Minnetonka, Minnesota.

Dr. Greene is on three national expert panels on physician performance measurement (AQA Physician Measurement Work Group, AHRQ Technical Expert Panel on Efficiency Measurement, and Symmetry (ETG) Medical Advisory Board). A practicing internist since 1989, Dr. Greene's career began with an electrical engineering degree from Harvard. His work was helping design the early network computers for the ARPAnet, the direct precursor of the Internet. He became involved with managed care administration in 1992, serving as Finance Committee chair of the Rochester (NY) Individual Practice Association (RIPA), a 3,700 member IPA and since 2002 as its associate medical director.

**Gregory H. Partridge, Co-founder and Vice President for Technical Affairs, Focused Medical Analytics.** Mr. Partridge has over 25 years experience working in information systems of numerous health care organizations. He has had a variety of roles, from Emergency Room Technician, programmer, project manager, to business analyst. Since 1995, he has been the senior medical business analyst for the Rochester (NY) Individual Practice Association (RIPA). Over the last ten years, Mr. Partridge has spent a great deal of time on analysis of physician data to identify action items. In 2005, Mr. Partridge and Dr. Greene founded Focused Medical Analytics, LLC., in order to bring their tools to a wider audience.

**Elaine Kirshenbaum, MPH, Vice President of Policy, Planning and Member Services, Massachusetts Medical Society.** Elaine Kirshenbaum is vice president of Policy, Planning and Member Services at the Massachusetts Medical Society (MMS), the nation's oldest continuously operating state medical society with a membership of more than 18,000 Massachusetts physicians and medical students. Founded in 1781, the Society owns and publishes *The New England Journal of Medicine*, *the Journal Watch* family of professional newsletters and *AIDS Clinical Care*.

As vice president at MMS, Ms. Kirshenbaum oversees several areas of the organization including Health Policy, Health Systems, Strategic Planning, Membership, and Continuing Education and Certification. She Staffs the Massachusetts Medical Society's Committee on the Quality of Medical Practice, which focuses on patient safety and improving the quality of medical care. She has been associated with the MMS since 1996 and has worked on critical health care issues for over thirty years.

**The CME Quiz "Understanding Episodes of Care," Answer Sheet, and Self Assessment CME Evaluation Form (that must be sent to CME Department, Texas Medical Association, 401 W. 15<sup>th</sup> Street, Austin, TX or Faxed to CME at Texas Medical Association: 512 370-1629) can be found at the conclusion of the Work Book slides that accompany the video.**

# Understanding Episodes of Care

Presented by

***Physicians Advocacy Institute, Inc.***

**Orchard Room, O'Hare Hilton  
Chicago, June 22, 2007**

10:00 am	Welcome and Introductions	Mary Jo Malone, PAI
10:15 am	Overview of the day	Robert A. Greene, FMA
10:30 am	Building episodes of care	Gregory H. Partridge, FMA
11:30 am	Why episodes are useful	Robert A. Greene, FMA
12:00 pm	Q&A – Break	All
12:30 pm	Working Lunch: Constructing Efficiency Indexes	Gregory H. Partridge, FMA
1:10 pm	The Mass. Medical Society experience	Elaine Kirshenbaum, MMS
1:30 pm	Issues with Efficiency Indexes	Robert A. Greene, FMA
2:30 pm	Q&A – Break	All
3:00 pm	Going past Efficiency Indexes	Robert A. Greene, FMA
3:30 pm	Wrap-up/review	All
4:00 pm	Adjourn	

## Speaker Biographies

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### **Robert A. Greene, MD, FACP**

*Co-founder, CEO and Chief Medical Officer*  
rgreene@fma-us.com

Dr. Greene is on three national expert panels on physician performance measurement (AQA Physician Measurement Work Group, AHRQ Technical Expert Panel on Efficiency Measurement, and Symmetry (ETG) Medical Advisory Board). A practicing internist since 1989, Dr. Greene's career began with an electrical engineering degree from Harvard. His first work was helping design the early network computers for the ARPAnet, the direct precursor of the Internet. He became involved with managed care administration in 1992, serving as Finance Committee chair of the Rochester (NY) Individual Practice Association (RIPA), a 3,700 member IPA and since 2002 as its associate medical director.

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She is a board member of Massachusetts Health Quality Partners, serves as a trustee of Boston University, and is a member of the Board of Visitors of Boston University School of Medicine.

## About Focused Medical Analytics, LLC

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Focused Medical Analytics (FMA) offers a unique combination of analytic and consulting services to health plans and physician organizations. FMA's services enable clients to create successful cost reduction programs while increasing the quality of medical care.

FMA's patent pending Medical Practice Pattern Tool™ (MPPT™) analyzes client data to identify practice patterns driving overuse and misuse of medical care for a given condition within a specific specialty. Once the most significant drivers emerge from the data, clients are able to focus attention on achieving their organizational goals.

In addition to providing valuable data to its clients, FMA also offers a wide variety of consulting options to help turn that data into action. FMA's experience in data analysis, program implementation, physician engagement and process improvement help achieve significant results for our clients while ensuring the best possible return on investment.



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## Understanding Episodes of Care: Seminar Overview

Robert A. Greene, MD, FACP  
Gregory H. Partridge  
Focused Medical Analytics

Physicians Advocacy Institute  
Chicago, June 22, 2007

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## FMA – Who We Are

- Began as staff of 3200 physician IPA in upstate New York
- Our work is based on 8 years of individual practitioner performance measurement
  - Cost-effectiveness measures
  - Quality measures
- Formed Focused Medical Analytics, LLC in 2005 to bring our tools to a wider audience

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## Questions to Address Today

- What are episodes of care?
- Why are they useful?
- What are their limitations?
- How is an efficiency index constructed?
- What has been one medical society's experience?
- What are the general issues with efficiency indexes?
- Can we *appropriately* reduce costs?

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## What is an Episode of Care?

An episode of care consists of all clinically related services for **one patient** for a discrete diagnostic condition from the onset of symptoms until treatment is complete.

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## The Episode Grouper Market

- Symmetry Health Data Systems
  - 1992: Episode Treatment Grouper (ETG)
  - About 85-90% of market
  - Now an Ingenix company
- Thomson MedStat
  - MedStat Episode Grouper (MEG)
  - About 10% of the market
- Cave Consulting – about 5%
- NCQA Cost of Care Measures

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## Episode Treatment Grouper® (ETG®)

- ETG: proprietary software from Symmetry
- Almost 1000 ETGs
- Statistically homogenous
- Clinically homogenous (to an extent)
  - Acute sinusitis
  - Asthma without comorbidity, age > 18
  - Menstrual conditions without surgery
  - Neurological signs & symptoms

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## Review Agenda

- Overview
- Building Episodes of Care - GHP
- Why Episodes Are Useful - RAG
- Lunch – Constructing Efficiency Indexes - GHP
- Massachusetts Medical Society Experience – Elaine Kirshenbaum, MMS VP
- Issues with the Efficiency Index - RAG
- Going Past the EI - RAG

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## References

- Greene RA, Beckman H, Partridge GH, Thomas JW. Review of the Massachusetts Group Insurance Commission Physician Profiling and Network Tiering Plan. Massachusetts Medical Society, November 2006. (Accessed Nov. 30, 2006 at [www.massmed.org/GIC\\_review](http://www.massmed.org/GIC_review)).
- Thomas JW, Ward K. Outlier treatment and episode attribution rules for economic profiling of physician specialists. *Inquiry* (forthcoming).
- Thomas JW, Grazier KL, Ward K. Economic Profiling of Primary Care Physicians: Consistency among Risk-Adjusted Measures. *Health Services Research* 2004;39:4, (Part I): 985-1003.
- Thomas JW. Economic profiling of physicians: A Guide Developed for the American Medical Association. June, 2006.
- Thomas JW . Should Episode-Based Economic Profiles Be Risk Adjusted to Account for Differences in Patients' Health Risks? *Health Services Research* 41:2 (April 2006).

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## Building Episodes of Care

Gregory H. Partridge  
Focused Medical Analytics

PAI Seminar – Understanding Episodes of Care  
Chicago, June 22, 2007

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## Episode of Care – Definition

- All clinically related services for **one patient** for a discrete diagnostic condition from the onset of symptoms until treatment is complete.
- One episode only pertains to one patient, but one patient can be in multiple episodes at once.

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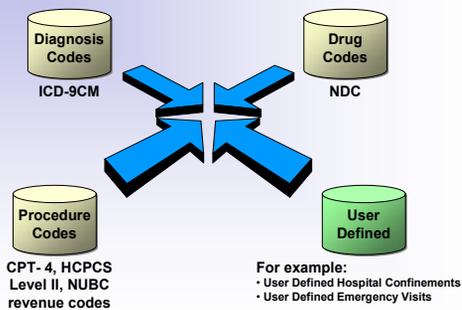
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## Your Inputs Build Episodes



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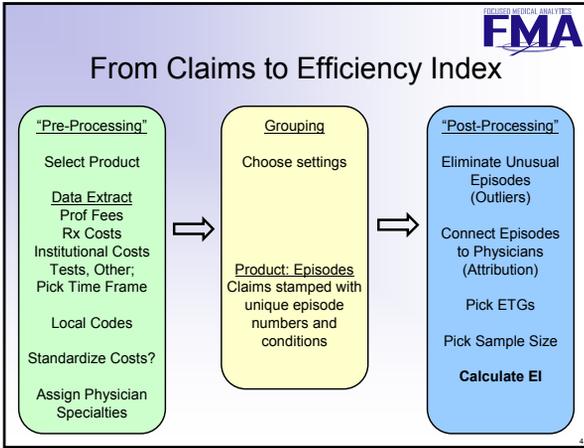
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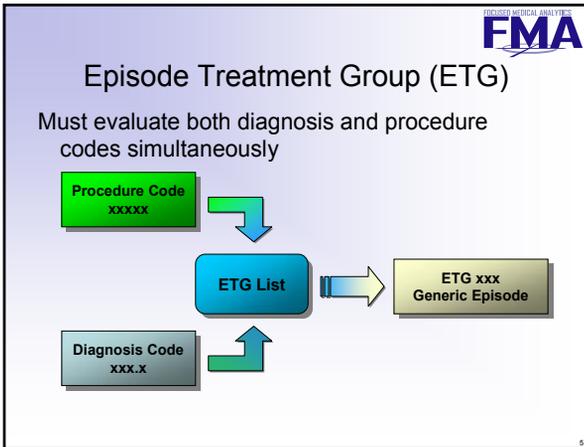
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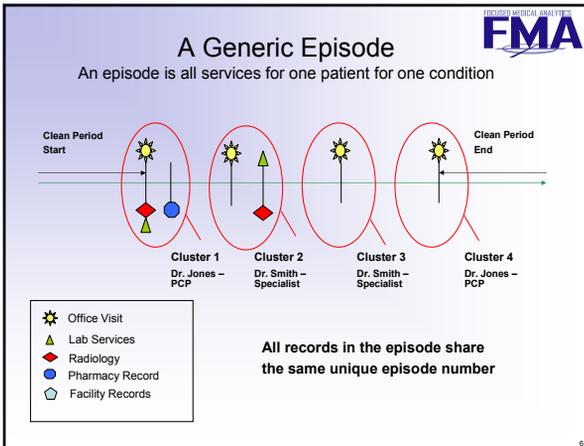
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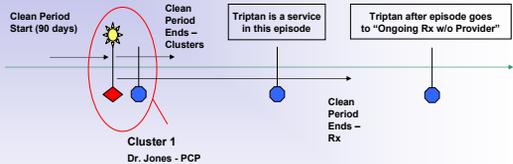
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## Service Occurs After Episode



**Migraine clean periods:**  
**Clusters: 90 days pre/post**  
**Pharmacy: 90 / 365 days pre/post**

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## Un-Groupable Services



Patient treated by phone – no clusters created

- MRI of head – orphan record
- Triptan – ETG 906.3, "Ongoing Rx without provider intervention"
- Amoxicillin – orphan record

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## Building Episodes

- Clusters are formed around face to face encounters, e.g. E&M visits, surgery
- Only clusters can start an episode
- Only clusters can extend an episode
- Episode ends when no further clusters occur within the ETG's "clean period"

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### Building Episode (*continued*)

- Non-face to face services are considered incidental to the evaluation, management, or treatment of the patient.
  - X-rays, lab tests, facility, and pharmaceuticals.
- Non-face to face services do not extend the date range of an episode.

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### How Long is an Episode?

- An episode is complete in absence of a new cluster for the condition's clean period.
- The more chronic a condition, the longer the clean period for an ETG
  - Sinusitis, acute 60 days
  - Sinusitis, chronic 180 days
- For chronic diseases Symmetry episodes are 365 days.
  - Benign Hypertension without comorbidity – 365 days

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### ICD-9 Diagnosis Codes

For each ETG, the grouper identifies diagnosis codes as:

- Primary
- Incidental
- Comorbid
- Complicating



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### Diagnosis Codes

- Primary
  - Will begin an episode with this ETG if no clinically appropriate episode is open
  - Could continue an episode
  - E.g. Office visit for sinusitis
- Incidental
  - May group to an episode with this ETG if within the respective clean period
  - E.g. office visit with Dx code of “cough” groups to sinusitis if sinusitis episode is open

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### Diagnosis Codes (*continued*)

- Comorbidity
  - Based on claims data outside the episode
  - Will shift an ETG, but record does not belong to the episode
    - e.g., Benign hypertension w/o comorbidity (ETG 281) to Benign hypertension w/ comorbidity (ETG 280)
- Complication
  - More severe ETG
  - May shift an ETG, but no new episode opens
    - Chronic Bronchitis w/o Complication (ETG 392)
    - Chronic Bronchitis w/ Complication (ETG 390)

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### CPT-4 Procedure Codes

- Can be a defining surgery
  - Shifts from “without” to “with surgery” ETG
- For each ETG, Symmetry ranks procedure codes as:
  - High – *best match*
  - Medium
  - Low

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### Methodology Constructs

- Clinically homogenous
- Intuitive conditions
- Manageable number




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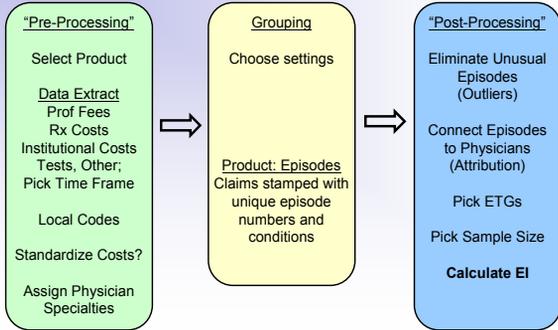
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### From Claims to Efficiency Index




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### Conclusion – Episodes of Care

- All clinically related services for **one patient** for a discrete diagnostic condition from the onset of symptoms until treatment is complete.
- One episode pertains only to one patient
- But patients can be in multiple episodes
- Grouping is just one part of the process
- Important work occurs both before *and* after the actual grouping process

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## Questions?



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## Where Do Ungrouped Services Go?

- **Medications** the grouper knows about go to “Ongoing Rx without provider intervention”
  - Migraine
  - Hyperlipidemia
  - Pain treatment
  - And a few dozen others
- **Other services** the grouper knows about go to an ETG but not an episode
  - Example: Stress thallium tests assigned to ETG 311, Cardiology signs and symptoms
- Orphan drug records: ETG 991
- Orphan services: ETG 999
- Error code ETGs

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## Why Use Episode-of-Care Methodology?

Robert A. Greene, MD, FACP  
Focused Medical Analytics

PAI Seminar – Understanding Episodes of Care  
Chicago, June 22, 2007

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## Questions to be answered

- How is utilization measured without episodes of care?
- What are the problems with that approach?
- How does the episode concept help?
- What are the issues with episodes of care?

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## Population-Based Utilization Measures

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### Doctor, You Use Too Much....

- Fill in the blank – Let's use antibiotics
- One approach: per member
  - pmpm cost of antibiotics
  - Rx's (Services) per thousand (SPT)
- Easy to calculate
- Easy to explain
- Easy to follow month by month
- Easy to make comparisons

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### Health Plan, You Don't Realize....

- My patients are sicker
- I have a different mix of patients
  - My patients are older and get more pneumonia
  - My patients are younger and get more ear infections
- I have to use the right medicine for every patient
- You only want to save money!

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### Population Measures – Cons

- No clinical correlation
- Therefore, no assessment of appropriateness
  - Cannot apply test for IOM paradigm
- Lack of case-mix adjustment
- Creates practitioner distrust

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## Episode-of-Care Methodology Helps

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## The Institute of Medicine Paradigm

- *Overuse* is the provision of a health care service under circumstances in which its potential for harm exceeds the possible benefit.
- *Underuse* is the failure to provide a health care service when it would have produced a favorable outcome for a patient.
- With *misuse* an appropriate service is provided, but a preventable complication occurs, and the patient does not receive the full potential benefit of the service.

IOM. *Crossing the Quality Chasm*. (Washington: National Academy Press, 2003), 192.

**Improving quality means reducing overuse, underuse, and misuse**

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## Episodes Allow Clinical Correlation

- Services may be appropriate for some conditions, not others
- Pharmacy Example:
  - Pneumonia: azithromycin is *appropriate*
  - “Chest cold” (virus): azithromycin is *overuse*
  - Flare of emphysema: *may be appropriate*
- Radiology Example:
  - Sciatica: Spine MRI may be *appropriate* use
  - Low back pain: Spine MRI more likely *overuse*

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### Episodes Form Reasonable Denominators

- Goal: Antibiotic use measure
- Consider the following series of services:
  - Office visit
  - Prescription for antibiotics
  - Office visit
- Is the rate of antibiotics:
  - One per patient? Diluted by more patients
  - One per 2 office visits? Diluted by more visits
- A better measure: one Rx per *episode*

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### Episode Logic Helps Coding Uncertainty

- Grouper has clinical priority logic
- Four episodes, each with 3 visits:
  1. Cough, cough, cough                      ETG 900
  2. Cough, fever, cough                      ETG 900
  3. Cough, short of breath, cough              ETG 410
  4. Cough, pneumonia, cough              ETG 374

Key:  
 ETG 900, "Isolated signs and symptoms"  
 ETG 410, "Pulmonary signs and symptoms"  
 ETG 374, "Bacterial lung infections"

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### That Helps with Coding Variation

- In a series of visits one physician codes:
  - Cough, short of breath, pneumonia
- Another codes:
  - Cough, fever, pneumonia
- Another codes:
  - Cough, fever, bronchitis, pneumonia
- All episodes wind up in "Pneumonia" ETG
- Corollary – coding in any *one* visit may not determine ETG

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### Episodes Show Clinical Trade-offs

- Reduction of overuse implies services are not of (net) benefit
- Does this service improve *overall* care?
- Examples of resulting questions
  - Does azithromycin use decrease ER use?
  - Is CT use preventing admissions (e.g. r/o appendicitis?)
- Must look at all resources used, i.e. the entire episode of care

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### Episodes Allow Case-Mix Adjustment

- Different conditions generally cost different amounts or use different resources
  - Head cold
  - Bronchitis
  - Pneumonia
- By connecting resources to conditions, can find average costs or use
- That allows case-mix adjustment
- Further in presentation on efficiency index

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### Limitations of Episode Methodology - I

- Limitations of all claims-based systems
  - Limited adjustment for severity
  - No outcomes
  - Data accuracy a factor
- Patient centered – not a physician measurement
  - Therefore need post-grouping attribution rules
- Long “tail” of high cost episodes
  - Therefore need “outlier” rules and logic

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## Limitations of Episode Methodology - II

- Sometimes coding IS critical
  - Benign hypertension: ICD-9 401.1
  - Malignant hypertension: 401.0 or 401.
- Unable to capture info outside of or across episodes without added tools
- Clean periods affect mix of episodes
- Are all episodes necessary?
- “Episode Churning”

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## Summary

- Episodes of care improve on pure utilization measurement
  - Clinical connection
  - Case-mix adjustment
  - Helps coding issues
  - Better denominators for rates
- Episode of care methodologies have
  - Similar limitations to other claims-based analyses
  - Some limitations particular to episodes

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## Questions?



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# Constructing Efficiency Indexes

Gregory H. Partridge  
Focused Medical Analytics

PAI Seminar – Understanding Episodes of Care  
Chicago, June 22, 2007

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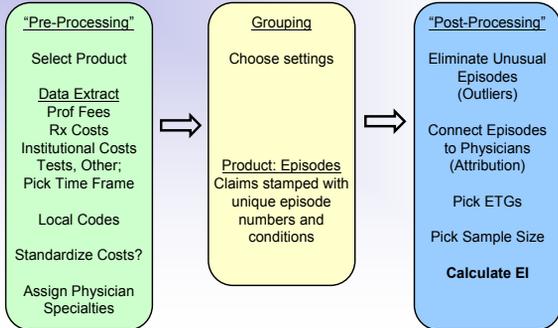
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## From Claims to Efficiency Index



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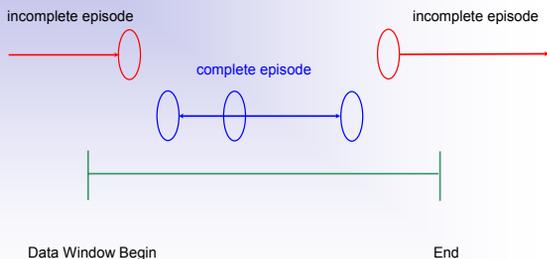
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## “Complete Episodes”



Only complete episodes are comparable to one another

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## Where Do the Dollars Go?

Complete episodes	45% - 60%
Incomplete episodes	20% - 30%
Prescriptions without ongoing practitioner involvement	5% - 10%
Services and Rx not assigned an episode	5% - 15%

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## Physician Attribution

- A variety of possible rules
  - Assigned PCP
  - Most dollars
  - Most encounters
  - Performed primary procedure
- At least – must be transparent
- A common choice:
  - Physician who generated the most costs
  - And had at least 30% of total cost
- In practical terms, *most* episodes have only one physician involved, and most of the rest have 2

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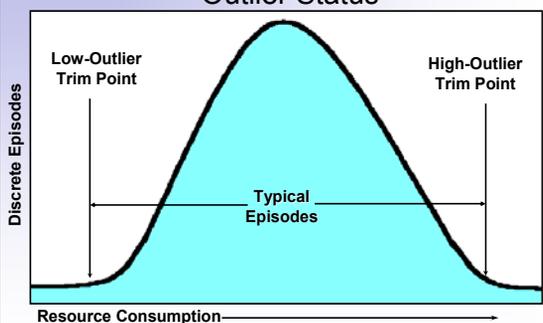
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## Outlier Status




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### Completed Episodes Available Dollars

Physician-Attributed Episodes	80% - 90%
Not Attributed	5% - 10%
Low and High Outliers	5% - 10%

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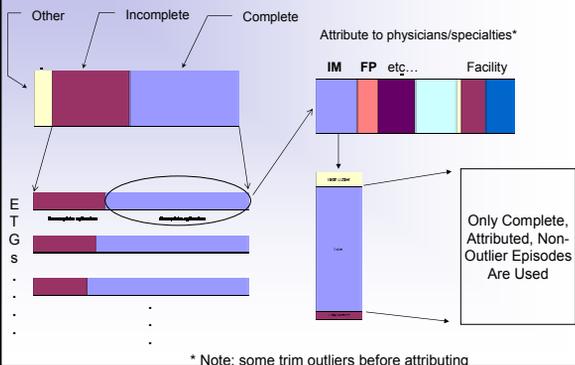
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### Only a Few Episodes Are Used




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### EI Reflects Only a Small Subset of Work

- Need to use comparable episodes so...
- Can only use complete episodes
  - Incomplete episodes are NOT clinically homogenous: what resources were used before or after the time frame?
- Cannot use outlier episodes
- And, can only use attributed episodes
- **Result: EI only captures ~25% of dollars**

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## Typical Efficiency Index Calculation

Demonstrating  
Case-Mix Adjustment

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## Efficiency Index (EI) Calculation

Condition*	Dr.'s number of episodes	Dr.'s actual costs for those episodes	Specialty avg cost per episode	Expected Cost (Dr.'s # of episodes x spec avg cost)
Sinusitis	10	\$1450	\$110	\$1100
Esophagitis	5	\$2000	\$400	\$2000
Hypertension	6	\$2000	\$350	\$2100
<b>Totals:</b>		<b>\$5450</b>		<b>\$5200</b>
Efficiency Index = actual/expected = <b>\$5450/\$5200, or 1.05</b>				

\* For example, by Episode Treatment Groups®

Episode Treatment Groups® and ETG® are trademarks of Symmetry Health Data Systems, an Ingenix Company

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## Conclusion – Efficiency Index Construction

- Group claims into "episodes of care" for given conditions
- Calculate an actual cost figure for each episode
  - Includes all claims in the episode: physician services, inpatient and outpatient facility services, prescription medications, and other services
- Remove unusual episodes ("outliers")
- Attribute responsibility for each episode to a physician
- Calculate an episode expected cost for each defined condition (specialty average)
- Sum actual costs and expected costs for each physician and create an actual to expected ratio
- Physicians are compared, within specialty, on relative **cost** efficiency performance
- Recognize that EI only captures a small portion of work

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Questions?



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# The Massachusetts Medical Society Experience

Elaine Kirshenbaum  
VP Policy, Planning, and Member Services

PAI Seminar – Understanding Episodes of Care  
Chicago, June 22, 2007




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## A History of Engagement

- ▶ 1999: First MMS principles for physician profiling
- ▶ 2004: GIC unveils ETG/tiering program; MMS begins dialogue with GIC
- ▶ 2005: MMS enhances principles on P4P and public reporting
- ▶ 2006: MMS issues recommendations
- ▶ 2007: The dialogue continues




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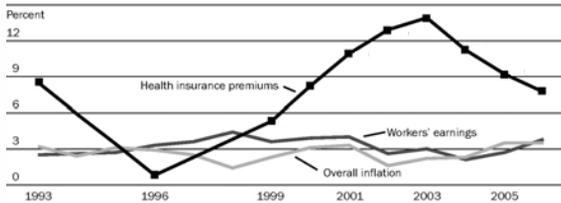
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## Rising Costs: Catalyst for Change



Source: Health Affairs, Sept. 2006

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## The GIC Approach



- Measure cost efficiency via “ETG” methodology
- Measure quality via ResolutionHealth
- Incent behavior via differentials in co-payments
- Squeeze quality and cost scores from claims data

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## Physicians' Reactions

- Confusion about the ratings
- Anger: Patients learned about the ratings before physicians
- Process wasn't fair
- Concern about accuracy and methodology

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## Do We Stop it, or Make it Work?

Fundamental assumptions:

- They will do it with us – or without us
- Transparency is here – like it or not
- Better to be in the room, than outside the door
  - Many meetings with the GIC and payers to share ideas and concerns
- Communications with physicians is essential
  - Poster/letter to physician community
- State legislation submitted
- Public awareness is key
  - Media/Op-eds
- Congressional briefings

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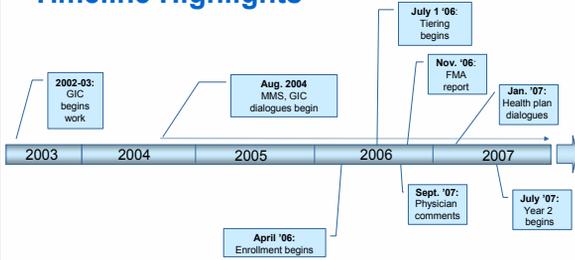
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## MMS-GIC Dialogue: Timeline Highlights




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## Research: Informing the Health Care Debate

- Review of the Massachusetts Group Insurance Commission Physician Profiling and Network Tiering Plan
  - Engaged *Focused Medical Analytics (FMA)*, Rochester, NY and J. William Thomas of Univ. of Southern Maine to examine their methodologies for cost and quality ratings, their process for implementation and make recommendations for improvement
- Physician Focus Groups
  - Engaged Howard Beckman, MD, to gain a better understanding of how Massachusetts' physicians view quality and efficiency measurements and reporting.

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## Recommendations: Analysis of Tiering Methodologies (FMA Report)

- Physicians should be given
  - patient-level drilldowns for the efficiency measure
  - patient lists for the quality measures
- There should be a formal feedback and correction mechanism.
- Specific technical changes would improve methodology.
- Tier at a group level until data accuracy is improved and the methodology is further validated.
- Develop a suggested uniform tier assignment protocol.

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## Physician Performance Evaluation: A Spectrum of Uses

Quality improvement programs



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## Physician Focus Groups in Massachusetts

What Are  
Practicing Physicians  
Thinking?

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## Methods

- Partnered with Mass. Health Quality Partners (RAND and the Commonwealth Fund)
- Engaged Howard Beckman, MD, FACP (Rochester IPA; Clinical Professor of Medicine and Family Medicine, University of Rochester SMD)

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## Results

- Physicians did not believe their current experience of reporting programs, especially those that publicly report or tier, are fair or meaningful because the data is inaccurate and the measures insufficient to determine a clinician's true quality or effectiveness.

*"You lose your confidence in these measures because you don't believe they're going to generate anything that is legitimate or accurate . . . there are so many loopholes, so many things that slip through the cracks that shouldn't be there, that they don't even have credibility."*

*"It will bother me if I don't know what I'll be evaluated on and if I feel that they have the wrong data"*

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## Results

- Physicians perceived that more judgmental programs, like tiering and public reporting at the individual level, use the fear of humiliation to influence practitioner's behavior and affect the physician's professional standing.

*"We don't know what we are being graded on. How can you be judged on something when you don't know what you're being judged on?"*

*"One of my partners has called [a health plan] and said, 'what are you talking about here, how are we being tiered, what do you want us to do if it has to do with patient care, quality of care? Don't you want that improved by everybody?' They talk about transparent medical record, how about a transparent HMO."*

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## Results

- Physicians in all disciplines agreed that quality and efficiency performance measurement is appropriate if the data is accurate and actionable, the measures clinically meaningful, and the incentive payment methodology clear and fair

*"I don't think any of us mind the game when the game is supposedly to improve the quality of care. If there's a game to improve care, sign me up. I'll play that game. But when the game is unfair and the rules are all askew, that's where the problem is."*

*"I think it does need to be done in some way, but it needs to be done with great care."*

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## Results

- Forge a partnership between health plans, employers and practitioners. Physicians felt excluded from a seat at the table. Those participating now understand that they have to become MORE involved in creating an actionable, meaningful set of measures that can be reported accurately and fairly.

*"I think that physicians were slow to do it [performance measurement] and insurance companies, with all the money and administrative power, do these things . . . There are scorecards employers use to rate plans."*

*"What the HMO can do is see if the patient regularly refills prescriptions, and if they find there is non-compliance they can notify the physician or patient."*

*"We should, as physicians, get together and tell them how to do it."*

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## Conclusions

- Expand communication/education strategies to inform practicing physicians about how performance reporting programs work and how to improve their performance measures. Highlight best practice groups
- Encourage community wide physician involvement in performance reporting program design
- Encourage payers to use accurate data by sharing the information with physicians early in the process and creating appeal processes

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## Second Round Focus Groups: Towards More Effective Reporting

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## Overarching Themes

- Practitioners endorse performance reporting but only if accurate, valid and actionable
- Practicing physicians feel uninformed about, disconnected from and disrespected by health plan reporting processes in Massachusetts
- Reports have to be easy to understand
- There should be one community report, not a flurry of conflicting ones
- To promote improvement, reports should be delivered at least twice a year

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## Overarching Themes

- Efficiency indexes are confusing and don't direct physicians to areas to improve
- Physicians find individual data most compelling, especially when linked to peer comparisons
- Physicians want more information and support to understand and succeed in the current reporting climate
- Specific action items are preferable to more indirect measures of efficiency (i.e. efficiency indexes)

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## Where GIC Profiling Stands Now

- Physician advisory committee with MMS representatives
- MMS/FMA Report: 23 recommendations accepted, 8 being considered
- 2007 products: more health plans tiering at the individual level across many specialties
- A true hodge-podge: Health plan approaches vary greatly
- Sept. '07 meeting with physicians, GIC, health plans and consultants

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## Issues with the Efficiency Index Concept

Robert A. Greene, MD, FACP  
Focused Medical Analytics

PAI Seminar – Understanding Episodes of Care  
Chicago, June 22, 2007

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## Efficiency Index Issues

- EI inherits all the problems of episodes, plus the issues around constructing the EI
- Data accuracy issues
- Confounding overuse and underuse problems
- Statistical and technical issues
- Forced rankings
- The Responsible-Total Role Paradox
- Too reductionistic!

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## Data Accuracy

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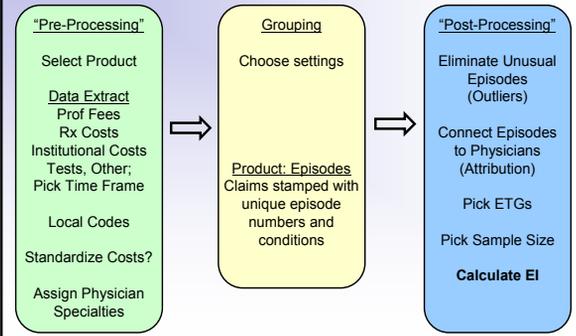
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## Accuracy Affects Every Step




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## Data Accuracy – Problems

- The claims payment process tends to promote accuracy only in those elements necessary to pay the claim, such as procedure codes and knowing who billed for the service.
- Performance measurement depends on other elements, such as diagnosis codes and knowing who actually ordered or performed a service.
- Data such as diagnosis codes are not necessarily involved in claims payment and their accuracy must be evaluated separately.
- Information may be inaccurate or even missing from a database consisting of paid claims, thereby introducing inaccuracy into profiling calculations.
- Specific common issues:
  - Radiology ordering physician
  - Prescribing physician
  - Coding problems

*From Review of the Massachusetts Group Insurance Commission Physician Profiling and Network Tiering Plan*

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## Confounding of Appropriate Use, Overuse, and Underuse

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## A Success Story – Dr. Z



- This specialist had an EI of 1.10
- He contacted us to complain
- ....and wanted to improve his score
- Analyses showed he used many brand name drugs where generics were available
- Follow up analyses showed increased generic use – **Decreased Overuse**

	2001	2002	2003	2004
EI:	1.10	1.05	1.01	0.99

11% decrease on almost  
\$1,000,000 year costs =  
\$100,000 savings

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## On the Other Hand....



- Dr. H., Ob-Gyn
  - “I am not going to withhold epidural anesthesia to save money!”
- Dr. R., Pediatrician
  - “You tell me my asthma care is too expensive, but you want me to use steroid inhalers”
- An efficiency index does not differentiate appropriate use from underuse, overuse, or misuse (the IOM paradigm)

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## Examples from One Profile



<u>Profile Element</u>	Overuse or Underuse?
• Sinusitis/Otitis Antibiotics	Overuse
• Diabetes Management	
• Asthma Management	Underuse
• CAD Prevention and Management	
• Mammography rate	Underuse
• Efficiency Index	Overuse

Because higher costs result in higher indexes,  
the efficiency index is inherently a measure of overuse.

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### Mixing Underuse with Overuse

- “Does not matter – No cost-quality correlation”
  - Only true *retrospectively*
  - *Prospectively* – you **want** them to correlate
  - Therefore must not discourage underuse reduction
- Too few underuse measures to balance
- Therefore: efficiency index calculation must rigorously exclude underuse costs
  - Preventive measures
  - Many aspects of chronic disease care, etc

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### Statistical Issues

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### Statistical Issues – Part I

- Constructed so that average = 1.0
  - By definition 68% are within 1 standard deviation\*
  - Creates appearance of difference when there is none
- High variation → low Z scores for individual conditions
  - The risk of tampering
- Z scores don't add

\* With long tail to right

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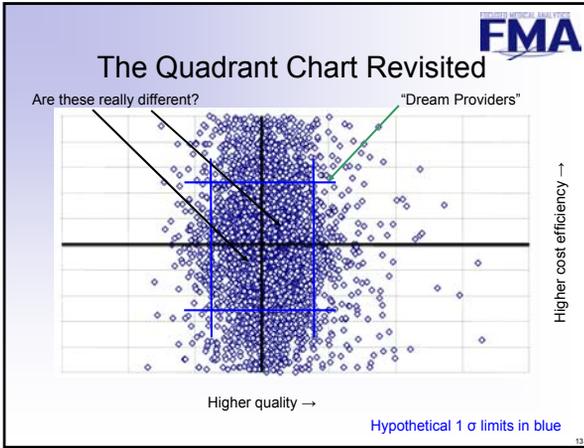
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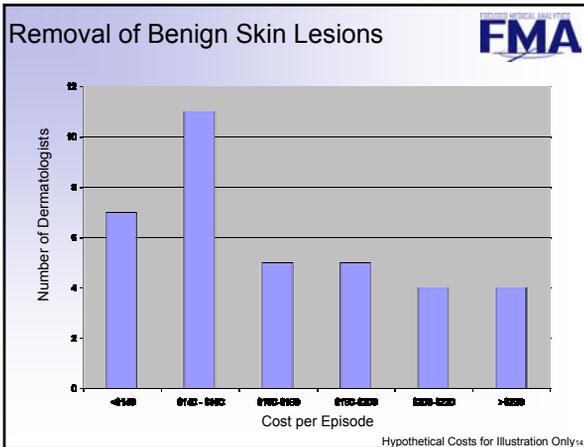
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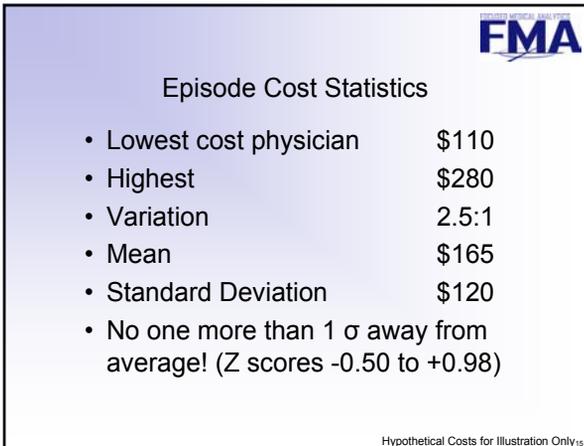
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## Statistical Issues - Part II

- Choice of conditions affects EI
- EI stability depends critically on accuracy, reproducibility, and sample size
  - Result: scores shift from year to year
- Need a 2<sup>nd</sup> level of severity adjustment
  - Often age-gender
  - Symmetry: ERG
  - MedStat Grouper: DxCG
- The problem of special cause variation

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## Efficiency Revisited – “Noise”

Condition	Dr.'s number of episodes	Dr.'s actual costs	Specialty avg cost per episode	Expected Cost
Sinusitis	10	\$1450	\$110	\$1100
Esophagitis	5	\$2000	\$400	\$2000
Hypertension	6	\$2000	\$350	\$2100
Totals:		\$5450		\$5200

Efficiency Index = actual/expected =  $\$5450/\$5200$ , or 1.05

Understanding the high sinusitis cost:  
 9 episodes at \$100 – *below* average cost  
 1 at \$550 – patient went to ER – No action possible

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## ETGs Overestimate Impact of Acute Illnesses

- ETGs underestimate the impact of chronic diseases
  - More incomplete episodes
  - More dollars in ongoing Rx without provider intervention
- ETGs underestimate the impact of evaluation of symptoms
  - More outliers because of inhomogeneity (e.g. ETG 900)
  - More procedures not in episodes (e.g. thallium scans in 311)
  - More orphaned procedures
- Therefore ETGs overestimate the impact of
  - Acute illnesses such as sore throats
  - Elective surgeries with short recovery times

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# The Problem with Forced Rankings

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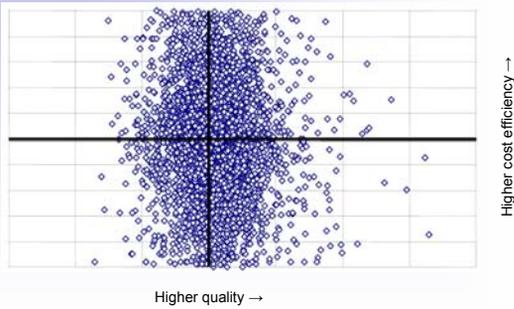
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## Before Quality and Cost Improvement



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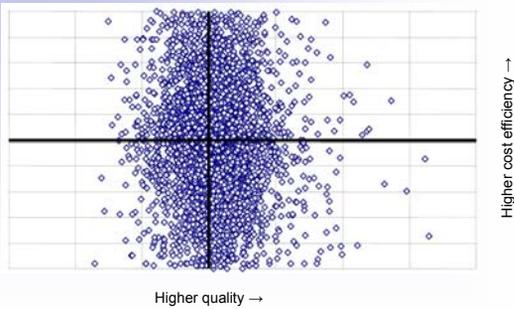
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## After Quality and Cost Improvement



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### The Problem of “Forced Ranking”

- Constructed so that average = 1.0
- Therefore a forced ranking (50% always high)
- Remember Lake Wobegone!
- Dermatologist who used more generics and went from 0.95 to 1.05 (“less efficient”)

“Fair rating is impossible. A common fallacy is the supposition that it is possible to rate people; to put them in rank order of performance for next year, based on performance last year.”

Deming WE. *Out of the Crisis*. (Cambridge: The MIT Press, 2000), 109.

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### Philosophical Issues with Efficiency Indexes

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### Philosophical Issues

- Responsible vs Total Role paradox
- A dimensionless judgment rather than an improvement target
- Appears to encourage and may in fact reward underuse of appropriate services
- Too reductionistic: everyone is cost-effective at some things and not at others

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## The Responsible-Total Role Paradox

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### Responsible Role – Problem

- Consider who orders the MRI in the following episode of care
  - [PCP OV....MRI]....Specialist OV vs
  - PCP OV....[Specialist OV....MRI]
- Same care delivered – *but*
  - First episode: specialist looks inexpensive
  - Second: MRI cost attributed to specialist, raising the specialist's responsible cost

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### Responsible Role – Paradox

- Measurement guidelines: use only that which is within scope of control (i.e. responsible role)
- BUT...
  - I can reduce **my** expense by having **you** do things (**you** get MRI before I see the patient)
  - Therefore using the responsible role can distort or increase system costs
- **Total Role** is the patient-centric measure on which **the system** must focus

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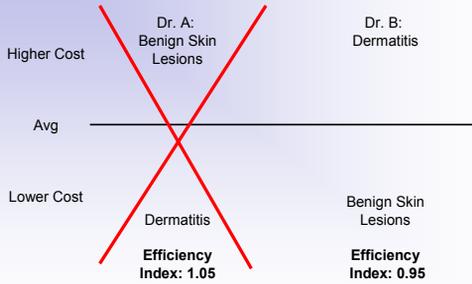
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## A Single Number is Too Reductionistic: Problems for Tiered Network Models



Result: Removing Dr. A Saves 10% (and only if Dr. B has room in his practice, and only if Dr. B gets no cases of dermatitis)

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## Summary of Concerns



- Constructing reasonable EIs requires facing significant practical, statistical, technical, and most importantly, philosophical issues
- Some reflect inherent limitations in the concept
  - Responsible-Total role paradox
  - Forced rankings
- Use of efficiency indexes must be tempered by these considerations

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## Questions?



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## **CME QUIZ: “UNDERSTANDING EPISODES OF CARE”**

- 1.** An “episode of care,” referred to as a period of time during which a disease process is present and being managed, uses methodology known as?
- Quality Performance Measures
  - Pay for Performance quality measures
  - Episode of Treatment Groupers (ETGs)
  - Medical chart data extraction
- 2.** Health insurance companies typically use which of the following data in determining a physician’s cost efficiency rating?
- Their own health insurance claims data
  - Other health plan claims data
  - Patient chart data
  - Medicare claims data
- 3.** An efficiency index, a number score or rank that is a doctor’s relative cost adjustment for his/her case mix, compares the physician to his/her”?
- Similar specialists in the same geographic region
  - Peers as defined by the health insurer
  - Peers as defined by the State Medical Association
  - A control group agreed to by both the physician and the health insurer
- 4.** How many patients are used to construct an “episode of care”?
- 1
  - 25
  - 50
  - 100
- 5.** How long does one “episode of care” last?
- The duration of the first diagnostic office visit
  - Visits to the primary care doctor until the episode is resolved
  - Until the treatment is complete, combining all physician visits
  - Each episode has a different length defined as a “clean period.”
- 6.** What is the usual length of an episode for a chronic condition?
- 3 months
  - 6 months
  - One year
  - As long as it takes to treat the condition.
- 7.** One of the most serious limitations to the use of efficiency indexes is?
- Only complete episodes may be used
  - Identifying what resources were used before or after the time frame
  - Only attributed episodes may be used and outlier episodes cannot be used
  - All of the above.
- 8.** Typically, how much of the total cost of one patient’s care is captured in an efficiency index for one physician?
- 10%
  - 25%
  - 30%
  - 50%
- 9.** What do most experts indicate is the single most significant limitation in achieving accuracy in efficiency ratings of physicians?
- Lack of participation by network physicians
  - Use of claims data
  - Patient sample size
  - Outlier episodes
- 10.** It is possible that cost efficiency ratings may be helpful to physicians, when the ratings are?
- Accurate
  - Useful to physicians
  - Paired with quality information
  - All of the above.

**Answers**

**CME Quiz: “Understanding Episodes of Care”**

Answers: 1. C 2. A 3. B 4. A 5. D 6. C 7. D 8. B 9. C 10. D

## **Self-Assessment/CME Evaluation Form: “Understanding Episodes of Care”**

This Self Assessment/Continuing Medical Education (CME) Evaluation Form must be faxed or postmarked within a year of the expiration of this CME video. To earn up to 3 hours of CME credit, please watch the video and use the workbook and mark your responses on this evaluation form. You must complete Parts 1, 2, 3, and 4 to receive credit. Mail or fax this page to the address or fax number listed at the bottom. There is no charge for this CME activity. A certificate awarding up to 3 *AMA PRA Category 1 Credits*™ will be returned to you by fax or mail. Allow up to four weeks for your certificate to arrive. This CME credit is available for the period of January 1, 2008 to January 1, 2009.

**Part 1.** Respond to each statement for the presentation by filling in the appropriate box:

	<b>Agree</b>	<b>Mostly Agree</b>	<b>Mostly Disagree</b>	<b>Disagree</b>
1. Content met the program objectives.	4	3	2	1
2. This presentation affirmed important information.	4	3	2	1
3. This presentation taught me new information.	4	3	2	1
4. Content was free of commercial bias.	4	3	2	1
5. Speakers communicated clearly and effectively.	4	3	2	1
6. Slides, handouts, etc. were clear and useful.	4	3	2	1

**Part 2. Commitment to change (required):** As a result of this presentation I intend to make the following changes to my practice:

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**Part 3.** Statement of the completion: I attest to having completed the CME activity.  
The time I spent was \_\_\_hour(s), \_\_\_minutes.

Sign Here: \_\_\_\_\_ Date: \_\_\_\_\_

**Part 4.** Identifying information: Please **PRINT** legibly or type the following:

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 E-Mail \_\_\_\_\_  
 Medical License Number: \_\_\_\_\_

**Where to send the completed CME evaluation form:**

**Mail to:** CME at Texas Medical Association, 401 W. 15<sup>th</sup> St., Austin, TX 78701; or

**Fax to:** (512) 370-1693.