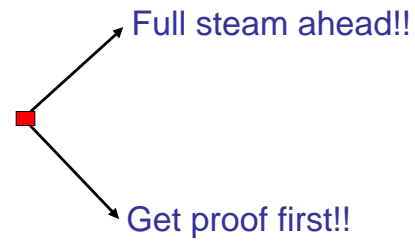


How Much Data Are Needed
for Quality Improvement
Activities Involving Quality of
Care?

ISQua, Paris
November, 2002

Decision Tree: First Decision Node



This type of decision tree
applies to either the **type** of QI
initiated OR to the **content** of a
particular QI initiative

Solution to Decision Tree: It
depends, but most of the
evidence suggests.....

Solution to Decision Tree: It
depends, but most of the
evidence suggests.....

Suspense - -Wait and See!!

*Full Steam Ahead: Proven
Areas for QI*

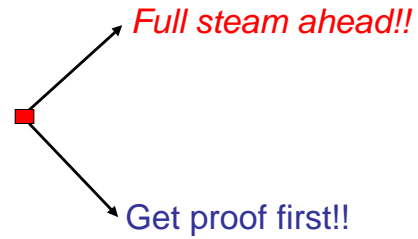
- Patient specific issues where
 - Data exist --usually from RCTs, sometimes consensus conferences AND
 - Importance is clear
- Global issues, e.g., error reduction*

* but, there is a controversy here as well

Controversy: Do Approaches for Error Reduction Require Data?

- **Yes:** Shojania et al. Patient Safety Meets EBM. *JAMA* 2002; 288: 508
- **No:** Leape et al. What Practices Will Most Improve Safety. *JAMA* 2002; 288: 501

Decision Tree: First Decision Node

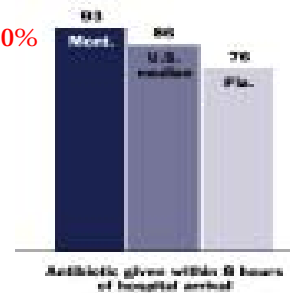


Typical Full Steam Ahead Practices

- Vaccinations
- Screening for selected conditions, e.g., colon cancer, breast cancer, NOT lung cancer
- Appropriate drug regimens
- Infections in hospital
- Hip protectors for at risk patients
- Anticoagulation

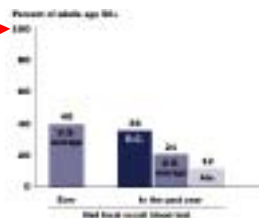
Pneumonia: Timing of Antibiotics for In-Patients

Goal: 100%



Colo-rectal Screening: Fecal Occult Test

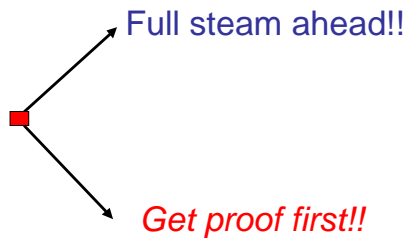
GOAL →



Warfarin for Atrial Fibrillation



Decision Tree: First Decision Node



Three Categories of Debunked Practices or “Myths”

- Assumed good, actually harmful
- Assumed good, not harmful, just waste of resources
- Assumed bad, actually good

Plus, practices where data are totally lacking

Assumed Good; Actually Harmful

- Digoxin for women with CHF
See NEJM 2002; 347:1403 (4.2% incr in deaths)
- Class I Anti-arrhythmic Rx vs. rate control for Atrial Fib (AFFIRM trial)*
- Beta-agonists for ventricular dysfunction

*http://www.acis2000.org/rate_control_may_be_preferable_i.htm

Assumed Good; Actually Harmful (cont'd) -AMI care

- Calcium Channel Blockers -- *TRENT* “mega” study on short acting *nifedipine**
- Lidocaine –increased asystolic deaths
- Anti-arrhythmic Rx for ventricular ectopic activity (CAST study)
- Full dose thrombolysis and angioplasty
See TIMI, TAMI, European study

*http://www.nottingham.ac.uk/cvm/research/clinical_trials_group.htm

Assumed Good; Not Harmful, Just Waste of Resources

- Magnesium in AMI
see MAGIC trial, Lancet, Oct 19,2002
- Screening for lung cancer with CT
- Knee arthroscopy for arthritis
- Interventions for low back pain

Assumed Bad; Actually Good

- Beta-blockers for CHF
- Aspirin immediately after bypass surgery (CABG)*

*Mangano DT et al. NEJM 2002; 347: 1309

Value of Aspirin after CABG

OUTCOME	ORES RATIO (95% Confidence Interval)
Death from any cause	0.98 (0.88-1.09)
Stroke events	0.98 (0.88-1.09)
Myocardial infarction	0.98 (0.88-1.09)
Composite major bleed	1.02 (0.92-1.13)
Death from cardiovascular	0.98 (0.88-1.09)
	Aspirin Better Aspirin Worse

Mangano DT et al. NEJM 2002; 347: 1309

The frequent occurrence of debunked myths makes data mandatory.

And the winner is.....

Decision Tree: First Decision Node

