

How AHRQ Research Saves Lives

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Washington, D.C.
September 20, 2002

Quality Overview

- Quality problems are serious and widespread, harming millions
- More than 20 years of AHCPR and AHRQ research has led the way
- Much more must be done
- Quality is the health care issue of the 21st century

Classifying Quality Problems

1. Overuse
2. Underuse
3. Misuse

Overuse of Antibiotics

- 24 million Americans given antibiotics for colds, URIs, or bronchitis in 1992
- % Adult Office Visits with Antibiotics
 - Colds: 51%
 - URIs: 52%
 - Bronchitis: 66%
- 21% of all ambulatory antibiotics

Common Health Services Documented to be Overused

- Antibiotics
- Tranquilizers
- Sedatives
- Coronary angiography
- Hysterectomy
- Carotid Endarterectomy
- Cardiac pacemakers
- Upper GI endoscopy
- Non-steroidal anti-inflammatory drugs
- Tympanostomy tubes

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- Does harm because patients are exposed to unnecessary risks
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At least 20%

Proven Effective Interventions That Are Underused

- Heart attack care
- Breast cancer care
- Hypertension:
Detection and Rx
- Anticoagulation in
atrial fibrillation
- Immunizations
- Inhaled steroids
- Depression:
Detection and Rx
- Heart Failure: ACE
inhibitors
- Diabetes: blindness
prevention
- Prenatal care
- Mammography

Underuse: Heart Attack Treatments

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- We reach about half of eligible patients now
- Over 750,000 Americans suffer heart attacks each year, leading to:

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18,000 preventable deaths

Misuse in Hospital Care

- Structured implicit MD review of medical records: NYS (30,000), Utah (5,000), and Colorado (10,000)
- Rates of negligent adverse events:

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New York	1984	1.0%
Utah	1992	0.95%
Colorado	1992	0.80%

Medication Errors That Cause Injury

- Medication errors causing injury occur in 1.8% of adult hospital stays

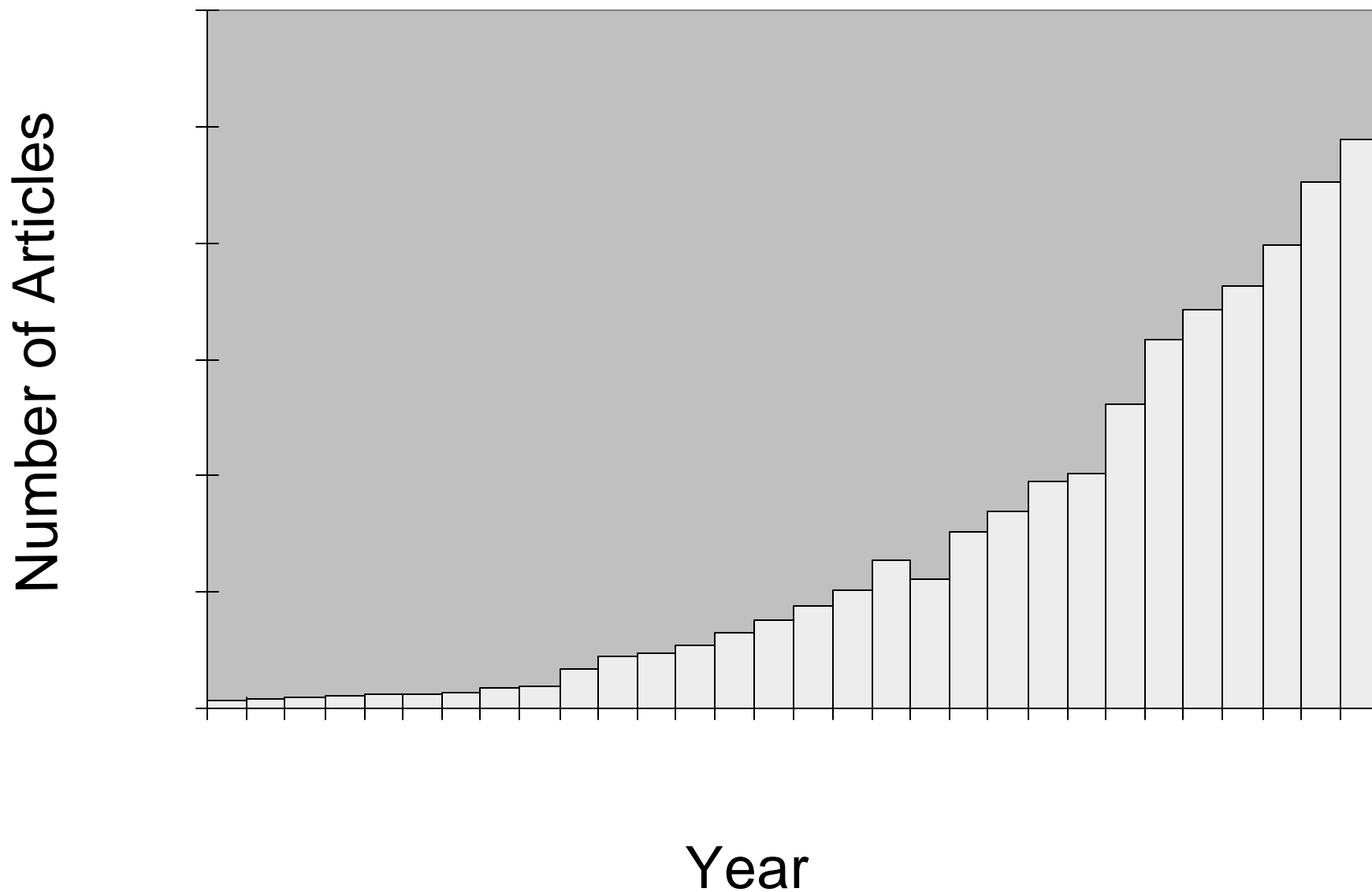
Medication Errors That Cause Injury

- Medication errors causing injury occur in 1.8% of adult hospital stays
- At a 700-bed hospital:
 - ? 530 of these injuries occur yearly
 - ? 106 will be life-threatening
 - ? 230 will be serious
- Each such injury adds \$4685 in costs

Cyclophosphamide

4 gm/m² days 1-4

Articles Published From RCTs



Public Release of Medical Outcomes Data in New York

- Data on risk-adjusted mortality after CABG surgery made public every year since 1989
- Hospitals and surgeons identified
- Data stimulated physicians and hospitals to improve
- Health department played key role

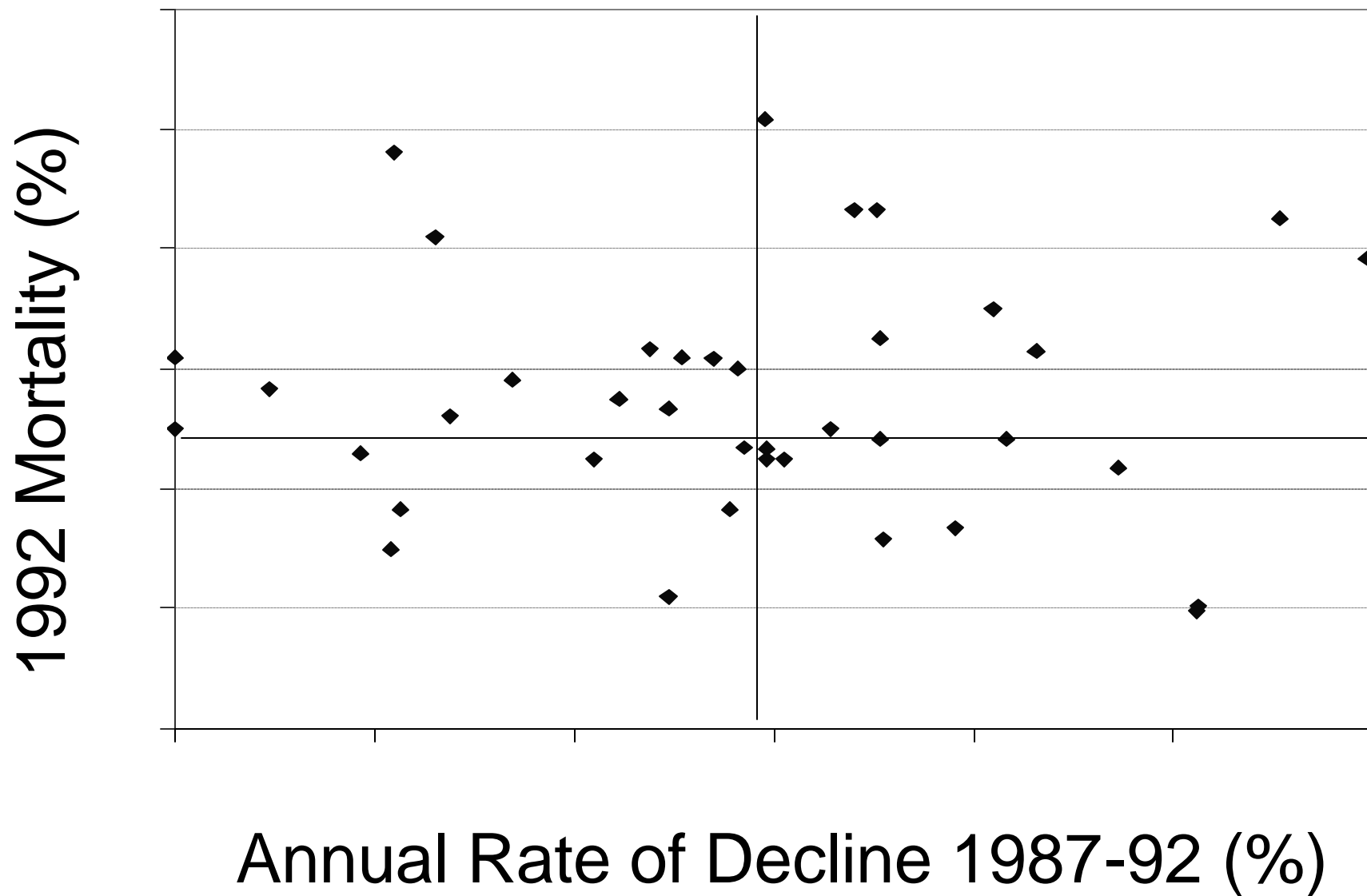
Tracing Poor Outcomes To Processes: St. Peter's Hospital

- High mortality hospital in 1991-92
- Usual mortality review by hospital provided no insight into cause
- Elective/urgent cases (91%) = avg.
- Emergencies = 26% mortality vs. 7%
- Multidisciplinary review showed insufficient stabilization before surgery

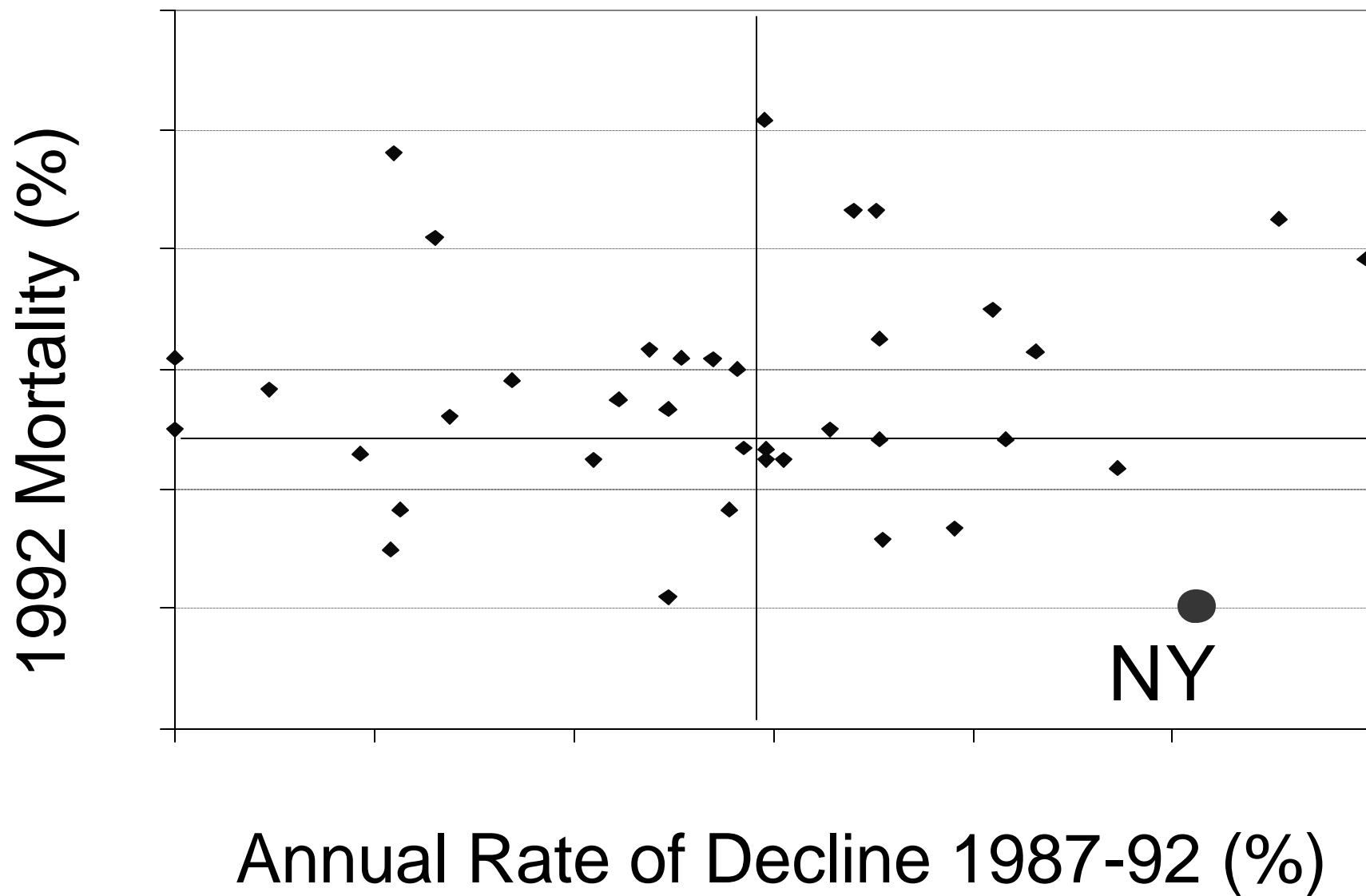
Improving Processes Improves Outcomes: St. Peter's Hospital

- Team approach to stabilizing patients
- Total mortality fell: 4.5% to 2.6%
- Elective/urgent cases: 2.5% to 2.9%
- High-risk cases not avoided
- Emergencies: deaths fell---26% to 0%
(# cases increased from 42 to 54)

CABG Mortality By State



CABG Mortality By State



The 3 Quality Goals

1. To always deliver effective care
2. To always avoid providing ineffective services
3. To eliminate preventable complications of health care