How Technology Assessment by Hospitals Differs from Technology Assessment by Payers

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Who uses technology assessment?

- Payers
- Industry
- Clinical specialty societies
- Regulatory agencies
- Hospitals

The bulk of technology assessment is done by and for payers.
Why do payers use TA?

- Emerging technologies
  - Provider requests
- High-impact technologies
  - High-cost technologies
  - Screening and other services with potentially large numbers of users
- Quality and accountability

Why do hospitals use TA?

- Decisions on technology acquisition
- Identifying and implementing best practices in processes of care
- Standardization of care
- Risk management and reduction
- Prioritizing quality improvement measures
Key differences between hospital and payer TA

- Topic selection
- Methods and analytic approach
  - Involvement of clinicians
  - Local perspective
  - Pragmatic approach
- Focus on implementation

CEP at UPHS

- Established 2006
  - 2 co-directors
  - 2 research analysts
  - Various supporting personnel
- Reports to Chief Medical Officer
- Serves entire health system
  - See poster #703
CEP functions

- Answer technology assessment questions from clinical departments
- Evaluate technologies for supply chain and pharmacy committees
- Assist CMO with quality improvement projects
- Also some non-hospital collaborations

Guideline/policy topics

- Should central venous catheters be flushed with heparin or with saline?
- How should we manage transitions of care for patients on anticoagulant therapy?
Committee decision topics

- Is reprocessing of single-use devices safe and effective?
- Which patients should have telemetry?
- Should celecoxib be on the formulary for post-op use in hip replacement patients?
- Should aprotinin be on the formulary for adult cardiac surgery patients?

Executive decision topics

- Should the hospital continue a contract for ICU telemedicine coverage?
- Is aprotinin safe for use in adult cardiac surgery?
- What manufacturer should supply new imaging equipment for a cardiac cath lab?
  - Poster 793
Topics for outside partners

➢ Is there a valid clinical basis for treatment with IV hydrogen peroxide? (payer)
➢ What procedures should be used in hospitals to prevent catheter-associated urinary tract infection? (CDC)
➢ How many hospital-acquired infections are “reasonably preventable”? (SHEA)

Hospital TA programs span a broader range of topics than payer TA programs
Hospital TA programs also use different methods than payer TA programs.

Methods: use publications that are most locally relevant

- Evidence from comparable institutions
- Evidence on comparable patient populations
Methods: use evidence generated in the hospital

- Local outcomes
- Characteristics of local patients
- Relationships among local specialists
- Local staff and equipment availability
- Local utilization patterns
- Variations in practice among local clinicians

Methods: clinician involvement

- Selecting topics and refining questions
- Providing strategic & patient care context
- Reviewing initial evidence assessment
- Approval of resulting guidelines & policies
- Considerable involvement of nursing staff
Methods: highly pragmatic

- Assessments limited to questions that affect hospital decision-making
- Work from existing secondary sources when possible
- Use in-house data
- Summarize evidence for busy clinicians
- Draw conclusions with implementation in mind

Hospital TA focuses on implementation

- Ensure implementing staff are involved in commissioning and reviewing report
- Prepare draft policies for review
- Standardized order sets
- Assess impact of TA process on patient care
Celecoxib

- **Purpose**
  - Committee decision on formulary

- **Resources**
  - Published literature

- **Local factors**
  - Very specific clinical circumstances for use (post-op use in hip replacement patients)

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ICU Telemedicine

- **Purpose**
  - Executive decision on contract renewal

- **Resources**
  - Published literature (scarce)
  - Mortality and LOS data from UPHS ICUs with and without telemedicine coverage

- **Local factors**
  - Local circumstances of ICU staffing
Heparin Flush

- Purpose
  - Standardize nursing practice guidelines for central venous catheter care

- Resources
  - Published literature

- Local factors
  - Collaboration with nursing leaders to acquire additional clinical evidence

TA collaborations

- Broaden your topic list
  - Look for process of care topics

- Build relationships with clinicians
  - Physicians and nurses give clinical context

- Work pragmatically
  - Look for reliable secondary sources to base conclusions on
TA collaborations

- Provide for localizing your findings
  - Selecting evidence relevant to users' practice
  - Adding local outcomes and resource information
- Focus on implementation
  - Develop tools like standard order sets
  - Measure effect of TA process on patient care