



HEALTH

***Underuse and Quality of Care:
The Extent and Nature of the Problem***

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Defining Quality

Elements of Quality Care

Type of Quality Problem

People get the care they need

Underuse

People need the care they get

Overuse

Defining Quality

Elements of Quality Care

Type of Quality Problem

People get the care they need

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People need the care they get

Overuse

} **Effectiveness**

The Other Elements of Quality

<u>Elements of Quality Care</u>	<u>Type of Quality Problem</u>
People get the care they need	Underuse
People need the care they get	Overuse
Care is provided safely	Error
Care is timely	Delays
Care is patient-centered	Unresponsive
Care is delivered equitably	Disparities
Care is delivered efficiently	Waste



How Did We Measure Quality?

- **Developed 439 standards for evaluating care for:**
 - **30 chronic and acute health problems**
 - **Preventive care**
- **Phoned people randomly selected from 12 representative metropolitan areas**
 - **With and without insurance**
 - **Healthy and seriously ill**
 - **Across the socioeconomic spectrum**
- **Reviewed all of their medical records for a two year period**

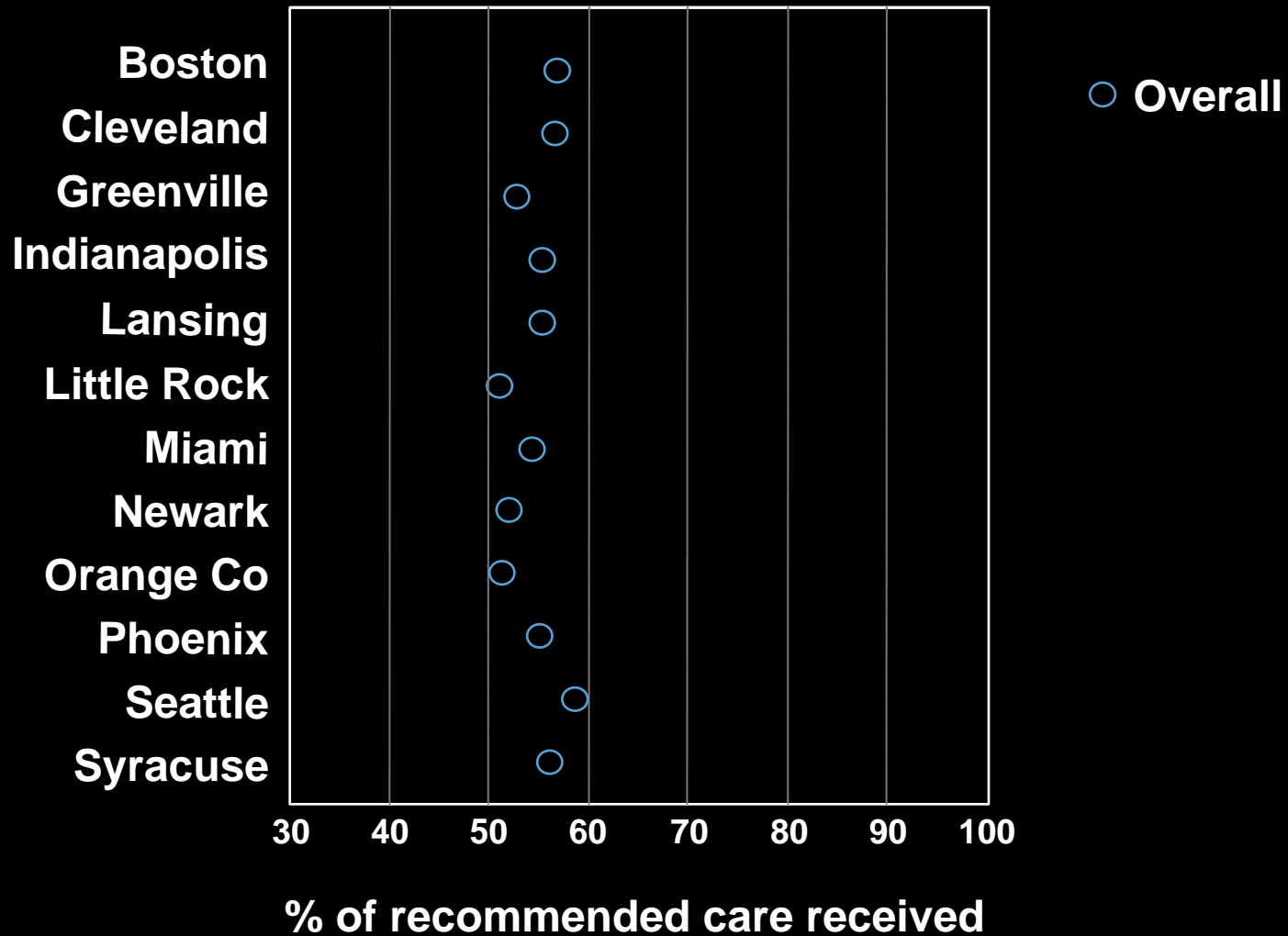
Constructing Quality Scores

$$\text{Score} = \frac{\text{\# of times recommended care was given}}{\text{\# of opportunities to deliver recommended care}}$$

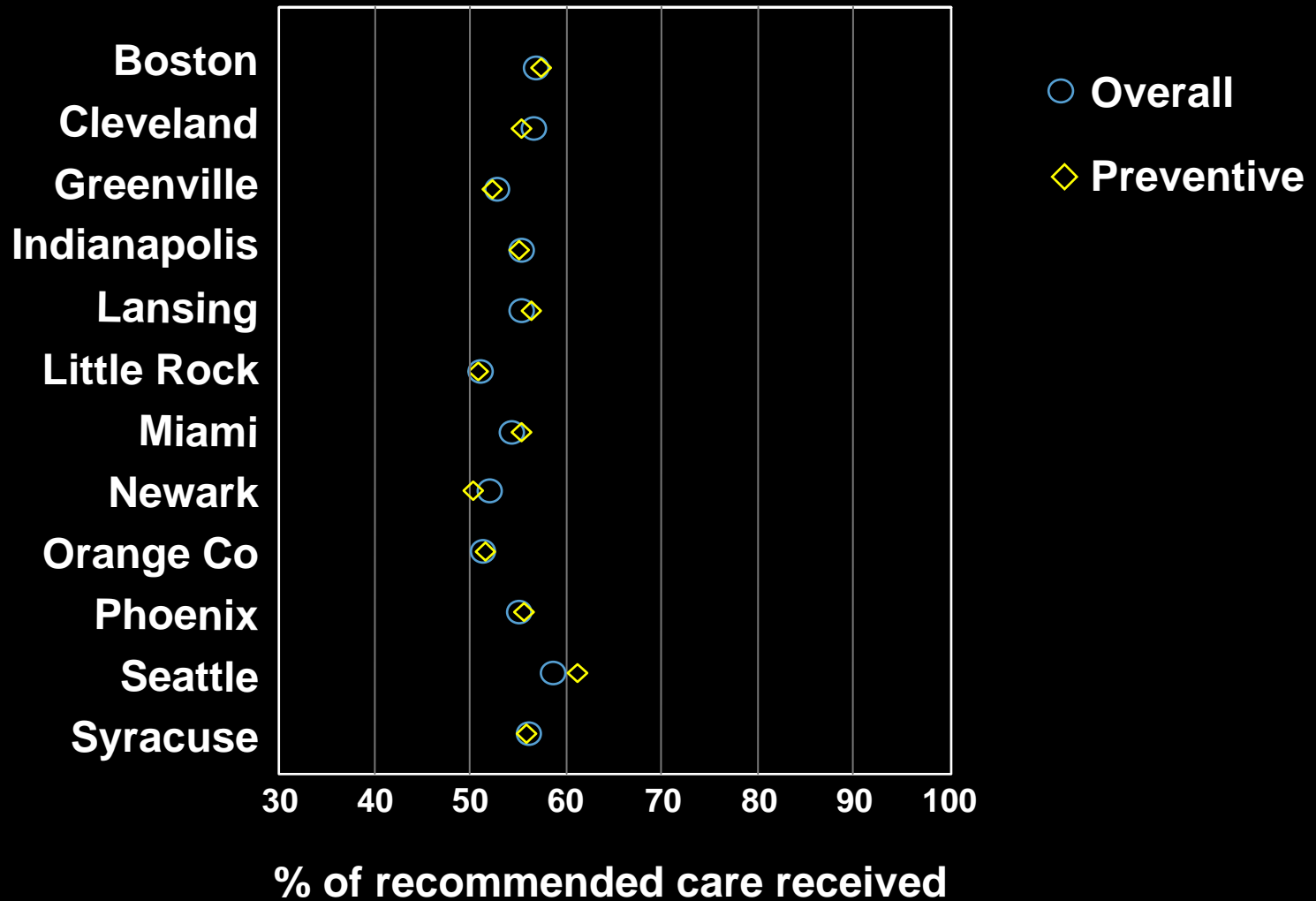
American Adults Receive About Half of Recommended Care



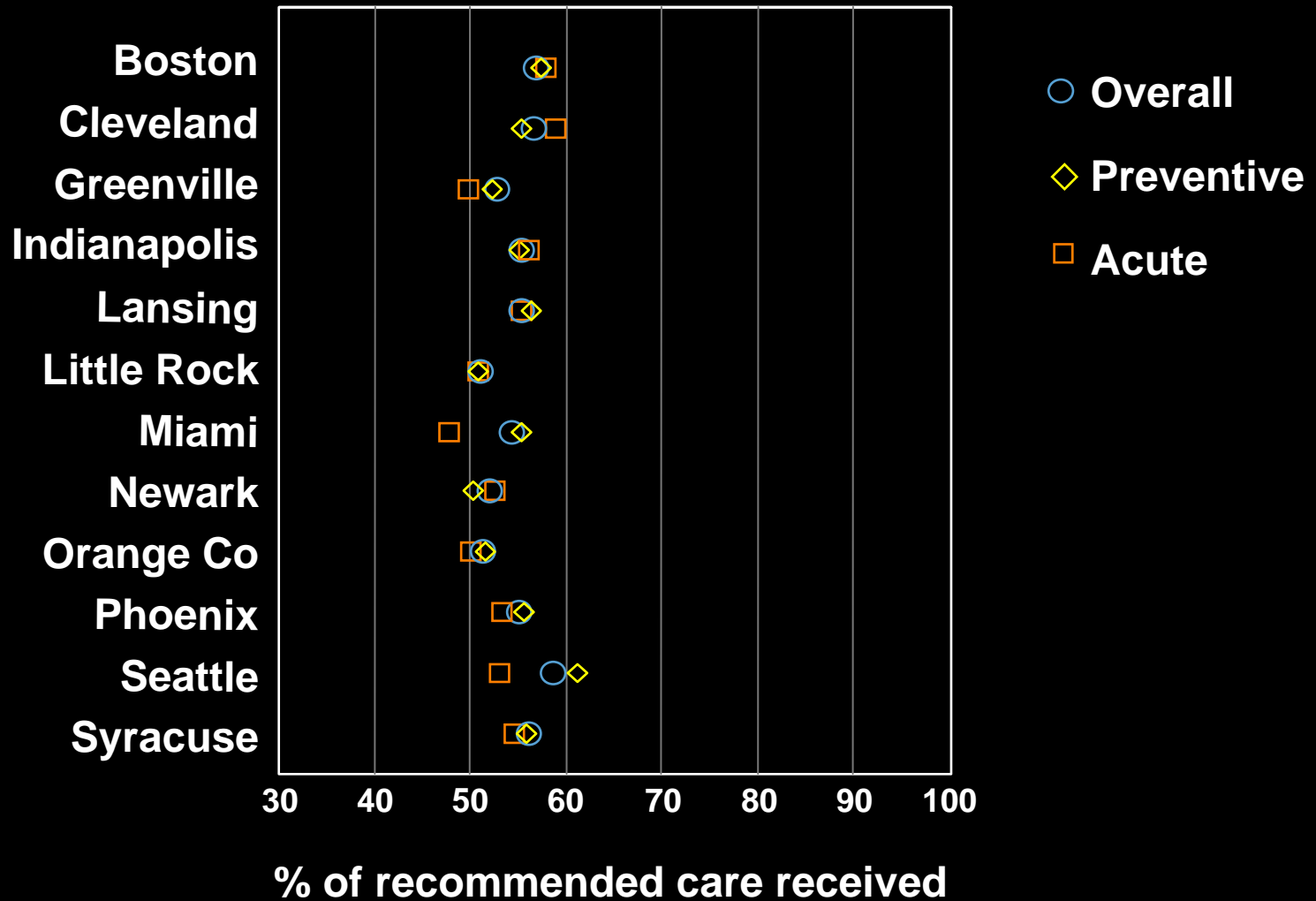
And You Aren't Safe Anywhere...



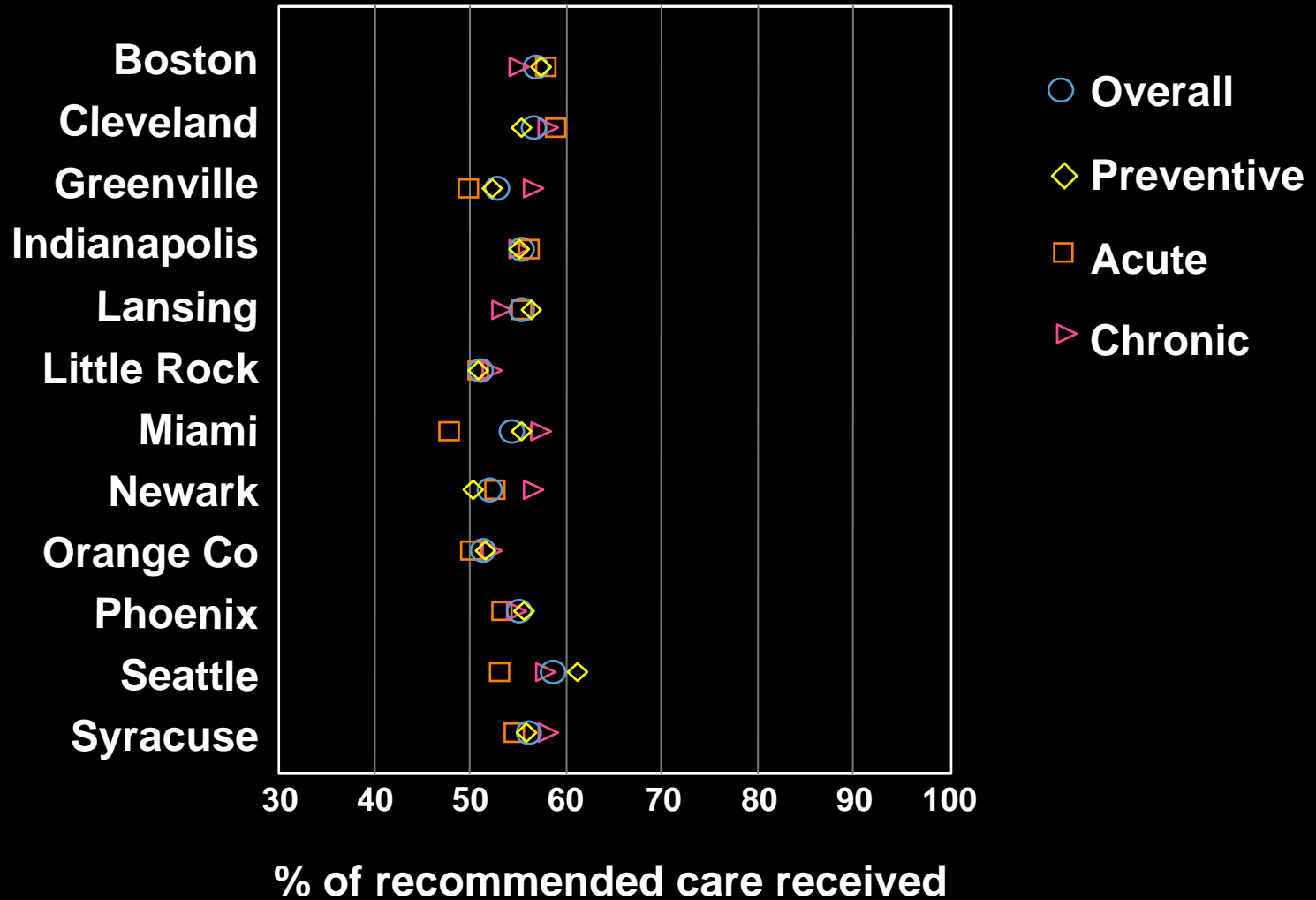
And You Aren't Safe Anywhere...



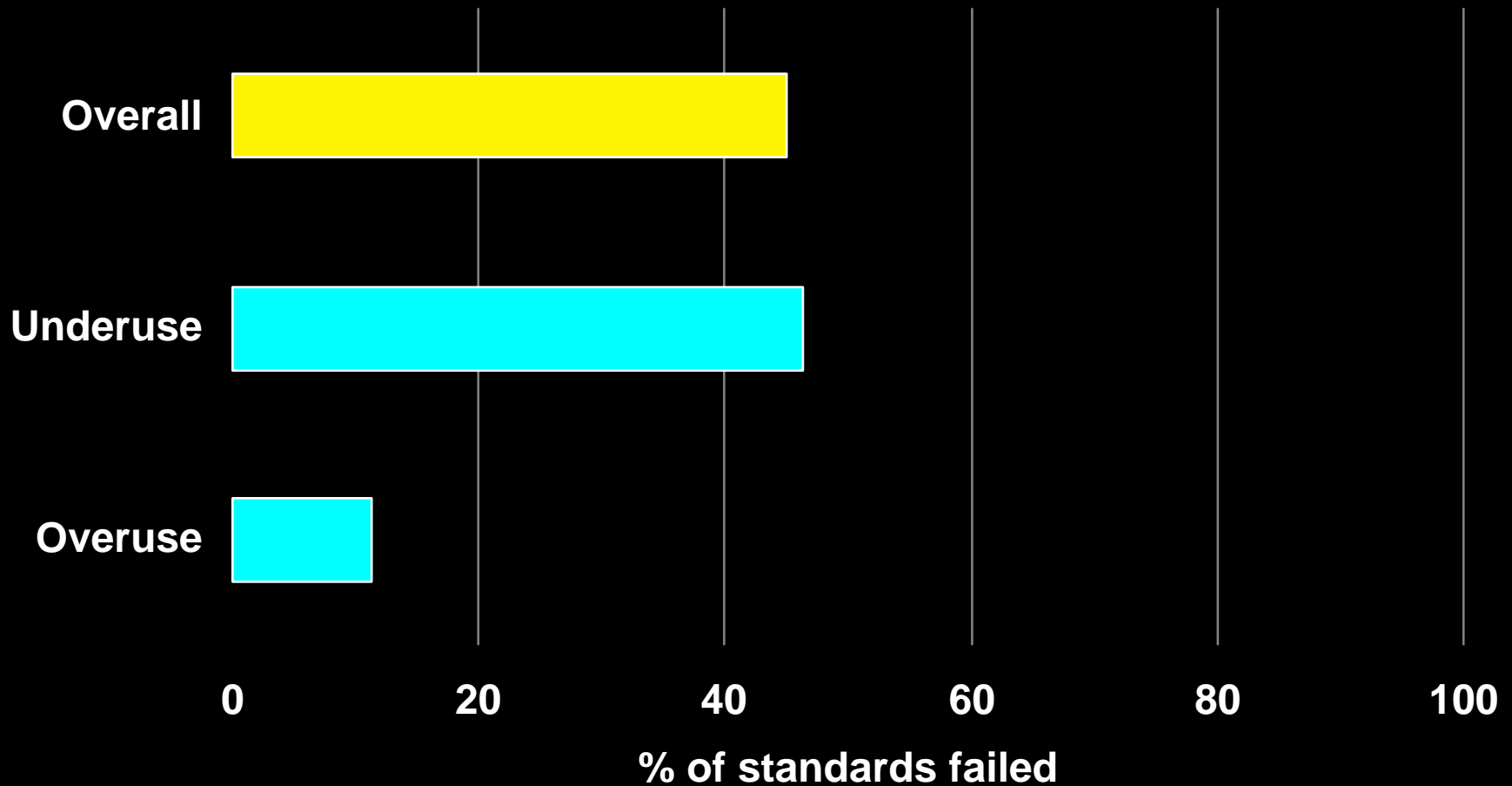
And You Aren't Safe Anywhere...



And You Aren't Safe Anywhere...



U.S. Health Care System Is Operating at ~1 Sigma



Underuse: Ongoing Monitoring of Diabetes



Underuse: Response to Abnormal Results

Failure of therapy



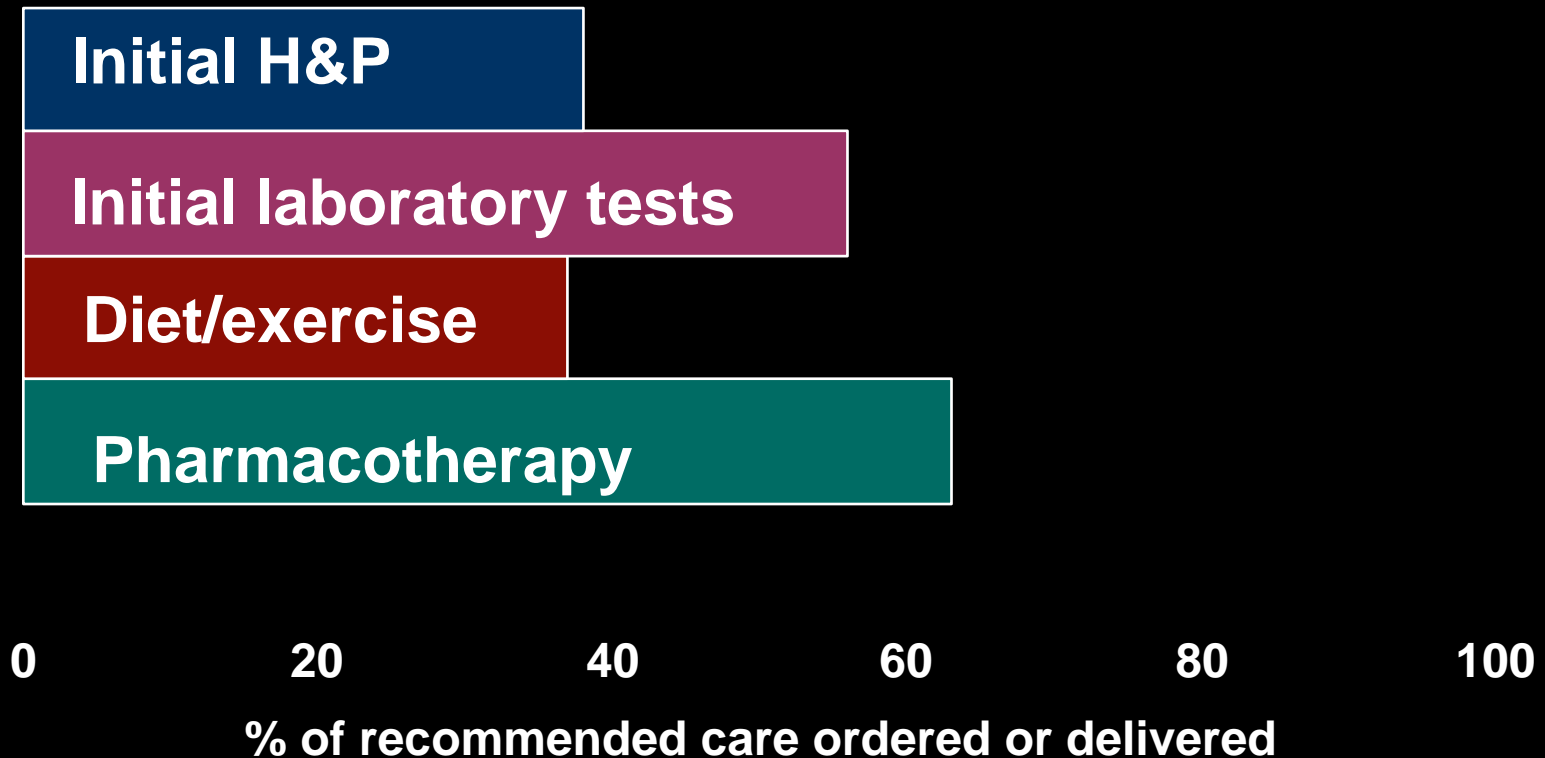
Change therapy
(38%)

Abnormal urine protein

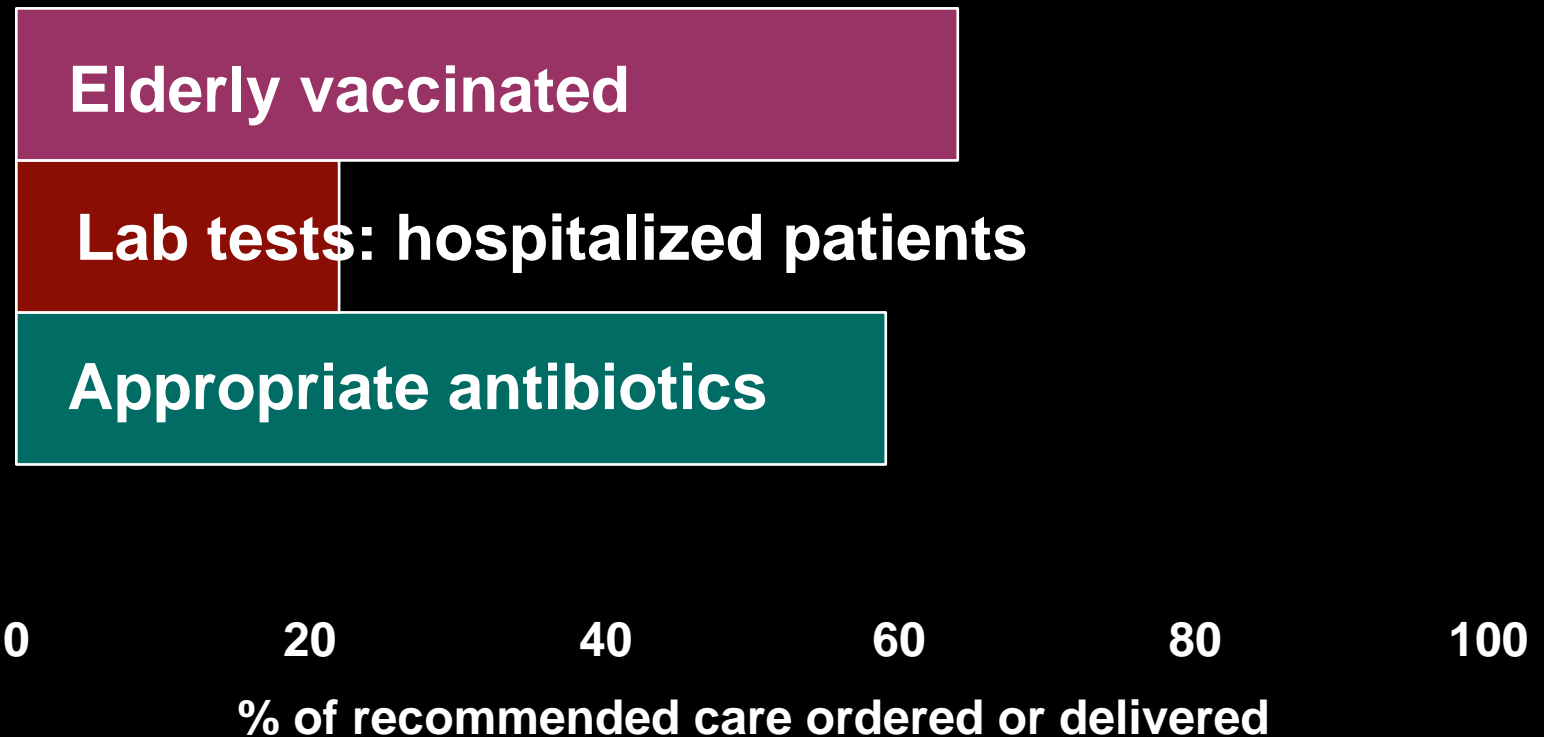


Prescribe ACEI
(55%)

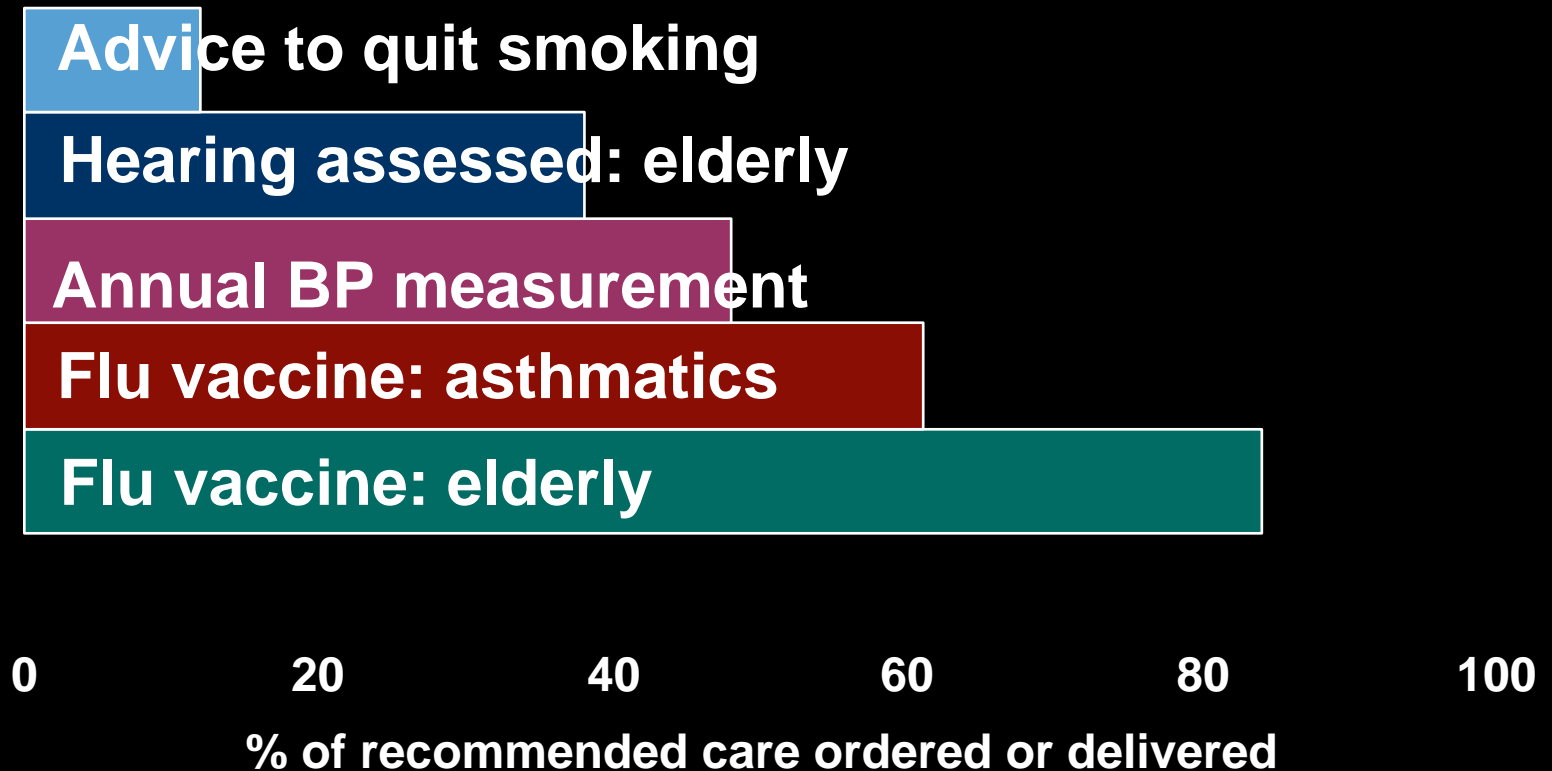
Underuse: Initial Diagnosis and Management of Hypertension



Underuse: Treatment of Pneumonia



Underuse: Prevention



What Can We Do?

- **Implement systems**
 - **Registries**
 - **Reminders**
 - **Alerts**
 - **Proactive monitoring**
- **Implement protocols**
 - **Standing orders**
- **Engage physicians in identifying and implementing solutions**
- **Activate patients to identify and advocate for their needs**

What are the Consequences of Poor Quality?

Condition	What We Found	Preventable Complications/ Deaths (Annual)
Diabetes	Blood sugar not measured for 40%; 24% uncontrolled	2,600 blind; 29,000 kidney failure
Hypertension	Blood pressure uncontrolled in 58%	68,000 deaths
Heart attacks	39-55% did not receive needed medications	37,000 deaths
Colon cancer	62% not screened	9,600 deaths