

# Quality Improvement in Mental Healthcare: The Measures Matter

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# Overview

- Quality of mental healthcare in the US
- Movement toward measurement-based quality improvement (MBQI)
- Implications for patient care & clinical practice

# U.S. Institute of Medicine Crossing the Quality Chasm, 2001

Quality problems are everywhere...

Between the health care we have and the care we could have lies not just a gap, but a chasm.

# IOM Crossing the Quality Chasm (2005): Adaptation to Mental Health/Addictive Disorders

- Many with severe illness receive no treatment
- Inappropriate variation from provider to provider
- Inconsistent use of evidence-based practices
- Medical errors threaten patient safety
- Opportunities for prevention often missed

# Quality of Mental Health Care

## Evidence-based Guidelines

## Conformance Rate

### Depression

medication management

31-35% (Wells, 1999)

psychotherapy / counseling

16-24% (Wells, 1999)

### Schizophrenia

medication management

29-92% (Lehman, 1999)

psychosocial treatment

10-45% (Lehman, 1999)

### Bipolar disorder – med. mgmt.

36-39% (Unutzer, 2000)

### Severe mental illness – evid. based care

4-19% (Wang, 2002)

# Gaps in Other Processes of Care

## Prevention

- 30-50% primary care pts w/ MDD not detected

## Assessment

- Among pts. hospitalized for MDD, only 46% had documented assessment for SI, 50% for psychosis

## Continuity

- Among pts. hospitalized for SPMI, btw 33-53% lacked an ambulatory follow-up visit w/in 30 days

## Coordination

- 29-84% of patients hospitalized for a psychiatric disorder lacked a scheduled OP appt. at discharge

# IOM Crossing the Quality Chasm (2005): Adaptation to Mental Health/Addictive Disorders

## Recommendations:

Clinicians & provider organizations should measure and continuously improve the quality of the care they provide.

- consensus-based development of core measures
- validation of measures
- models for their use in QI

# Why QI, Why Now?

- Accumulation of quality of care research
- Concerns of business community
  - rising costs
  - absence of information on value
  - “accountability”
- Concerns of consumers & clinicians
  - impact of cost-containment, managed care
- Rise of the machine
  - integrated health systems
  - information systems



# A 'March' toward Empiricism?

- Criteria-based diagnosis
- Controlled trials of interventions
- Practice guidelines
- Measuring guideline conformance
- Narrowing gaps between actual & guideline-based care

# What is Measurement-based QI?

Total Quality

FOCUS

CQI

TQM

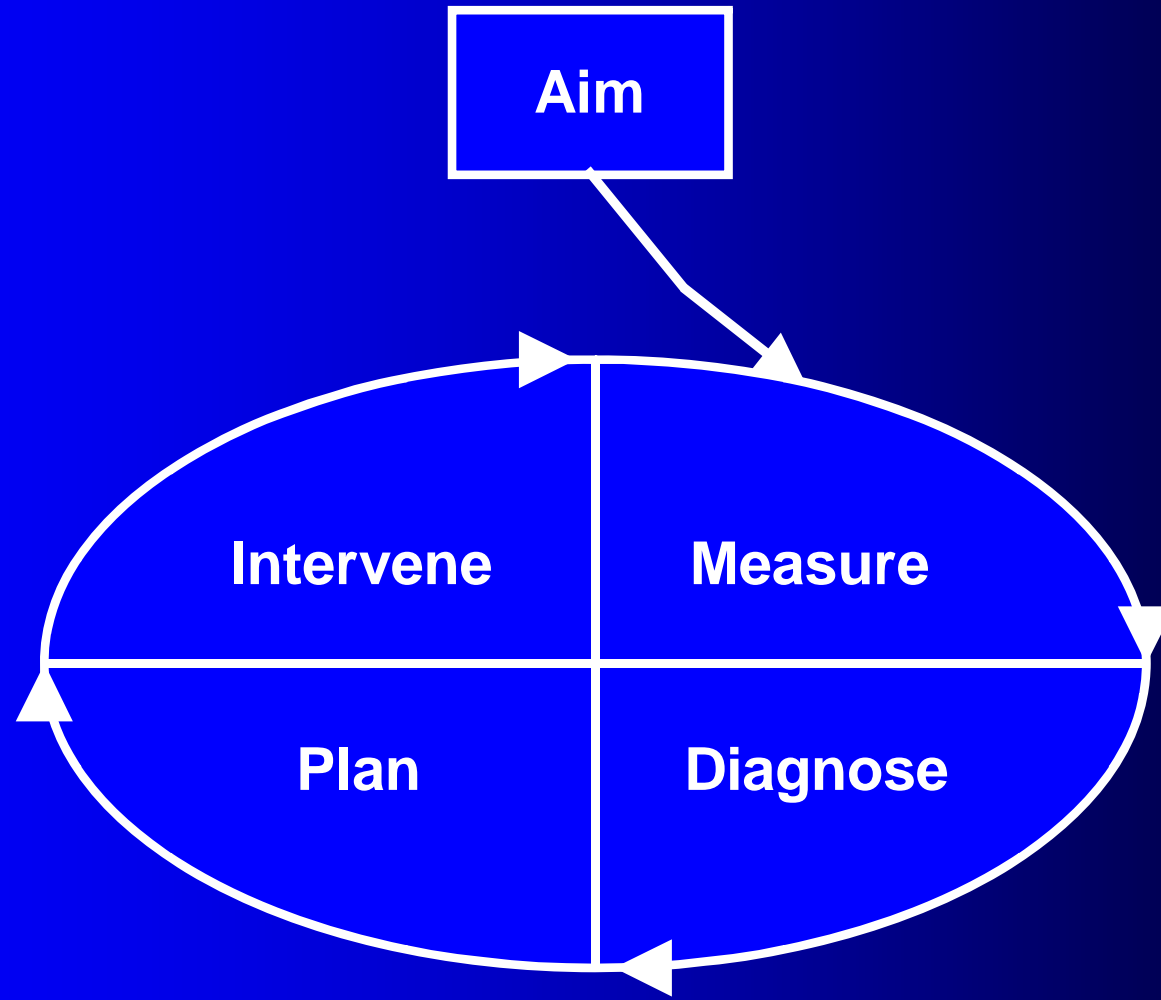
PDCA

Six Sigma

# Principles of Measurement-Based QI

- Health care as series of processes
- Quality as problems in processes
- Use of measurement & statistical analysis
- Focus on improving process & outcomes
- Organization-wide involvement

# Model for Measurement-based QI



# Role of Measurement in Quality Improvement

- Internal quality improvement
  - incremental MBQI
  - system redesign
- External quality improvement
  - reporting and feedback
  - collaborative partnerships
  - consumer & purchaser choice
  - contractual goals
  - accreditation standards

# "Pay for Performance"

Goal: align payment incentives w/ higher quality

Mechanisms:

- higher payments for meeting quality standards
- incentives for improvement
- "tiered co-payments" for consumers

Status:

- hundreds of programs nationwide
- federal demonstration projects; legislation pending
- broader use expected

# Concerns about Measurement-Based QI

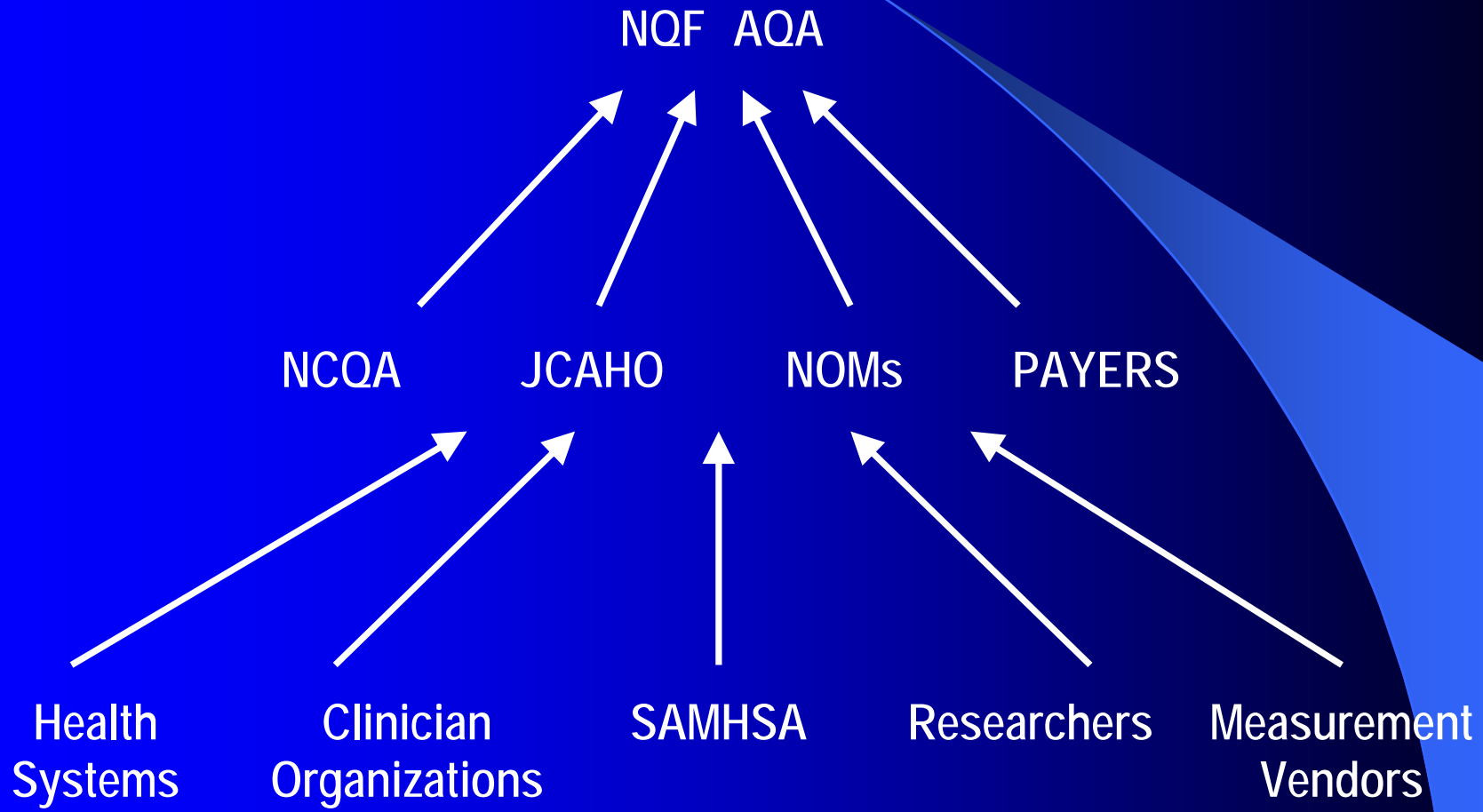
- Regulatory compliance or real work?
- QI or cost containment?
- Are we measuring what's important?
- Are the measures & data adequate to the task?
- Is what's measured under our control?
- My patients are sicker...

Meanwhile...





# Standardization of Quality Measures



# Measure Selection: Why it Matters

- What problems will be addressed?
- Where will resources be directed?
  - Direct cost of QI to hospitals: \$200,000 / year
  - Indirect costs: clinician & administrative time
  - Opportunity costs: other QI, clinical care, other
- How will we be reimbursed, accredited, credentialed?

# Measurable, Improvable Components of Care

## Structure

Clinicians  
Facilities  
Plans  
Financing  
Communities  
Patients  
Illnesses

## Technical Process

Prevention  
Access  
Assessment  
Treatment  
Coordination  
Continuity  
Safety

## Interpersonal Process

Communication  
Decision-making  
Interpersonal style

## Outcome

$\Delta$  in symptoms  
 $\Delta$  in functioning  
 $\Delta$  in quality of life  
Satisfaction  
Adverse effects  
Mortality

# NCQA's HEDIS Measures for Health Plans

## Major Depression: % of patients with...

- $\geq 12$ -week continuation after antidepressant initiated
- $\geq 6$ -month continuation after antidepressant initiated
- 3 follow-up visits during 12-week acute phase

## ADHD: % of children with...

- $\geq 1$  follow-up visit w/in 30-day after initiation of medication
- $\geq 2$  additional follow-up visits w/in subsequent 9 months

## Aftercare Post-Hospitalization:

- % patients with a follow-up visit within 7 & 30 days

# JCAHO Candidate Core Measures for Inpatient Psychiatry

## % of hospitalized patients with:

- assessment of risk, substance abuse, trauma & strengths
- discharged on multiple antipsychotic medications
- hospital data provided to their OP clinician after discharge

## Per Inpatient Stay:

- hours of restraint use
- hours of seclusion use

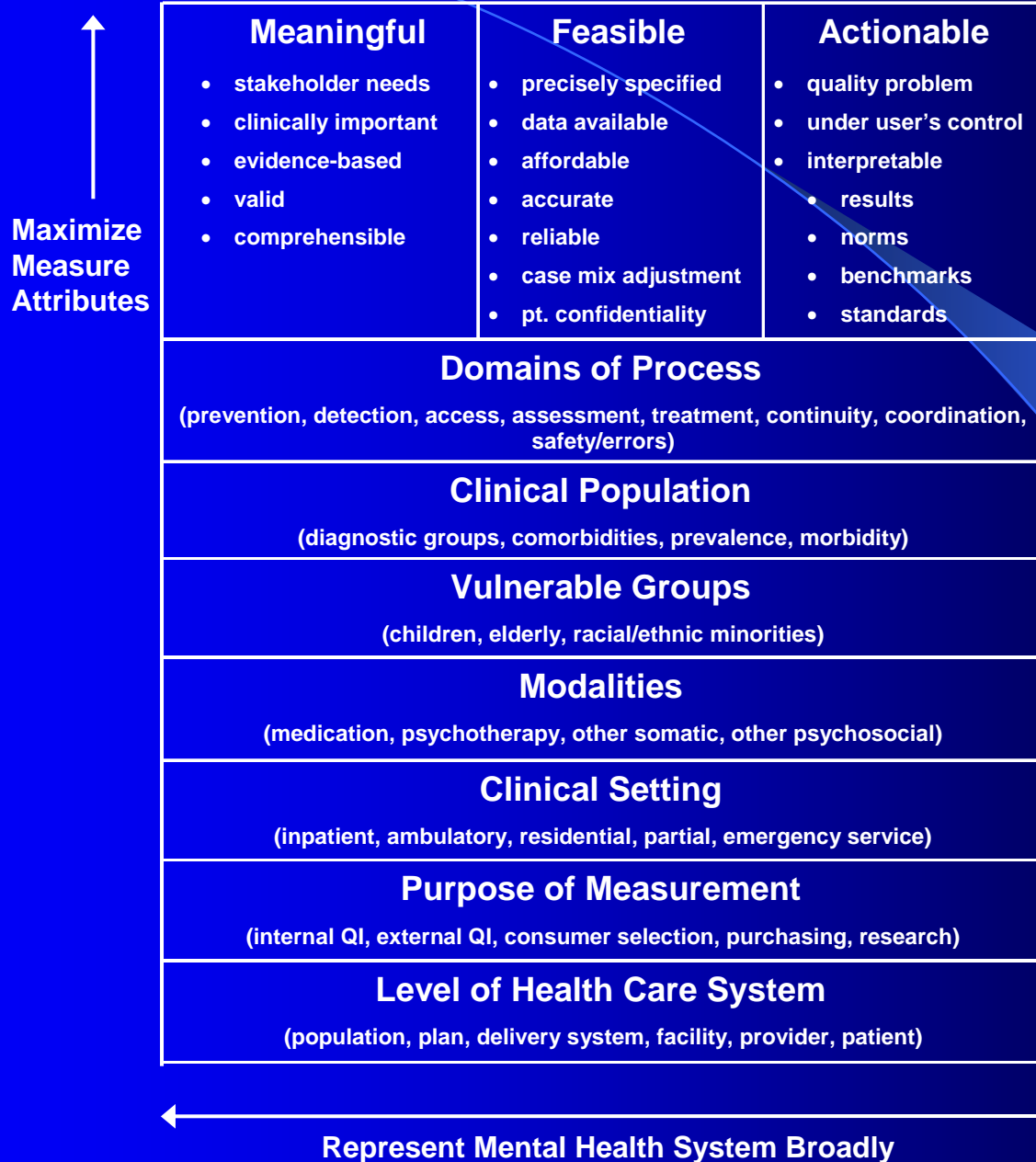
# Surveys of Patient Experience

- Experience of Care & Health Outcomes Survey (ECHO)
- MHSHP Consumer Survey
- Perceptions of Care Survey
- Press-Ganey Survey

# Outcome Measures in Use in Massachusetts

- Brief Psychiatric Rating Scale (BPRS)
- Treatment Outcomes Package (TOP)
- Behavior & Symptom Identification Scale (BASIS)
- Life Status Questionnaire (LSQ)
- Patient Health Questionnaire (PHQ)

# Attributes Informing Measure Selection



Hermann and Palmer,  
Psychiatric Services, 2002



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**Search for Measures**

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To search for measures, please select at least two of the following search criteria.

Diagnosis:	<input type="text" value="Not Specified"/>
Special Populations:	<input type="text" value="Not Specified"/>
Data Source:	<input type="text" value="Not Specified"/>
Evidence Level:	<input type="text" value="Not Specified"/>
Treatment:	<input type="text" value="Not Specified"/>
Domain of Quality:	<input type="text" value="Not Specified"/>
Clinical Setting:	<input type="text" value="Not Specified"/>

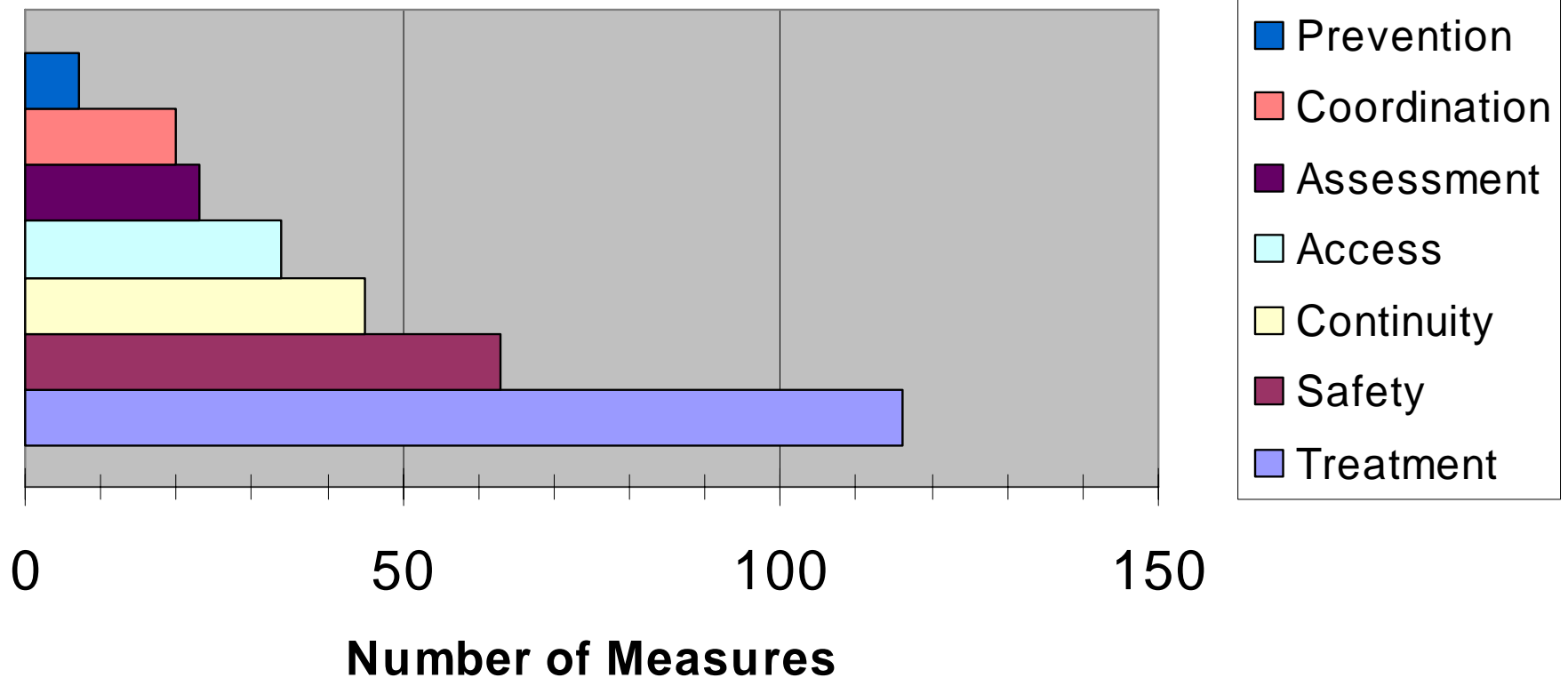
Search for Quality Measures

Reset

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# National Inventory of Mental Health Quality Measures

## Process Measures Assessing Quality (n=308)



# Treatment Modalities Assessed

	<u>N</u>	<u>%</u>
Medication	81	26
Psychosocial	97	32
Psychotherapy	9	
Assertive community treatment	11	
Substance abuse counseling	22	
Other psychosocial	12	
Other modality	43	14
Not applicable	121	39

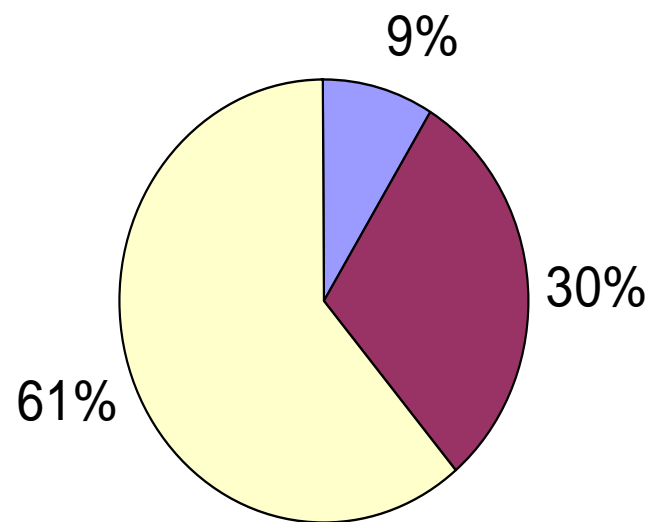
# Diagnostic Groups Addressed

	<u>N</u>	<u>%</u>
Schizophrenia	35	11
Depressive disorders	43	14
Substance abuse / dependence	24	8
Bipolar disorder	3	1
Dementia	1	<1
Personality disorders	1	<1
Across diagnoses	119	39

# Vulnerable Populations Addressed

	<u>N</u>	<u>%</u>
SPMI	35	11
Elderly	23	7
Children & adolescents	49	16
Dual diagnosis	7	2
Comorbid medical conditions	4	1

## Most Measures Lack Supporting Research



- Level A: Good research-based evidence (e.g., RCTs)
- Level B: Fair research-based evidence (e.g., observational data)
- Level C: Little research evidence, based principally on clinical opinion

# Testing of Measures

	<u>N</u>	<u>%</u>
Reliability testing	21	7
Validity testing	34	11
Cost assessment	53	17

# Evidence for Measurement-based QI

## Efficacy

- Review of 55 controlled trials of QI showed “pockets of improvement” rather than widespread change across hospitals and QI objectives (Shortell, 1998)

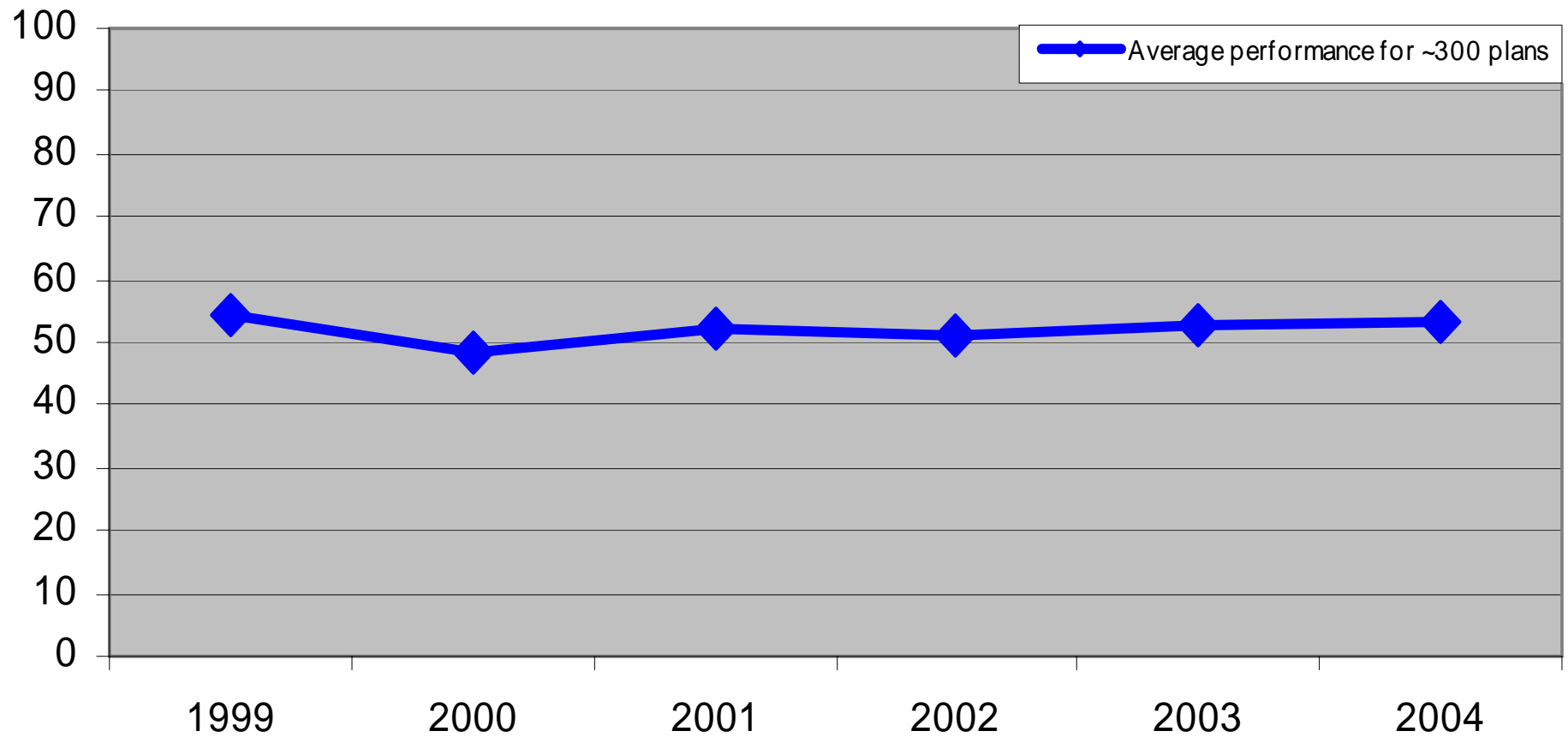


# Evidence for Measurement-based QI

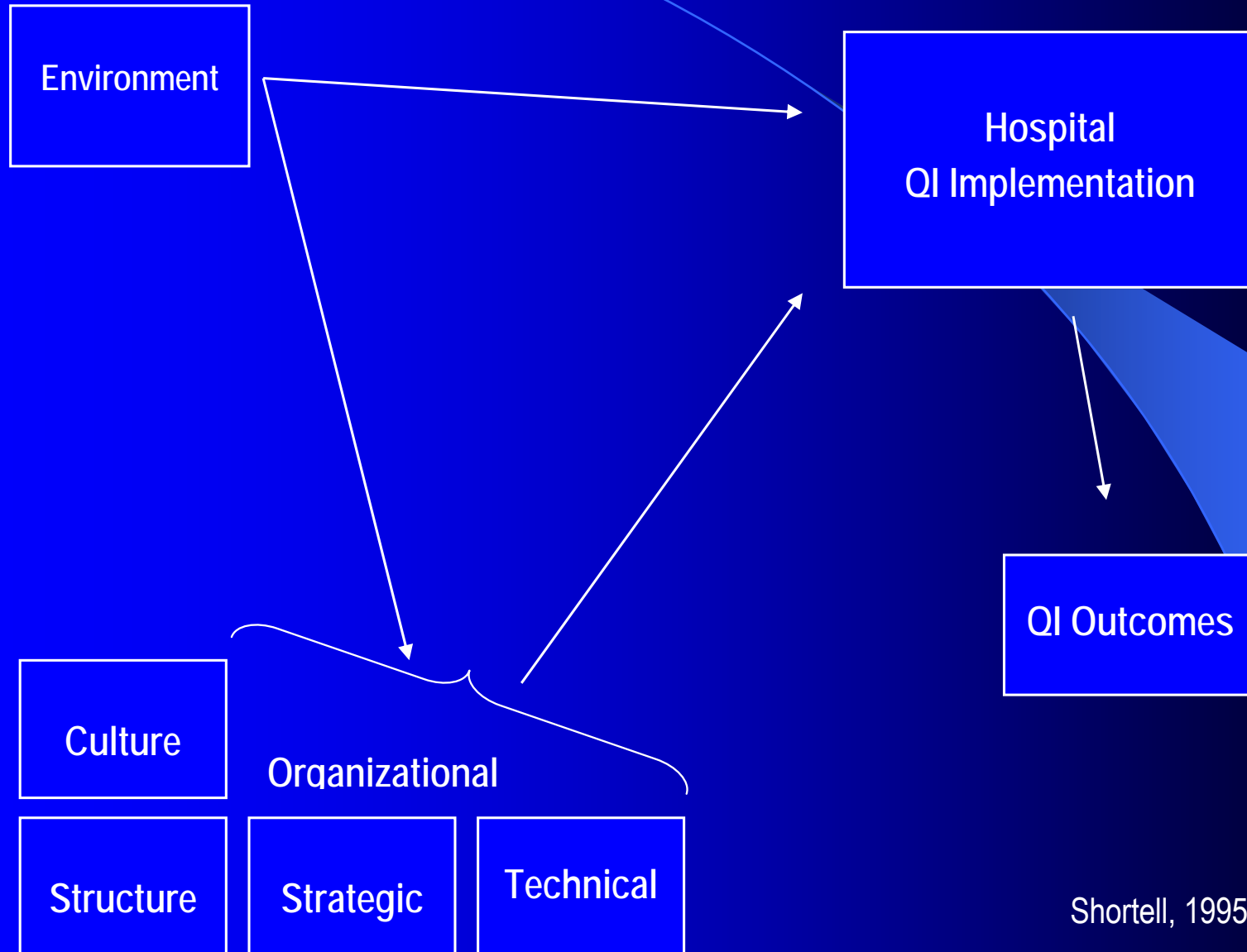
## Effectiveness

- Routine QI is not well studied
- Published case reports of successful initiatives
- Little improvement seen in results of national measurement initiatives

# National HEDIS Results: Acute-Phase Antidepressant Adherence



# Determinants of QI Effectiveness: Prior Research

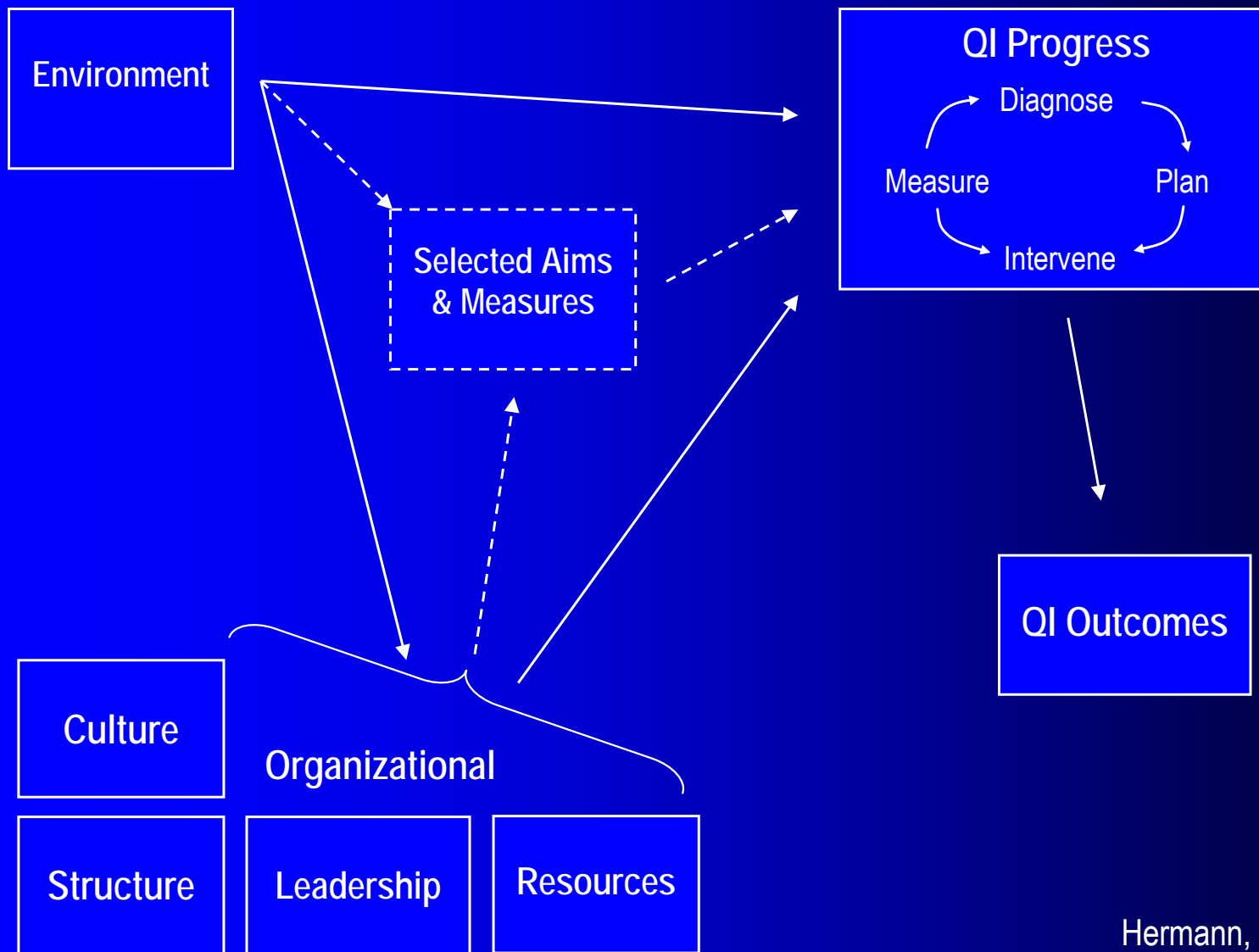


Shortell, 1995

# The Mental Health QI-Fit Study

- NIMH-funded study of 32 hospitals in MA & CA
- What are hospitals' QI objectives for inpatient psychiatry?
  - EBPs
  - effectiveness
  - access
  - safety
  - patient-centered care
  - equity
  - efficiency
- Are hospitals achieving improvement?
- Hypothesis: effectiveness is influenced by the fit between the hospitals & their QI objectives

# Determinants of QI Effectiveness: QI-Fit Study



# Evidence-based Improvement Interventions

- Audit & feedback
- Local opinion leaders in guideline implementation
- Academic detailing
- Reminders & prompts
- Multimodal programs for improving depression care
  - Collaborative management
  - Chronic disease model
  - Partners in Care training model
- Relapse prevention programs for schizophrenia
- Open access for ambulatory care

# Conclusion

## Current Status

- 100s of measures—need for further development & testing
- MBQI not proven—need to improve effectiveness

## Meanwhile...

- need for the “good enough” measure
  - trade-offs
  - combined approaches
- measure selection is a political process
  - educate, advocate, negotiate
  - can’t beat something with nothing
  - need for clinician input & leadership
- accountability works both ways