



The Role of Health Information Technology in Healthcare Quality

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NQF Mission

- To improve the quality of American healthcare by
- setting national priorities and goals for performance improvement,
- endorsing national consensus standards for measuring and publicly reporting on performance, and
- promoting the attainment of national goals through education and outreach programs.



What is the NQF?

The National Quality Forum is a
private, non-profit
voluntary consensus standards-
setting organization



National Technology and Transfer Advancement of Act of 1995 (NTTAA)

- Defines the five key attributes of a “voluntary consensus standards-setting body” (i.e., openness, balance of interest, due process, consensus, and an appeals process)
- Obligates federal government to adopt voluntary consensus standards (when the government is adopting standards)
- Encourages federal government to participate in setting voluntary consensus standards



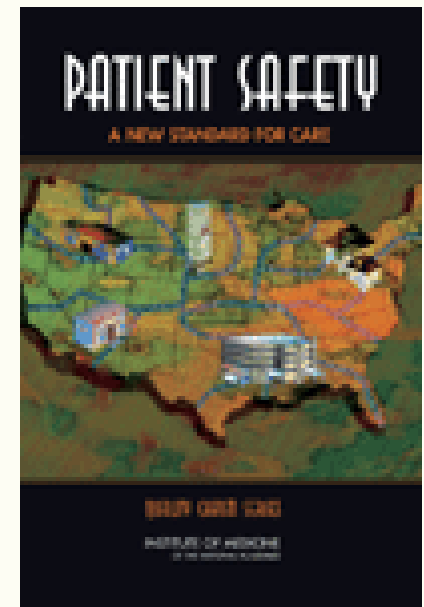
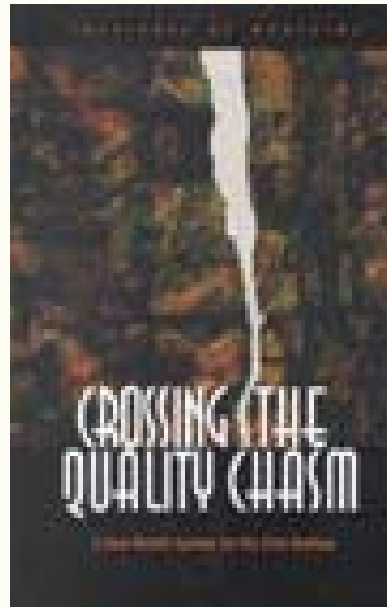
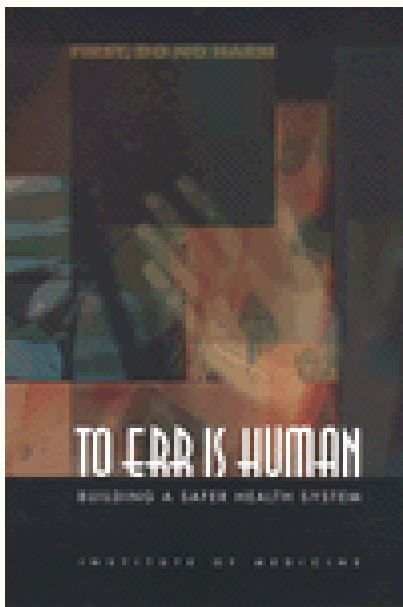
To Err is Human: Building a Safer Health System

- Placed quality on the national agenda
- Need well designed and managed “systems of care”





IOM Reports





Important Progress

- Growing sense of awareness and urgency
- Cultural change within health care:
performance measurement and transparency
- Critical linkage between payment and quality
- Engagement of health care leadership



Growing Sense of Awareness & Urgency

- The uninsured population now totals 46.6 M
- Health care costs rising at 1.5-2 times the rate of inflation
- Up to 2-fold variation in per capita spending across communities
- U.S. spends more than all other industrialized countries by sizable margins



Growing Sense of Awareness & Urgency

- 55% overall adherence to recommended care
- On average:
 - One medication error per day per hospital patient
 - Every 7th admission unnecessary
 - Every 5th lab test unnecessary



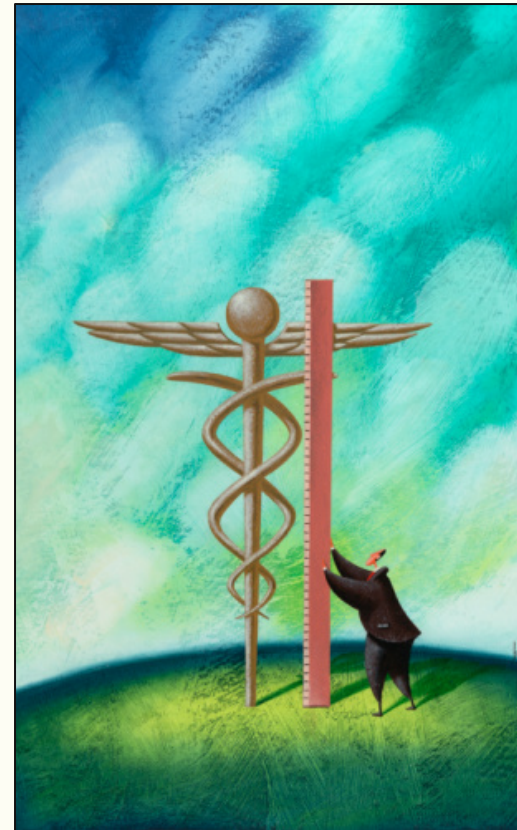
Cultural Change: Measurement & Transparency

- Medicare Compare Series
 - Most significant effort
 - Becoming all payer
- State Reporting Programs
 - Serious reportable events
 - Healthcare-acquired infections
- Community-Based Efforts
 - Value exchanges



Critical Linkage between Payment and Quality

- Pay for what works; Don't pay for what doesn't
- Growing number of incentive programs - about 200 projects underway
- Metrics – process measures but moving to outcomes
- EHRs could help facilitate participation in P4P (could it drive adoption?)





Federal Legislation: Teeth to the Quality Movement

- Deficit Reduction Act (2005)
 - Medicare hospital payment updates contingent upon submission of performance data.
 - Mandated development of a Medicare Hospital Value-Based Purchasing Plan (Under Development for 2009)
- Tax Relief & Health Care Act (2006) ties Medicare professional bonus payments to submission of performance data



President's Executive Order: Teeth to the Quality Movement

- August 2006 – government programs directed to encourage:
 - Acquisition of interoperable HIT
 - Transparency of Quality & Pricing Information
 - Promote Quality and Efficiency through P4P

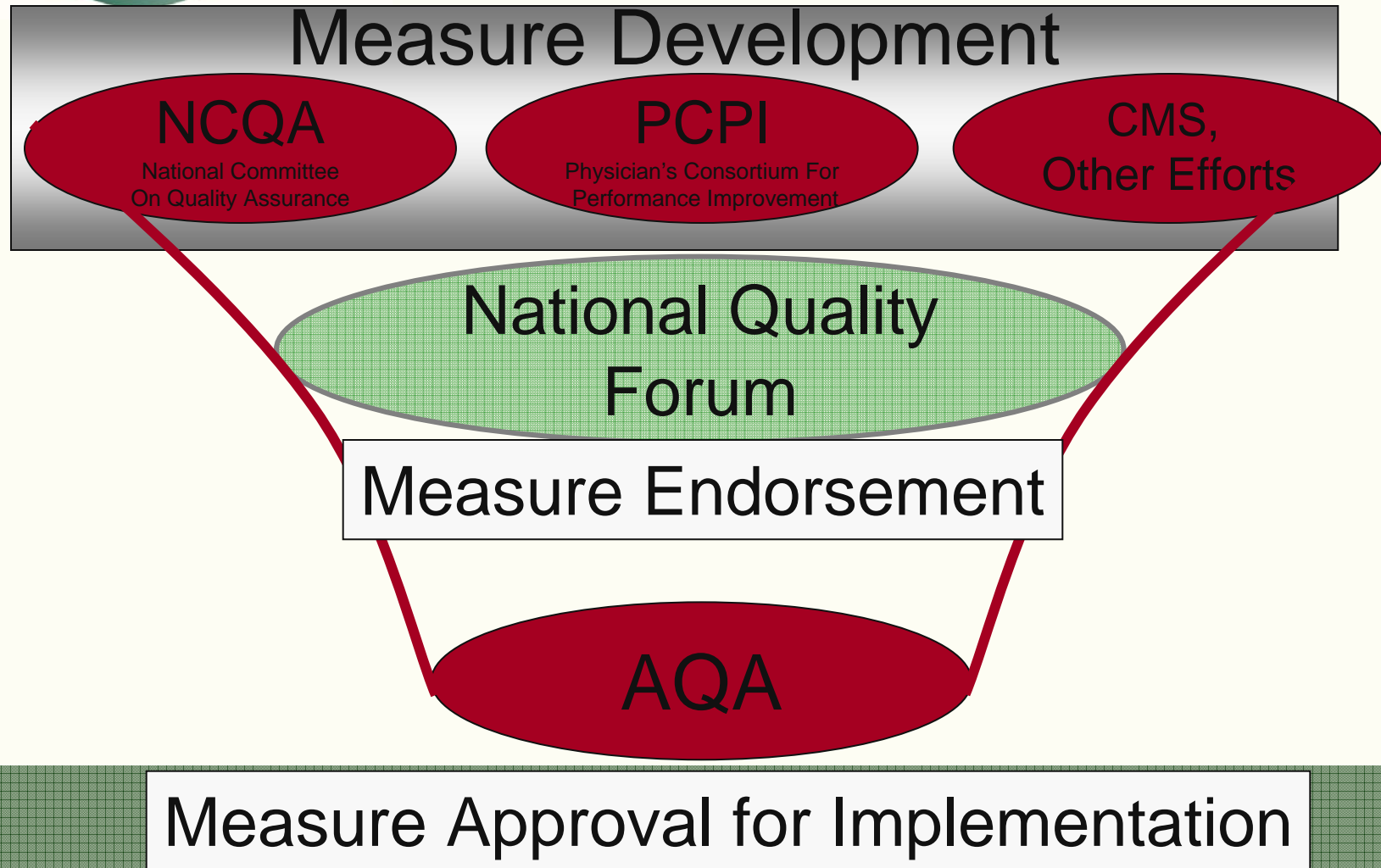


Engaging Health Care Leadership

- Quality Alliances: HQA, AQA, APQ, PQA...
- AMA Physician Consortium for Performance Improvement
 - 30+ Specialty Societies
- ANA National Database of Nursing Quality Indicators (NDNQI)



Where are we with quality measures?

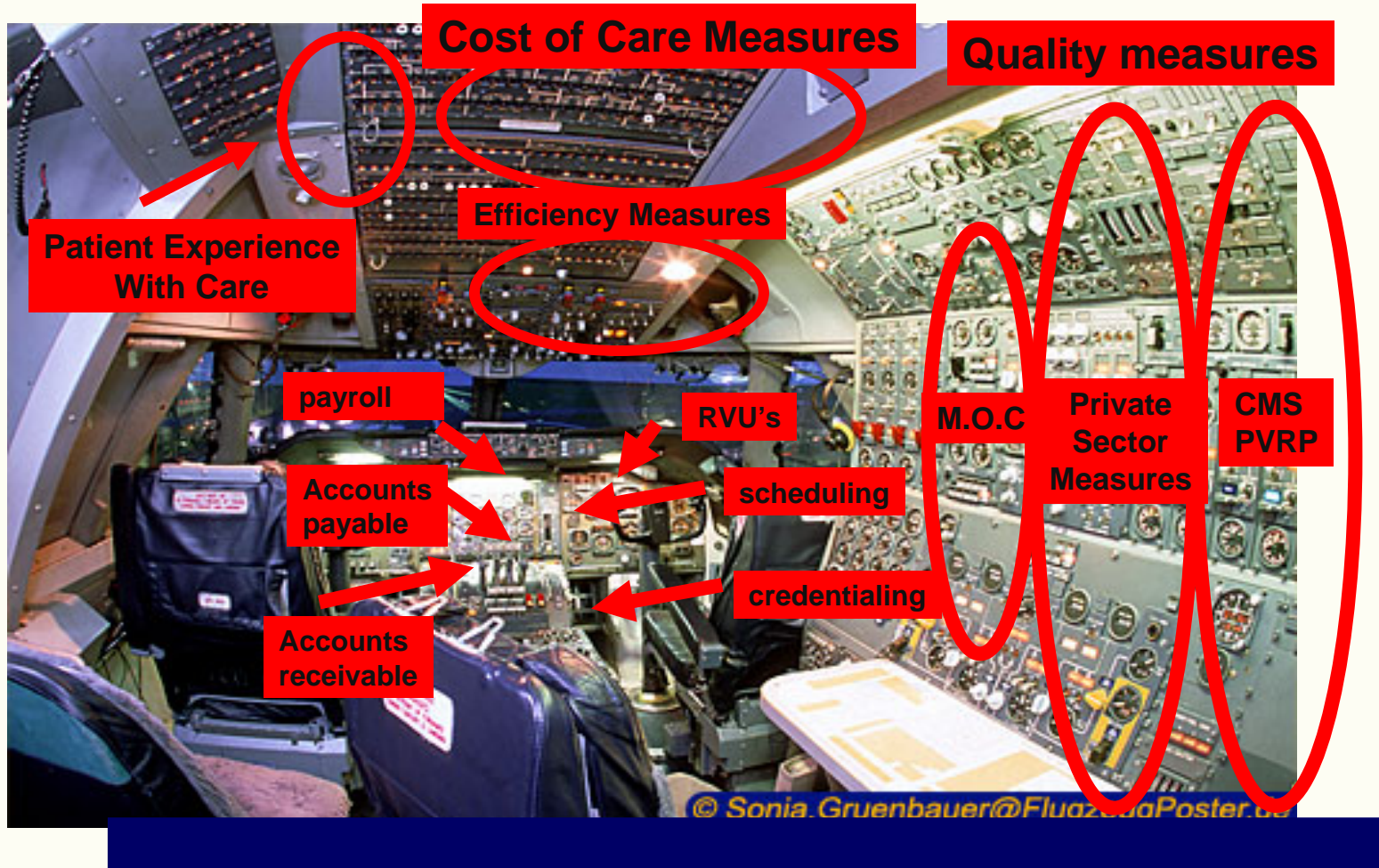




Great Progress: Sobering Problems

- No national goal setting process
- Not enough measures; too many measures
- Process vs Outcomes
- Numerous methodologic issues
- Special Populations and unintended consequences
- Competency vs high performance measures

Quality Dashboard





Challenges & Opportunities Ahead

- Setting National Priorities
- Evolution of the Quality Metrics
- National Infrastructure for Quality Measurement and Reporting



Measure What Matters

“...it is the glory of science to become ever more and more precise in its measurements, and it is the agony of the scientist to discover that when his measurements are really precise, what he has measured is just to one side of what he is after.”

F. Fremont-Smith, 1956

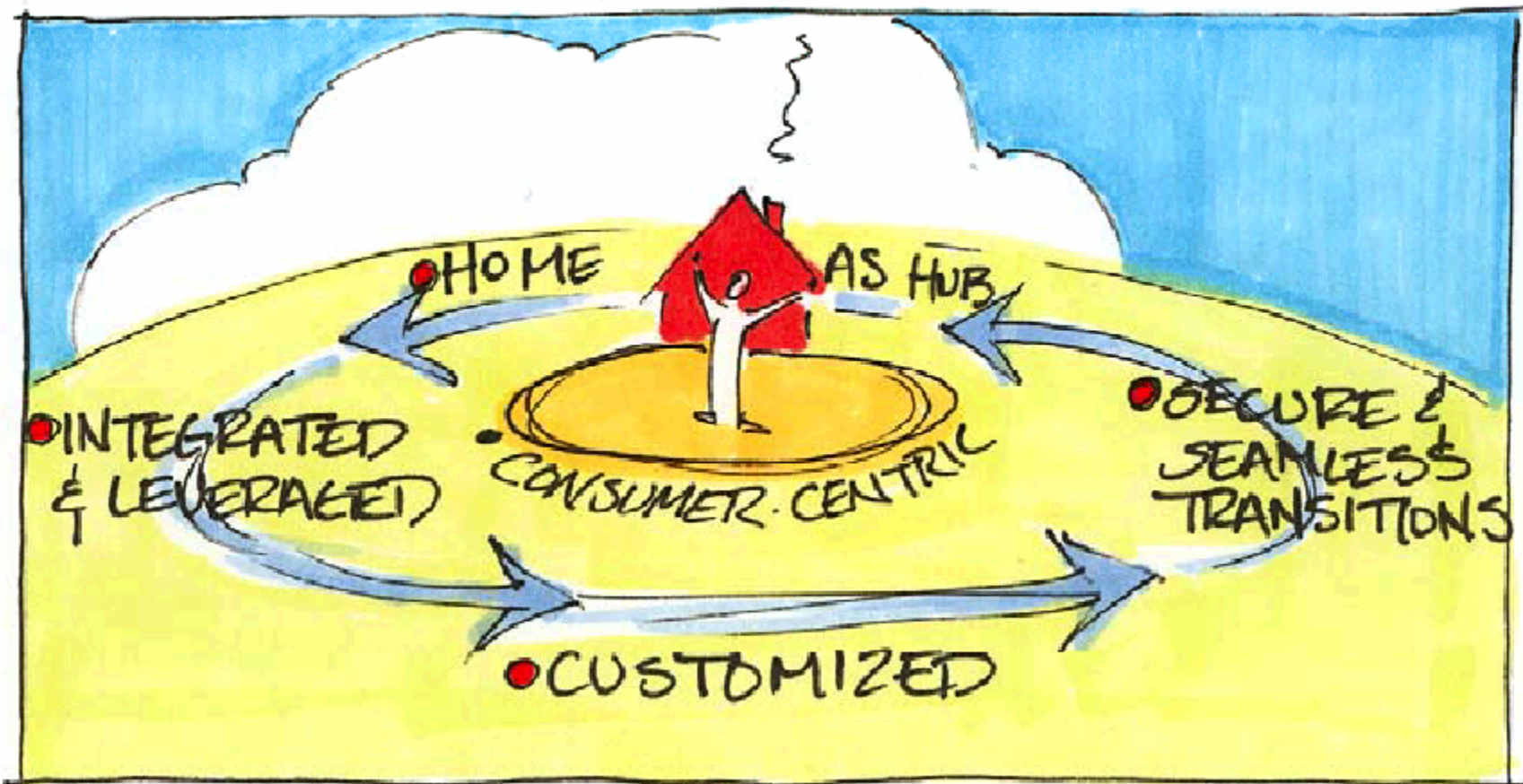


Measure What Matters™

- NQF Pilot Project –Chronic Conditions and Episodes of Care
 - Elliot Fisher and Kevin Weiss, co-chairs
 - 2 conditions
 - Develop measurement framework



The Patient at the Center of Care



Courtesy of Paul Wallace, Kaiser



Measure What Matters™

*Forthcoming 3-year
Initiative*

- Priorities, Goals and Metrics
 - 6 Chronic Conditions
 - 6 Crosscutting Areas (e.g., medication management, care coordination)



Evolution of Quality Metrics

- Episodes of Care: Paired Process and Outcome Measures
- Measures of Patient Engagement and Self-Management
- Efficiency, Cost, Value
- Attribution



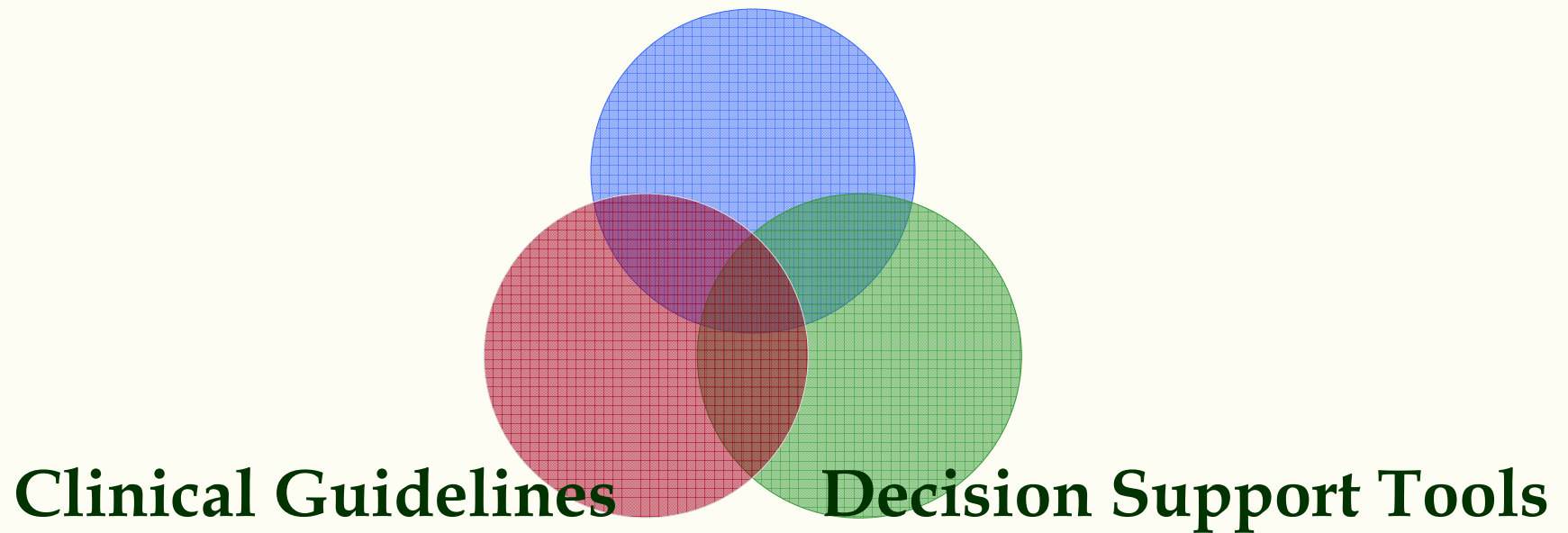
National Quality Measurement & Reporting Infrastructure

- Critically needed to:
 - Set priorities and goals
 - Develop and maintain measures
 - Endorse “Best in Class” measures
 - Data aggregation
 - Public reporting



Related Concepts: Shared Data Elements

Quality Measures





Diffusion of knowledge

| Clinical Procedure | Landmark Trial* | NHQR 2006 |
|-----------------------|-----------------|-----------|
| Flu Vaccine | 1968 | 65% |
| Pneumococcal Vaccine | 1977 | 57% |
| Diabetic Eye Exam | 1981 | 66% |
| Mammography | 1982 | 70% |
| Cholesterol Screening | 1984 | 73% |

*Balas EA, Boren SA., Managing Clinical Knowledge for Health Care Improvement. Yearbook of Medical Informatics 2000.



Quality Measures and Health IT (1)

- Need greater dialogue between the performance measurement community and the health IT community.
- Need to consider how interoperable systems begin to get us towards high impact gap areas (e.g., transitions, coordination of care) where quality measures and decision support tools are needed



Quality Measures and Health IT (2)

- Need to specify the EHR data elements needed to produce quality measures.
- Quality measures need to follow standardized vocabulary and conventions (e.g., use standardized lists for denominator exclusions).
- Consistent development and specification of quality measures would help facilitate their incorporation into EHRs.



NQF Role: Measure Submission

- In March 2007, NQF released *A Guide to NQF Candidate Measure Submission Requirements*
- Key measure submission requirements:
 - Documentation and Grading of Evidence
 - Rigorous Measure Development
 - Clear Measure Specifications
 - Measure Harmonization
 - Data Source and Availability
 - Measure Testing
 - Measure Maintenance Process



Methodologic issues

- **Attribution:** how can we do a better job of attributing specific care to individual physicians or groups?
- **Measurement mode:** what is the effect of mode of measurement using administrative data, clinical data, or data derived from EHR systems?
- **Episodes of care:** how can interoperable EHRs facilitate quality measurement across providers, settings and episodes of care?



Implications for EHR Developers

- Utilize strategies that support documentation of clinical processes (e.g., medication lists, templates, prompts).
- Associate key events with time, location and provider.
- Incorporate methods to reliably identify the same patient over time and in all locations served by the system.
- Provide strategies for robust and flexible reporting including trending over time, incorporation of standards/goals/thresholds, and variances.
- Support or provide strategies for efficient transfer of data using multiple technical specifications.



Health IT and Disparities

- Health IT could help to reduce disparities – avoid digital divide
- EHRs are essential to get us to routine examination of quality by population
- Aftermath of Katrina showed significance of health IT in protecting and accessing patient records





PHRs and Healthcare Quality

- How does patient access and control of their data change performance measurement?
- What is the role of patient-directed decision support systems?



Health IT and Population Health

- Need to increase linkages between EHRs and public health systems
- Enhance the clinical-public health interface
- Interconnected health IT systems should allow for tracking of quality by population



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