Potential Tools to Improve Patient Safety

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One Definition of Quality Care

Care that is **safe**, timely, patient-centered, efficient and equitable

IOM 2001
Another Definition of Quality

Doing the right thing, at the right time, in the right way, for the right person – and having the best possible results

AHRQ 2001
Requirements: Training and Tools

- Training
  - Quality improvement concepts
  - Failure modes and effects analysis

- Tools
  - Standards
  - Quality measures
  - Checklists
• PCS one of the first quality measurement programs in medicine (1973)
• Long history of peer review (e.g., chart rounds)
• Institutionalized quality assurance into routine clinical practice (e.g., weekly physics review, portal images)
Potential Safety Training/Tools Sources

- Medical/Graduate school? No
- Residency training? No
- Licensing process? No
- Certification process? No
- Credentialing process? No
Standards

• Minimum requirements for clinical practice
• Only modified under unusual circumstances
• Contrast with guidelines
• Often consensus-, rather than evidence-, based
• Typically generally accepted
Why Standards?

• Improve safety by…
  – Systematize best practice
  – Reduce undesirable variation
  – Introduce new knowledge into practice

• Educational value to members

• Source of quality measures
Guideline Qualities

• Systematic search of scientific literature
• Evidence described and strength rated
• Distinct recommendations made and strength of recommendation rated
• Explicit expiration date and update plan
• National physician organization preferred source

AMA-PCPI
Consensus Guidelines

- Less preferred but acceptable if...
  - Systematic literature review
  - Formal consensus method used
  - Distinct recommendations with strength rated
- “Informal” expert consensus may no longer be acceptable (e.g., NCCN)
- Model for standards

AMA-PCPI
• Not good enough just to talk about quality, need to measure it
• Safety is a key component of quality
• Prospective and frequent
• Being incorporated into payment, network determination, MOC and accreditation programs
• Provides opportunity for implementation
Quality Measures

- Drawn directly from standards/guidelines
- Quantifies adherence to standard
- Structure, process, outcomes
- Explicitly defined including numerator, denominator, exclusions, source of data
- Desirable attributes include importance, reliability, validity, feasibility
Example of Quality Measure

Percentage of external beam treatments delivered as planned

\[
\frac{\text{# of treatments delivered without variance}}{\text{# treatments delivered}}\n\]

Exclusions: None
Source: Record and verify system
Checklists

- Used first in aviation (~1935) and more recently in ICUs and ORs
- Checklist in Michigan ICUs reduced catheter-related bloodstream infections by 66% in 3 months
- 19 item surgical checklist reduced surgical mortality 50% and major complications more than 33%

Checklists

• Informational aid
• Help recall mundane matters that are easily overlooked
• Make explicit the minimum expected steps in complex processes
• Should improve consistency and completeness of completing a task
Conclusion

• Many potential tools at our disposal to improve safety

• Work together to develop these tools and programs that facilitate their implementation

• Ultimately will lead to improvements in patient safety

• Next steps… next session…