Disruption, Disruption, Disruption

Building a Successful Canadian Healthcare System

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Canada and Me

- **Rockies**
- **Saskatchewan**
- **Cardiovascular Mortality**
- **Appropriateness/Reliability**
- **Breast cancer**
- **Brother-in-law**

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What do people want?

Care that is

- Appropriate
- Excellent
- Humane
- Affordable

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What do we provide?

Care that is

- Variable
- Mediocre
- Expensive

Goal 1

- **Provide all necessary care for everyone**

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Necessary Care

- **Appropriate**
- **Non-trivial benefit**
- **If not offered, physician is liable**
- **If unable to offer, physician would get upset, might strike**

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Necessary Care

- **Pap smear once every three years**
- **Bypass surgery for left main disease**
- **Bone marrow transplant for aplastic anemia**

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Goal 2

Eliminate waste

- **Provide what is necessary more efficiently**

- **Change labor mix**

- **Do not use "public" money to pay for care when cost > benefit**

It is the only win/win solution left in improving health care

Control New Technology

Decide what technology is worth the cost

Benefits and Costs of the Most Likely Innovations, 2002-2030

Technology	Annual Treatment Cost in 2030 (2000 $, billions)	Incr. in 2030 health care spending over status quo (%)	Cost per additional life-year
Anti-aging compound (healthy)	72.8	13.8	8,790
Cancer vaccines	0.8	0.4	18,236
Treatment of acute stroke	4.4	0.4	21,905
Anti-aging (unhealthy)	73.3	70.4	29,785
Telomerase inhibitors	6.4	0.5	61,884
Alzheimer's prevention	49.1	8.0	80,334
ICDs	20.7	3.7	103,095
Diabetes prevention	20.6	3.2	147,199
Antiangiogenesis	51.9	8.0	498,809
Left ventricular assist devices	14.2	2.3	511,962
Pacemaker for atrial fibrillation	13.6	2.3	1,403,740

Goal 3

- **Improve mean level of quality of care (appropriateness, excellence, patient satisfaction)**

- **Decrease its variation as a function of whom one sees**

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Real time data on quality to everybody

Will public accountability (transparency) improve quality?

MAYBE

Clinton Surgery Puts Attention on Death Rate

- **Clinton hospital's death rate higher for bypass surgery** *(NY Times 9/6/2004)*

- **Overall CABG death rate for New York State is 2.18%** *(nysdoh 2001)*

- **Columbia Presbyterian Center of New York Presbyterian Hospital overall CABG death rate 3.93% - nearly double** *(nysdoh 2001)*

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Improving Quality

Biggest patient safety problem in hospitals is unnecessary death in patients admitted with treatable medical conditions. Push to adopt 6-digit code. Produce hospital death index. Release it. Demand accuracy or else. Incentivize patients to use safer hospitals.

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Improving Quality

Biggest patient safety problem in surgery is inappropriate surgical decisions - both operating on patients who do not need it and not operating on patients who do. Incentivize patients and providers to do formal appropriateness assessments before a decision for surgery is made.

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Improving Quality

Biggest patient safety problem in ambulatory area is underuse of chronic disease medications. Make sure e-prescribing systems detect underuse and inform providers of it.

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Improving Quality

Pay providers for transparency, not performance. Blacklist providers who produce misleading data.

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Improving Quality

Increase plan generosity for those patients who will answer surveys and allow use of medical records to answer questions about effectiveness and quality of care.

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Improving Quality

Demand that all CEOs of a delivery entity know, in real time, what patients they are responsible for, how many died in the previous 24 hours, and what proportion of each death was their responsibility. Make results transparent.

Require (incentivize) patients and physicians to know the appropriateness of care before procedure is performed

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Improving Quality

Incentivize patients to obtain the least expensive medication in the least expensive manner.

Improving Quality

Incentivize providers and hospitals to implement computerized medical record systems that produce a real-time, comprehensive, clinically-detailed quality assessment that cannot be gamed (QA Tools, ACOVE).

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Improving Quality

Push the government to produce a yearly clinically-detailed national report on quality (QA Tools and ACOVE are the best way to go). This report should include how quality varies by race, gender, state, method of payment and age. In addition, the report should reference quality scores by name for each medium-to-large medical group as well.

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Relationship of Quality Score on Process of Care to 30-day Death Rate (400 Hospitals)

Disease	Death Rate (%)	
	Top 25%	Bottom 25%
Heart failure	11	19
Heart attack	24	30
Pneumonia	15	20

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# *About One-Third of Common Surgical Procedures May Not Benefit Patients*

Proportion of procedures performed

Categories: Cataract surgery, Hysterectomy, Angioplasty, CABG, Angiography

Legend: Overuse, Potential overuse
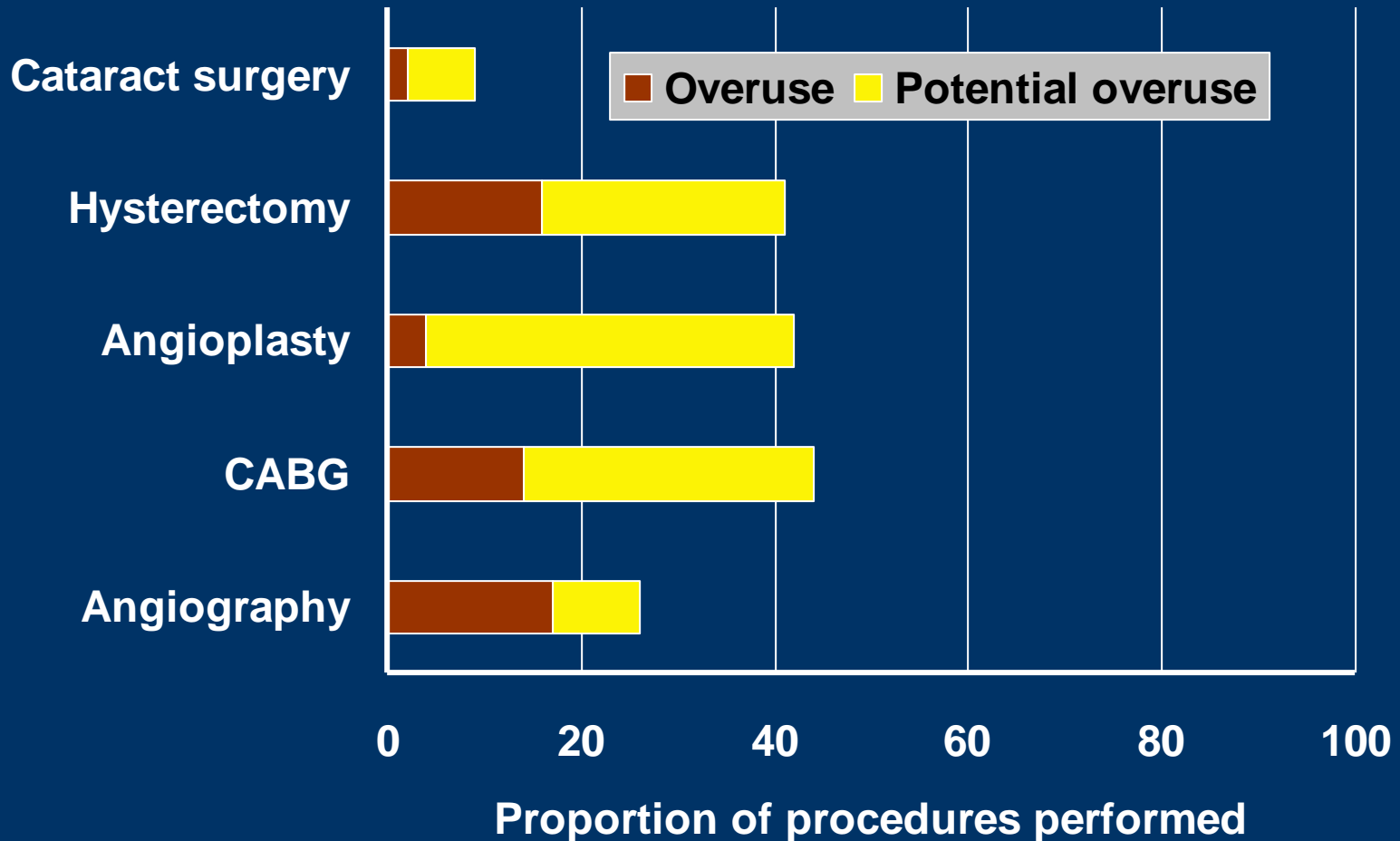
Variability in Interpretation of Coronary Angiograms in New York State

- **48% exhibited one or more technical inadequacies**

- **Inadequate studies varied markedly by hospital; 12 of 29 $\geq$ 50% inadequate**

- **Only 1/3 of cases initially read as left main disease confirmed**

Overall, About Half of Recommended Care Is Received

Care that meets quality standards

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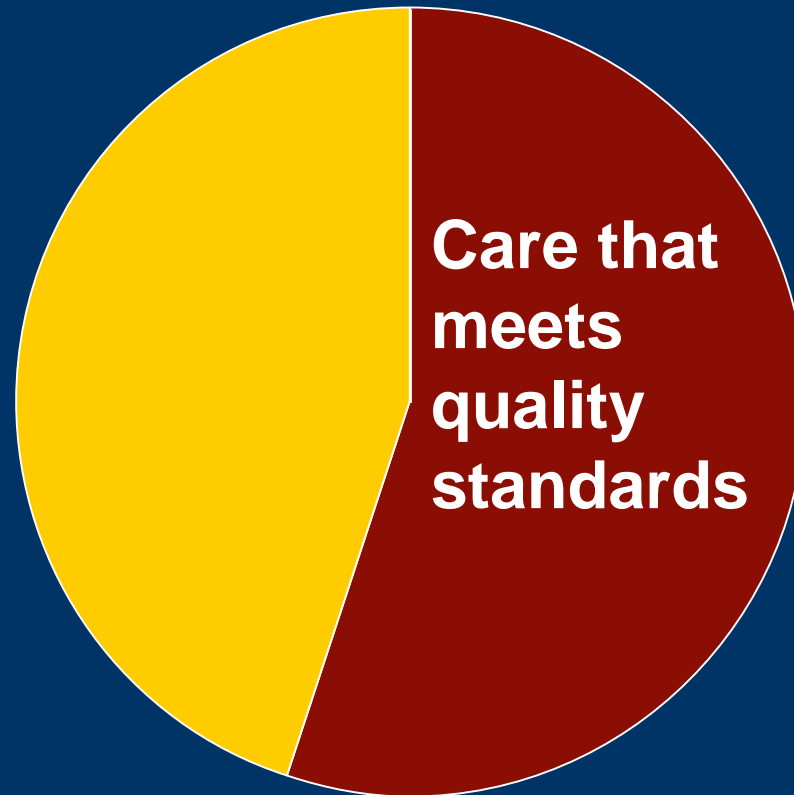
Quality of Care for Cardiopulmonary Problems Varies Widely
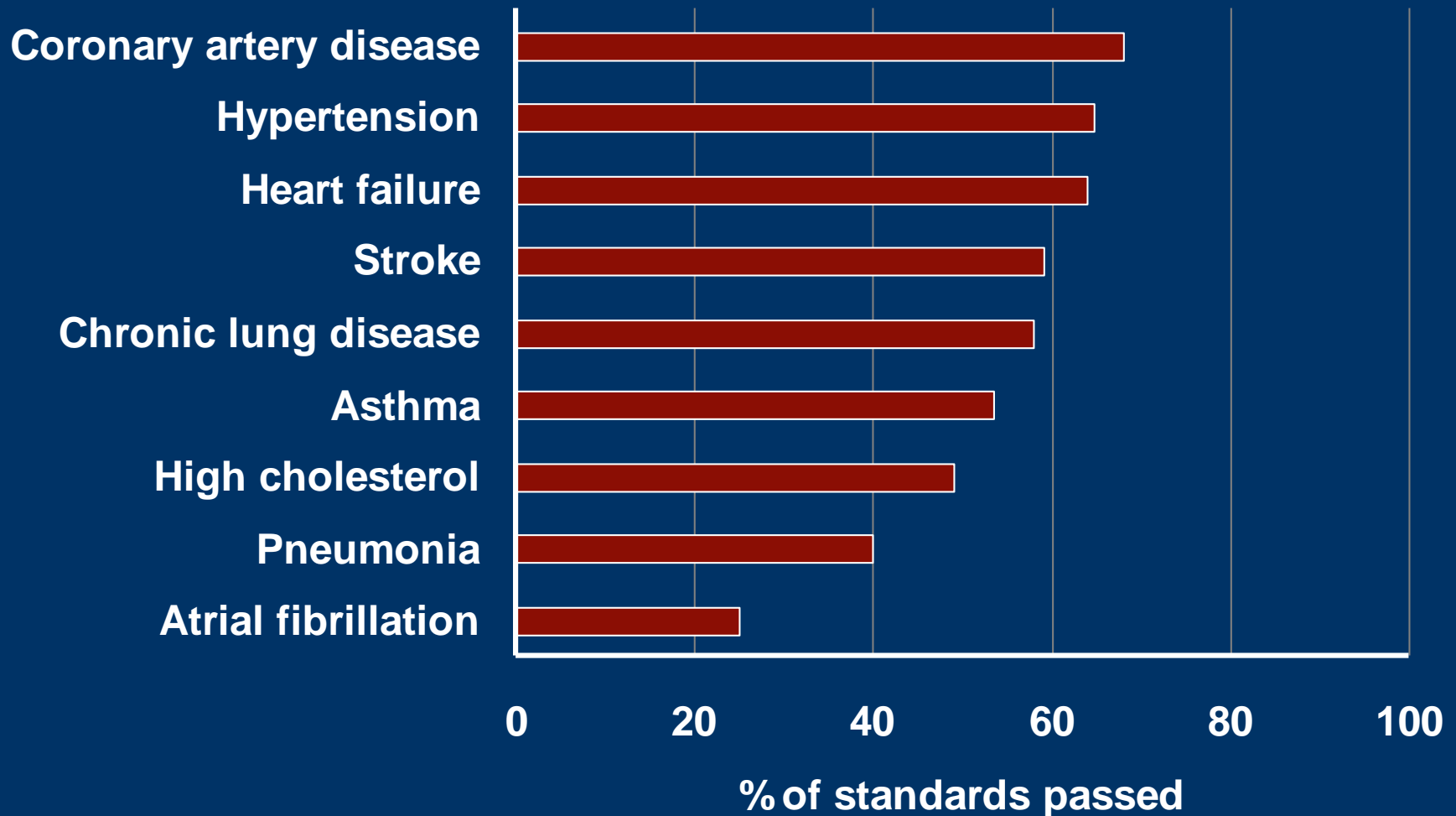
And You Aren't Safe Anywhere...

% of recommended care received
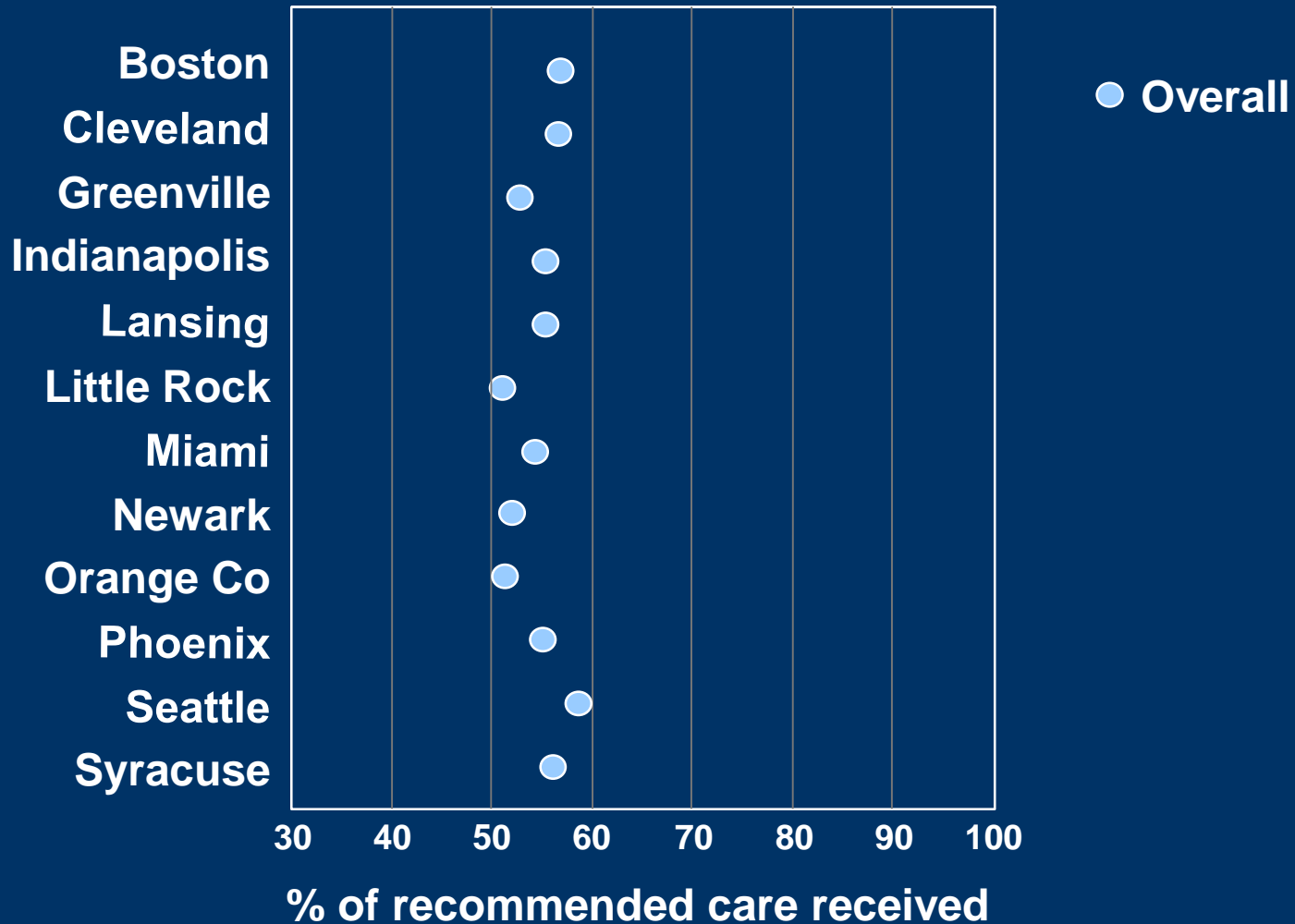
Kerr et al, Health Affairs 2004;23(3):247-256.

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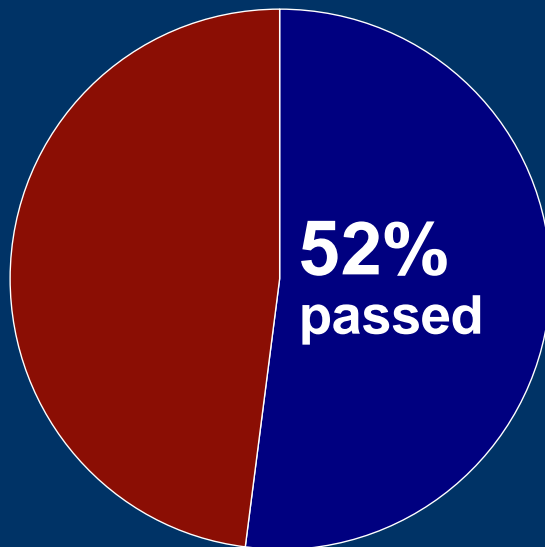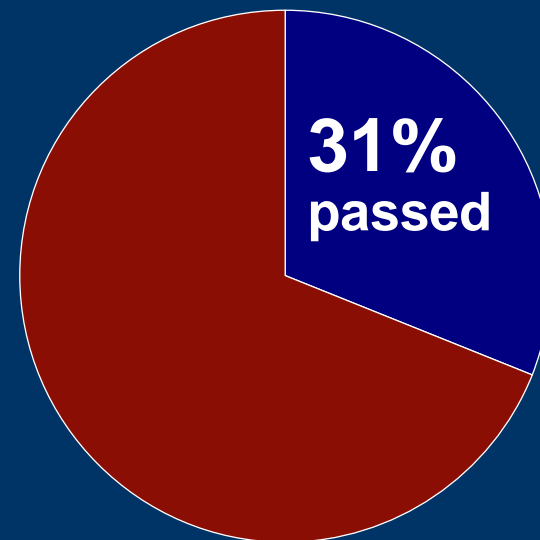
Example of Care Given to Vulnerable Elder: Examination After a Fall

- 6% Blood pressure
- 25% Vision
- 7% Gait and balance
- 28% Neurological exam
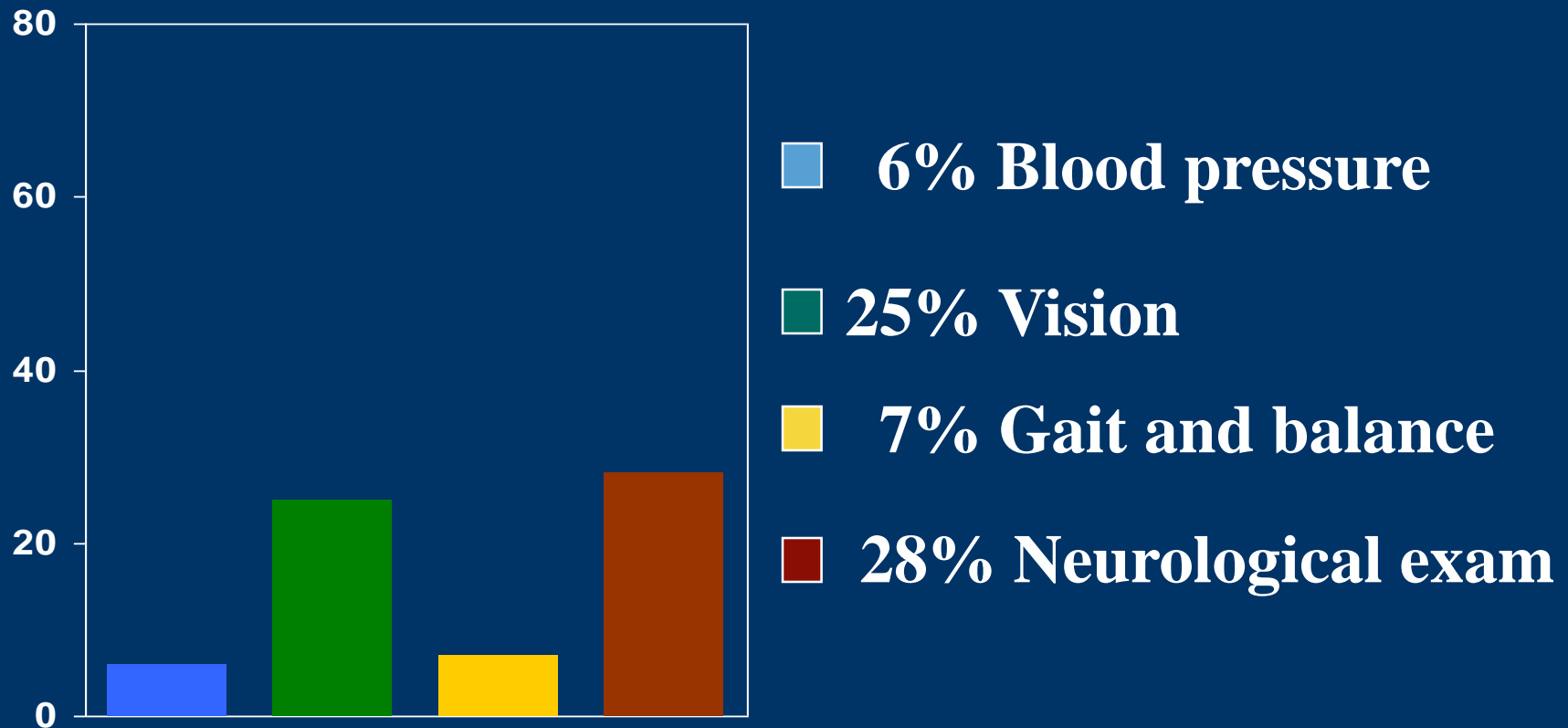
Patients Receiving Better Quality of Care Were More Likely to Be Alive 3 Years Later

% Survival After 3 Years

% of Recommended Care Provided
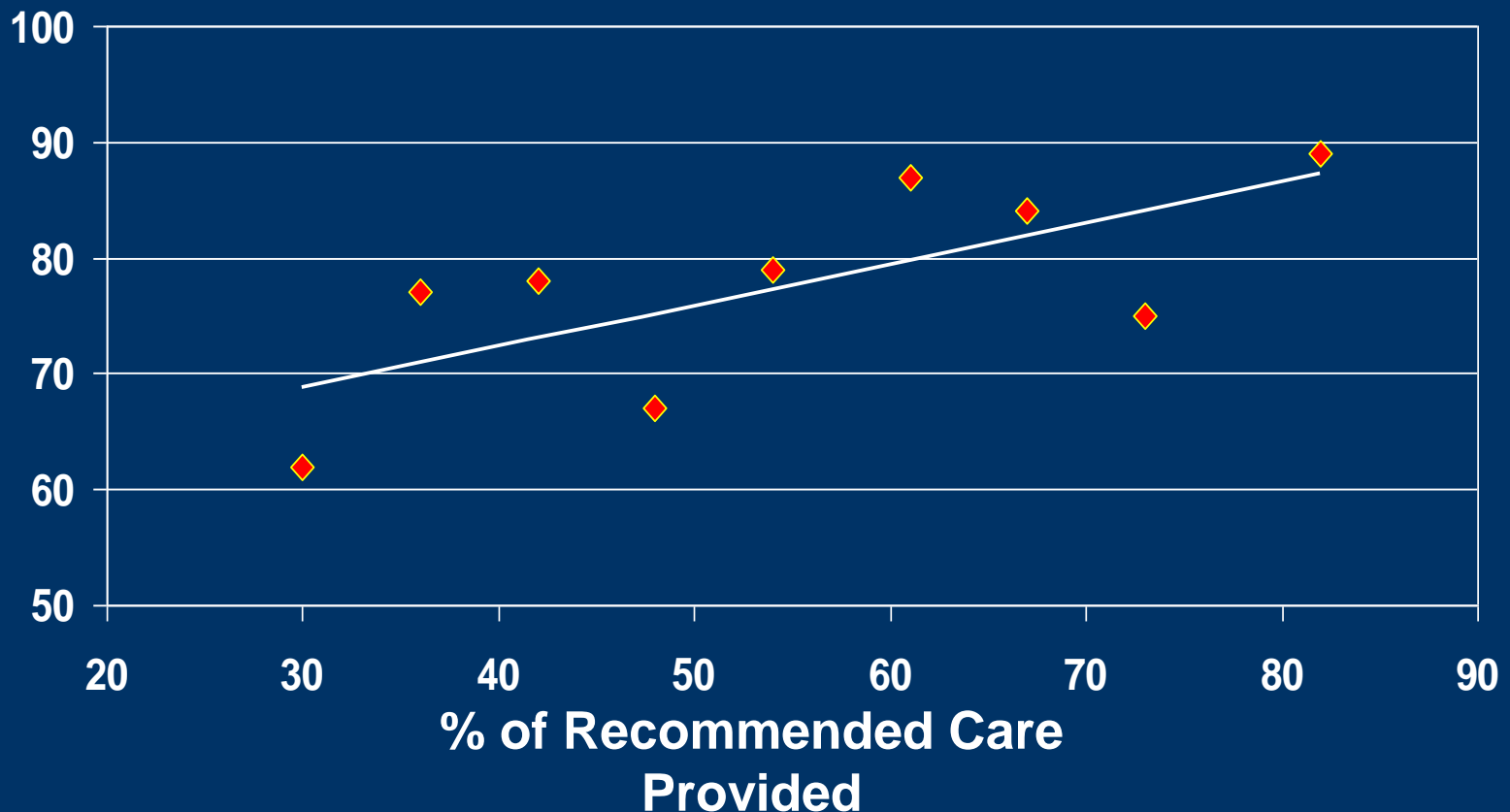
How Can Academics Play Their Part?

1. **Make purpose of professional organizations to improve value of healthcare and use annual meetings to focus on the achievements of last year**

2. **Aggressively identify and eliminate waste**

3. **Tie research to immediate action/ROI**

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How Can Academics Play Their Part?
(cont'd)

4. **Change publication/promotion policy**

5. **Agree to be responsible for cost and quality**

6. **Practice population based medicine**

7. **Do not be afraid to require patients to be responsible**

8. **Establish a 24 hour business**

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How Can Academics Play Their Part?
(cont'd)

9. **Insist on real time measures of quality and cost**

10. **Measure functional status, appropriateness**

11. **Give up on astrology**