



Measurement-based Quality Improvement: Making it Work

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Questions for Tonight's Discussion

- What is “measurement-based quality improvement”?
- Are we measuring the right topics?
- Are our measures adequate to the task?
- Are our improvement efforts effective?
- How can we enhance their effectiveness?

What is Measurement-based QI?

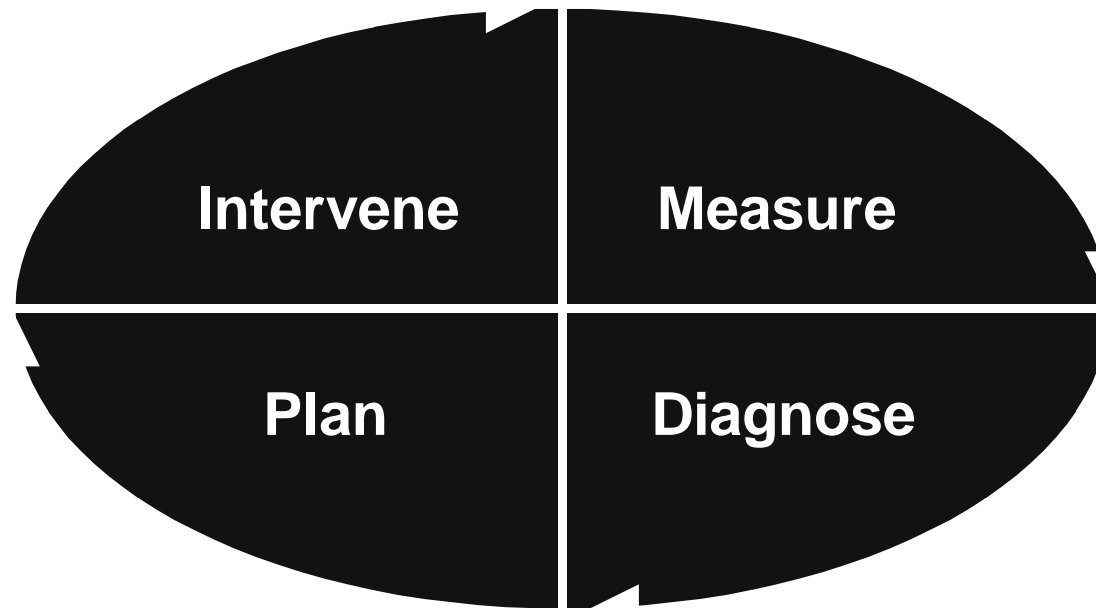


Principles of Measurement-Based QI

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

Model for Measurement-based QI

Aim



What Do We Know about Quality of MH 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

What Measures Are Available?

Structure

Clinicians
Facilities
Plans
Financing
Communities
Patients
Illnesses

Technical Process

Prevention
Access
Assessment
Treatment / Fidelity
Coordination
Continuity
Safety

Interpersonal Process

Communication
Decision-making
Interpersonal style

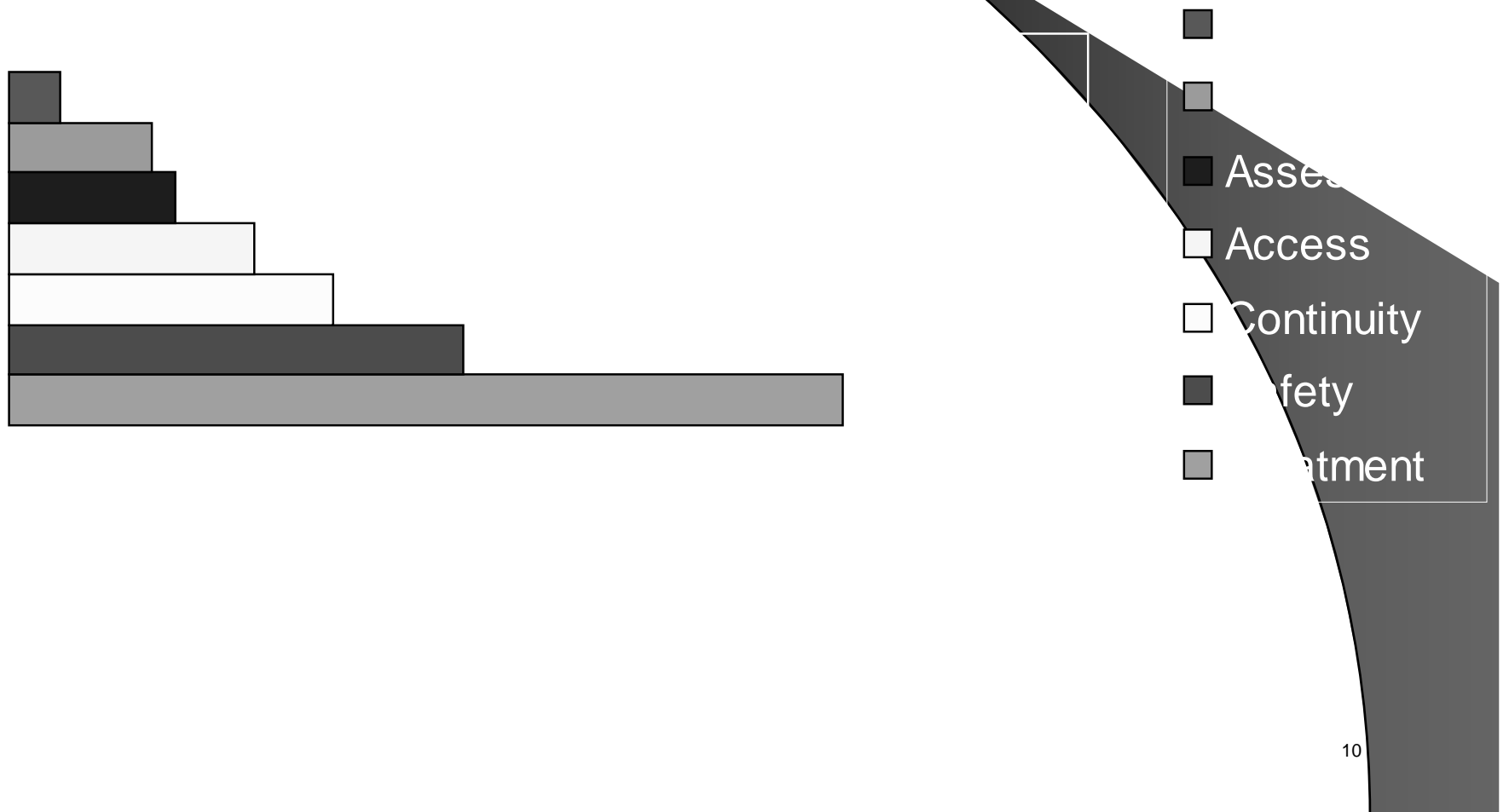
Outcome

Δ in symptoms
 Δ in functioning
 Δ in quality of life
Satisfaction
Adverse effects
Mortality

National Inventory of Mental Health Quality Measures

- AHRQ R01 HS10303
- Clinical, technical & scientific properties of >300 process measures for improving MH/SUD care
- Information on measures' rationale, specifications, data sources, evidence-base, reliability, validity, case-mix adjustment, standards, results & benchmarks.
- Measure developers include government agencies, clinician organizations, accreditors, healthcare systems, purchasers, consumer groups, researchers & industry

Domains of Quality



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

Majority of Measures Lacked Evidence Basis



Research-based

Expert opinion, anecdotal evidence, common sense (data)

Other

Testing of Measures

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

Which Measures for Which Purposes?

- Internal quality improvement
 - Measures selected by health systems, plans, hospitals, practices
- External quality improvement
 - Measures selected by payers, purchasers, MCOs, oversight agencies, collaboratives
 - audit and feedback
 - benchmarking
 - dissemination of results
 - mandates
 - contractual goals
 - accreditation standards
 - incentives

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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"/>
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Improving Mental Healthcare



*A Guide to
Measurement-Based
Quality
Improvement*

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Includes results from the
National Inventory
of Mental Health
Quality Measures

Published by American
Psychiatric Press, Inc.

Standardization of Quality Measures

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Attributes Informing Measure Selection



Measurement-based QI: How Well Does it Work?

Efficacy

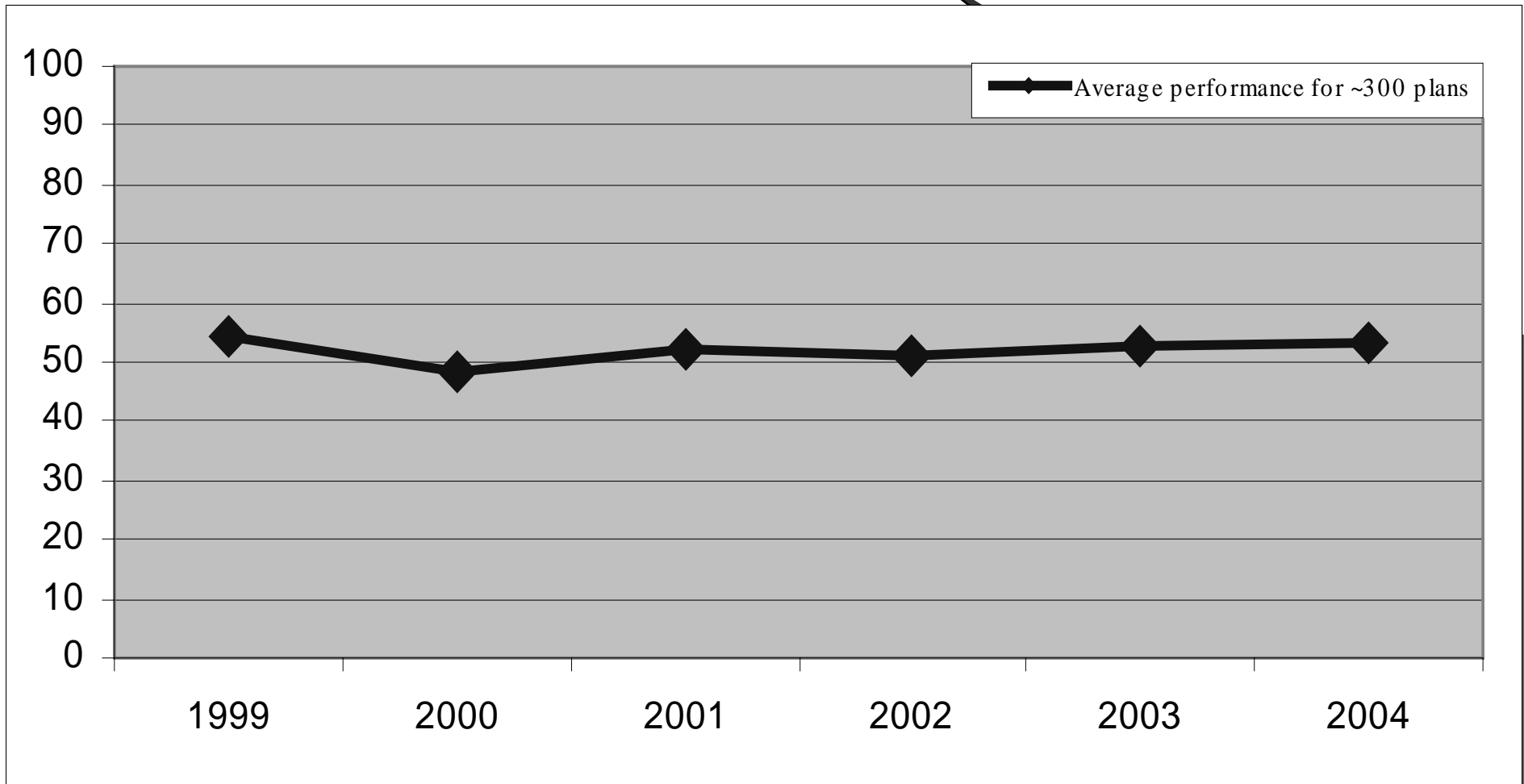
Review of 55 controlled trials of QI showed “pockets of improvement” rather than widespread change across hospitals and QI objectives (Shortell, 1998)

Evidence for Measurement-based QI

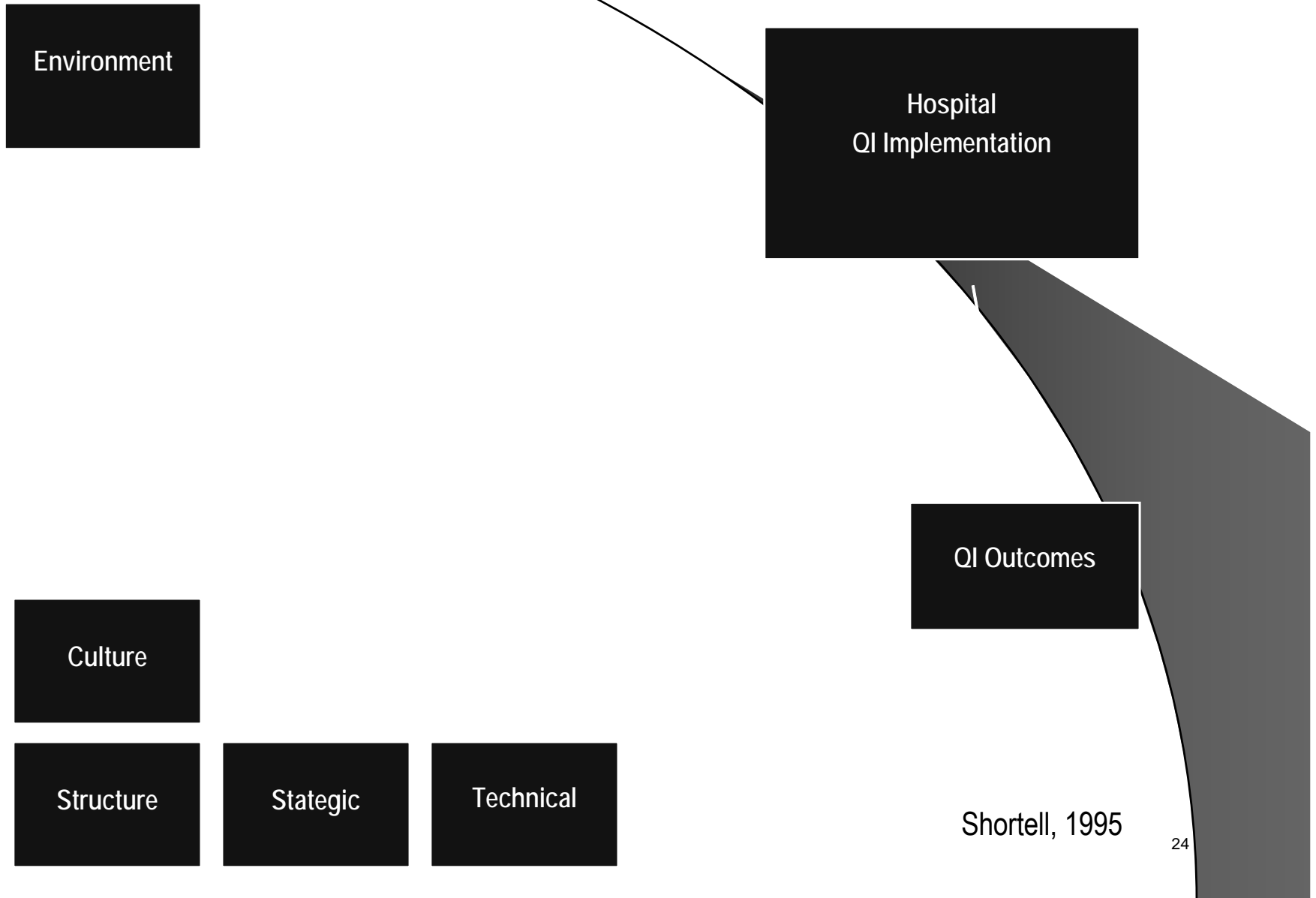
Effectiveness

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

National HEDIS Results: Acute-Phase Antidepressant Adherence



Determinants of QI Effectiveness: Prior Research



The Mental Health QI-Fit Study

NIMH-funded study of 32 hospital psychiatry depts in MA & CA

Aims:

- What inpatient QI objectives are depts addressing?
- Are they achieving improvement?
- What are the determinants of QI progress?

Hypothesis:

- Progress is influenced by the fit between external factors, dept organizational features & the QI objectives they address

Determinants of QI Effectiveness: Prior Research

Environment

Hospital
QI Implementation

QI Outcomes

Culture

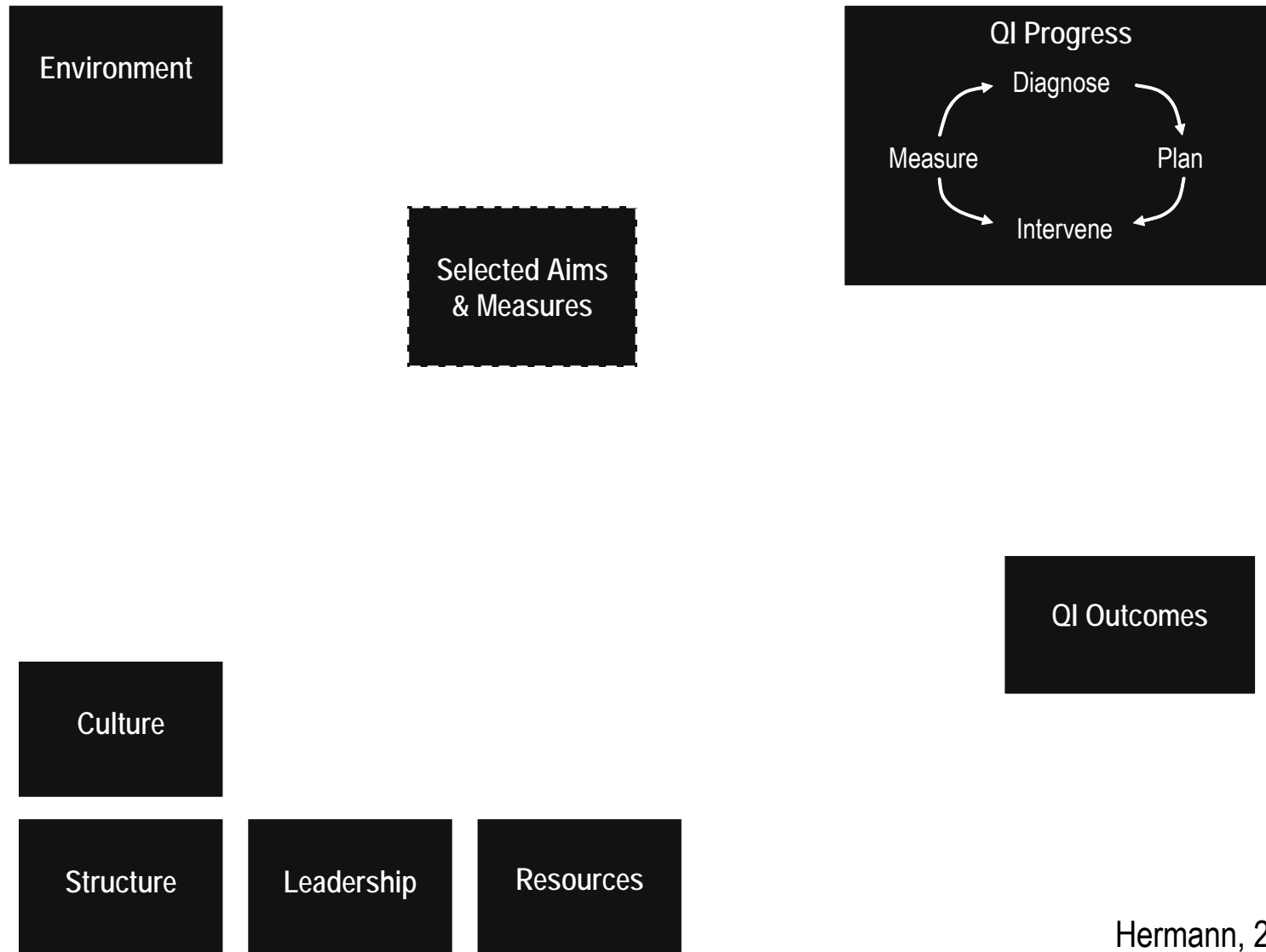
Structure

Strategic

Technical

Shortell, 1995

Determinants of QI Effectiveness: QI-Fit Study



Hermann, 2005

Potential External Drivers



- Mandates
- Oversight
- Incentives
- Public dissemination
- Resource provision

Potential Internal Drivers

Culture

- Beliefs about QI
 - regulatory compliance or real work?
- Beliefs about QI objective
 - mission concordance?
 - help pts?
- Evidence-based practice
 - knowledge / beliefs about evidence?

Potential Internal Drivers

Leadership

- Organizational priority?
- Active management?
- Internal champions?
- Accountability?

Potential Internal Drivers

Resources

- Availability of what's needed to succeed?
 - education / training
 - tools
 - analytic support
 - time / money
 - IS support

Potential Internal Drivers

Structures to support

- Priority setting
- Dissemination
- Active management

QI Fit Study: Next Steps

- Analysis of data at MA and CA hospitals
 - Is the model valid?
 - Determinants of QI progress?
- Generalizability to other settings & clinical areas?
- Influence measure selection
- Intervention to identify and address barriers to improvement

Our Discussion

- The right topics?
- The right measures?
- How to improve the effectiveness of QI?