Can Substance Abuse and Mental Health Services Cross the Quality Chasm?
U.S. and Global Perspectives

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International Comparison of Spending on Health, 1980–2007

Average spending on health per capita ($US PPP)

- United States
- Canada
- Netherlands
- Germany
- Australia
- United Kingdom
- New Zealand

Total expenditures on health as percent of GDP

- United States
- Germany
- Canada
- Netherlands
- New Zealand
- Australia
- United Kingdom

Note: $US PPP = purchasing power parity.
To Err Is Human: Building A Safer Health System

First Report

Committee on Quality of Health Care in America

To order: www.nap.edu
Studies Documenting the “Quality Gap”

- Literature reviews conducted by RAND
  - Over 70 studies documenting quality shortcomings
- Large gaps between the care people should receive and the care they do receive
  - true for preventive, acute and chronic
  - across all health care settings
  - all age groups and geographic areas
- Only 50% chance of getting appropriate care

“Quality problems occur typically not because of failure of goodwill, knowledge, effort or resources devoted to health care, but because of fundamental shortcomings in the ways care is organized”

The American health care delivery system is in need of fundamental change. The current care systems cannot do the job. *Trying harder* will not work: Changing systems of care will!
“Crossing the Quality Chasm”
Six Aims For Improvement

- Safe
- Effective
- Patient-centered
- Timely
- Efficient
- Equitable
Improving the Quality of Health Care for Mental and Substance-Use Conditions

QUALITY CHASM SERIES

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES
There are, however, disturbing exceptions to this pattern of [overall health care quality] improvement. The quality of care for Americans with mental health problems remains as poor today as it was several years ago. Patients on antidepressant medication are about as likely to receive appropriate care today as they were in 1999.

www.ncqa.org
The Lessons of Ten Years of Measurement

**FIGURE 2. BETA-BLOCKER TREATMENT AFTER A HEART ATTACK**
COMMERCIAL MEAN, 10TH AND 90TH %ILES, 1996 - 2005

**FIGURE 3. CONTROLLING HIGH BLOOD PRESSURE**
COMMERCIAL MEAN, 10TH AND 90TH %ILES, 1999 - 2005
Follow-up After Hospitalization:
Follow-up After Hospitalization for Mental Illness: 7 Days
Trends, 1998-2005

- Commercial
- Medicaid
- Medicare

AHSR Meeting
10.05.2011
Antidepressant Medication Management: Effective Continuation Phase Treatment Trends, 1998-2005

Commercial
Medicaid
Medicare
Initiation of Alcohol and Other Drug Dependence Treatment: HMO Means

Trends, 2004-2009

NHS London Seminar
10.14.2011
Six Problems in the Quality of M/SU Health Care

- Problem 1: Obstacles to patient-centered care
- Problem 2: Weak measurement and improvement infrastructure
- Problem 3: Poor linkages across MH/SU/GH
- Problem 4: Lack of involvement in National Health Information Infrastructure (NHII)
- Problem 5: Insufficient workforce capacity for QI
- Problem 6: Differently structured marketplace
Preparing for the Future

Consumer Participation

Standardize Practice Elements
- Clinical assessment
- Interventions
- IT infrastructure

Develop Guidelines
- Mental health
- Substance use
- General health

Measure Performance
- Can’t improve without measuring
- Across silos and levels

Improve Performance
- Learn
- Reward

Strengthen Evidence Base
- Document stakeholder value
- Evaluate effective strategies
- Translate from bench to bedside to community

Leadership (PCP/MH/SUD) Support

Clinical (PCP/MH/SUD) Perspectives

Integrative Processes

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The Measurement Enterprise

• Measure Developers
  – Professional societies, Accreditation bodies, Consulting groups, health services researchers(?)

• Measure Reviewers/Approvers
  – National Quality Forum, Secretary HHS

• Measure Users (for accountability)
  – Medicare, Medicaid, Health plans, Accreditation bodies, Consumer groups

• Measure Users (for improvement)
  – Hospitals, Physician groups, FQHCs

• Measure Funders
  – ???
  – Risks of poorly validated measures
Initiatives

• **WHO-AIMS**
  – Assessment Instrument for Mental Health Systems (specifically designed for assessing MH systems of middle and low income countries with clear baseline information and targets)

• **OECD Health Care Quality Indicator Project/ Further Update-Collaboration**
  – Set of MH indicators proposed by international expert panel

• **WHO/ ICD-11 Quality and Patient Safety Topic Advisory Group**
  – Goal is to enhance the coding of quality data in ICD-11
  – Also linked to ICD 10 CM/ HIT implementation in US

• **US Affordable Care Act/ NQF MAP/ SAMHSA Quality Framework/ AHRQ SNAC**

• **IIMHL Clinical Leaders Project**
  – 3-phased project to develop/ implement quality measurement framework across 12 countries (AUS, CAN, ENG, GER, IRL, JAP, NETH, NOR, NZ, SCOT, TAIW, US)
  – Identified over 70 initiatives (40 in US) and 600+ measures/indicators
  – Initiating Phase II which includes developing country quality networks and consensus framework

• **US RAND/ Altarum Evaluation of VHA’s Mental Health Services**
  – Assessment of quality of care for patients with five highest cost, highest volume MH diagnosis within VA system
U.S./Affordable Care Act

- National Quality Strategy
- State Medicaid Quality Reporting
- Measurement Applications Partnership
- System Redesign
  - ACOs
  - Patient-Centered Medical Homes
  - Health Homes
- Value-Based Purchasing
  - From volume to quality and efficiency
- MH/SUD Parity
IIMHL Clinical Leads Project

Aims
- Raise awareness of quality of care for mental health
- Develop framework for performance measures
- Compare system performance across countries
- Inform initiatives for transforming mental health services

Phase I
- Compile indicators across countries (national or regional/ state/ provincial level)
- Identify common (and differing) themes, methods and definitions
- Describe how indicators developed and applied
- Literature review (indicators) and survey (programs)

Phase II
- Develop overarching shared framework
- Identify features of data sources/information systems
- Reach consensus on indicator set

Phase III
- Pilot indicator set and framework for cross country comparisons
IIMHL clinical leads project: Phase I

• Review of the “grey literature” – peer-reviewed articles, government reports, white papers, NGO reports, etc.
• Identify specific indicators reported in the grey literature and classify by domain
• Survey international mental health leaders about existing and planned quality assessment programs
  - Features of the programs
  - Development of measures
  - Data collection and reporting
  - Domains and subdomains of quality assessed
Grey literature review: Summary

- Most programs included broad spectrum of measures, some focused on select populations (ethnic minorities) or settings (inpatient)
- Varying degree of development of programs
- Widely-shared domains:
  - Access – waiting time until services available, waiting list length
  - Efficiency – cost of care (budget or per capita expenses), per capita use of services, length of stay
  - Effectiveness – GAF, HoNOS, employment, consumer QOL
  - Safety – assaults, coercive treatments, training
  - Appropriateness – hospitalization rates for certain diagnoses, post-discharge ER visits, fidelity to treatment guidelines or best practices
## Preliminary Analysis of Measures (Grey Literature)
### Indicators by Country

<table>
<thead>
<tr>
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## Preliminary Analysis of Measures (Grey Literature) Indicators by Domain

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### Preliminary Analysis of Measures (Grey Literature)

**Indicators by Domain and Sub-Domains (cont.)**

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<td>Occurrence of side effects</td>
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<td>Medication adherence</td>
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<td>Other</td>
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<td>Access to/ wait times for substance abuse treatment</td>
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<td>Engagement in care</td>
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<td>Coordination of treatment</td>
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<td>Quantity/ frequency of use</td>
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<td>Outcomes</td>
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<td></td>
<td></td>
<td>Other</td>
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</table>
National Program Evaluation of VA Mental Health Services

A collaboration among RAND, Altarum Institute, University of Pittsburgh and Columbia University
Key Features

- Study is intended to serve as a model for evaluating other alcohol, drug, and mental health systems of care.
- The US Veterans Health System is similar in size and structure to, for example, the Scottish Health System.
- The study included:
  - 5 diagnoses
  - 6 IOM quality domains
    - >128 performance indicators (32 Admin, 56 MRR, 40 Client Survey)
  - 4 data sources
  - 750,000 veterans each year (total over 2 million)
  - 7,069 medical records reviewed
  - 6,190 client interviews
  - Cost is 8.5 million over 4 years
We Evaluated Quality by Examining the Structure, Process, and Outcomes of Care

Structure of Care
What services are available to veterans?
- Type/level of staffing
- How many patients can be served
- Hours of operation
- Provider workloads
- Cost per workload unit
- Availability of evidence-based practices

Process of Care
What services do veterans receive?
- Extent evidence-based practices are implemented
- Frequency and timing of services
- Appropriate monitoring for side effects

Outcomes of Care
Does it make a difference?
- Patient satisfaction
- Quality of life
- Functional status
- Cost

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IOM Quality of Care Paradigm Drove the Development of the Performance Indicators

Data Sources:
- Facility Survey
- Administrative Data
- Medical Record Review
- Client Survey

<table>
<thead>
<tr>
<th>IOM Quality of Care Paradigm</th>
<th>Efficiency</th>
<th>Equity</th>
<th>Effectiveness</th>
<th>Patient-Centeredness</th>
<th>Timeliness</th>
<th>Safety</th>
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Evidence ➔ Guidelines ➔ Performance Indicators
Overlap of Patient Samples by Data Source

**Administrative Data**
Universe of VHA patients with cohort diagnoses in FY07

**Medical Record Data**
Random sample of 7,069 VHA patients with cohort diagnoses in FY07 & who have also received care in FY08

**Client Survey**
N = 6,190

**Facilities Survey**
Surveyed PFSAs in 2007 (N=138) and 2009 (N=138)
PTSD Cohort Had the Most Veterans (FY2007)

- These conditions were chosen because they are:
  - Prevalent
  - Associated with high levels of disability
  - Costly to treat

- Minimum utilization for inclusion:
  - 1 inpatient visit with a qualifying mental health diagnosis
  - 1 outpatient visit with a qualifying mental health diagnosis AND another visit with any diagnosis

- PTSD: N=357,289
- MDD: N=135,387
- SUD: N=344,866
- Schizophrenia: N=81,624
- Bipolar: N=61,578
- MDD/SUD: N=30,438
- PTSD/SUD: N=73,213
- Sch/SUD: N=20,680
- BP/SUD: N=19,714

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Study Population Is Responsible for a Disproportionate Share of Utilization and Costs

- Number of Veterans: 16.5%
- Inpatient Discharges (Acute + Residential + Extended): 48.5%
- Outpatient Encounters: 39.9%
- Outpatient Costs: 32.7%
- Inpatient Costs (Acute + Residential + Extended): 37.4%
- Total Costs: 34.4%
Most EBPs Were Reported to Have Increased Availability Between 2007 and 2009

- **Medication Evaluation / Management**: 68% to 100%
- **MHICM**: 82%
- **Supported Employment**: 88% to 96%
- **Family Psychoeducation**: 81% to 97%
- **Cognitive Behavioral Therapy**: 96% to 97%
- **Intensive Outpatient Treatment for SUD**: 95% to 91%
- **Psychosocial Interventions for SUD**: 45% to 99%
- **Opiate Agonist Therapy**: 73% to 81%
- **Integrated Dual Diagnosis Therapy**: 79%
- **Specialized Therapies for PTSD**: 86% to 98%
- **Treatment with Clozapine**: 93% to 95%
- **Electroconvulsive Therapy**: 46% to 59%

Percent of PFSAs Offering the Evidence-Based Practice
By 2009, Most PFSAs Reported Offering 10 or 11 EBPs

Legend
- CBOC
- Medical Center
- VISN Boundary
- PFSA Boundary

Number of EBPs offered
- 7 or fewer
- 8
- 9
- 10
- 11
Some Veterans Are Living in PFSAs That Do Not Offer Potentially Beneficial EBPs
Overall Results

- Overall, the quality indicators assessed suggest that in most instances the performance of VHA care is as good or better than that reported in the literature by other groups or by direct comparisons conducted in our study. But the level of performance often does not meet expectations set by the VHA.
VHA Outperformed Private Sector Plans for 7 of 9 Performance Indicators (Administrative Data)

**Medication lab tests**: Those with an antipsychotic prescription who received recommended lab blood monitoring
- **VHA National Average**: 5.7%
- **MarketScan Average**: 77.2%

**Any lab screening test**: Received TSH, liver function, chemistry panel, sodium, creatinine, or potassium test
- **VHA National Average**: 49.3%
- **MarketScan Average**: 86.9%

**Anti-psychotics** (Schiz): Received antipsychotics in 12 weeks following NTE
- **VHA National Average**: 24.3%
- **MarketScan Average**: 50.1%

**Long-term anti-psychotics** (Schiz): received 12 months of antipsychotic medication
- **VHA National Average**: 23.5%
- **MarketScan Average**: 38.2%

**Mood stabilizers** (Bipolar): received 12 months of mood-stabilizing medication
- **VHA National Average**: 31.3%
- **MarketScan Average**: 48.8%

**Anti-depressant** (MDD): Filled prescriptions for a 12-week supply of an antidepressant in the 12 weeks following NTE
- **VHA National Average**: 21.5%
- **MarketScan Average**: 48.8%

**Continuation phase anti-depressant** (MDD): Filled prescriptions for 180-day supply for an antidepressant in 180 days following NTE
- **VHA National Average**: 22.3%
- **MarketScan Average**: 31.2%

**Treatment initiation** (SUD): Initiated treatment within 14 days of the start of NTE
- **VHA National Average**: 14.5%
- **MarketScan Average**: 16.2%

**Treatment engagement** (SUD) Had two or more diagnosis-related outpatient encounters in 30 days following start of NTE
- **VHA National Average**: 14.9%
- **MarketScan Average**: 27.1%

^ denotes Grade I indicators

Proportion of VHA Cohort and Private Plan Cohort Meeting Performance Indicators
Documented Use of EBPs Remained Below 40% (Chart Review)

Proportion of Study Cohort Veterans Meeting Evidence-Based Practice Performance Indicators, VHA National Average (FY2007)

- indicates 95% C.I.
Only One-Third of Veterans Were In Continuous Treatment With Medication

* Antipsychotics for Schizophrenia and Mood Stabilizers for Bipolar Disorder
We Observed Variations in Performance as High as 25 Points

- Variations in many of the performance indicators across:
  - Personal characteristics (age, gender, OEF/OIF status)
  - Diagnostic cohort
  - Geography (VISN and urban/rural status)

- Overall, we observed lower utilization across diagnostic cohorts for:
  - Veterans over age 65
  - Veterans under age 35
  - OEF/OIF veterans
  - Veterans residing in rural areas

- While we observed statistically significant variation across VISNs on individual indicators, few VISNs stood out as consistently performing above or below the VISN average
Performance Varied by VISN

**Suicide**: Assessment for suicidal ideation during the study period

**Physical exam**: Physical exam within 30 days of NTE

**Brief intervention**: Brief intervention, specialty care, or completed referral to specialty mental health during the study period

**Continuation phase anti-depressant (MDD)**: Filled prescriptions for 180-day supply for an antidepressant in 180 days following NTE

**Anti-psychotics (Schiz)**: Received anti-psychotics in 12 weeks following NTE

**Medication lab tests**: Those with an antipsychotic prescription who received recommended lab blood monitoring during the study period

**Anti-depressant (MDD)**: Filled prescriptions for a 12-week supply of an antidepressant in the 12 weeks following NTE

**Anti-depressant [HEDIS] (MDD)**: Those with at least one prescription who filled prescriptions for a 12-week supply of an antidepressant in the 12 weeks following NTE

**MHICM**: MHICM during the study period with at least inpatient discharges or 30 cumulative inpatient days

**Housing and employment**: Assessment for recent substance abuse within 30 days of NTE
Over 40% of Veterans “Always” Received Care as Soon as They Wanted

In the last 12 months, not counting times you needed counseling or treatment right away, how often did you get an appointment for counseling or treatment as soon as you wanted?

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<th>Usually</th>
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<td>19.3%</td>
<td>23.8%</td>
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<td>49.6%</td>
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7.3%

In the last 12 months, when you needed counseling or treatment right away, how often did you see someone as soon as you wanted?

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<th>Never</th>
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<td>15.4%</td>
<td>23.3%</td>
<td>18.5%</td>
<td>42.8%</td>
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Nearly One-Third of Veterans Gave VHA Counseling or Treatment the Highest Possible Rating
Veterans Perceived Limited Improvements in Functioning

Compared to 12 months ago, how would you rate your...

...problems or symptoms now?
- Much worse: 10.1%
- A little worse: 19.8%
- About the same: 38.4%
- A little better: 20.0%
- Much better: 11.7%

...ability to accomplish the things you want to do now?
- Much worse: 11.2%
- A little worse: 21.2%
- About the same: 36.7%
- A little better: 19.9%
- Much better: 11.0%

...ability to deal with social situations now?
- Much worse: 8.1%
- A little worse: 14.9%
- About the same: 42.8%
- A little better: 20.6%
- Much better: 13.6%

...ability to deal with daily problems now?
- Much worse: 6.4%
- A little worse: 13.9%
- About the same: 38.3%
- A little better: 24.7%
- Much better: 16.7%
An Agenda for Measuring and Improving Quality

- Providing Resources And Stewardship
- Implementing Standardized Measurement
- Incorporating MH/SUD Care into Health Information Technology
- Setting Benchmarks and Accountability
- Applying Improvement Tools
- Linking/Integrating MH/SUD Measures/Care with General Health-System Redesign
- Investing In Research to Develop, Improve, Validate Measures
“Crossing the Quality Chasm”
Strategies for Influencing Quality of Care

- Guidelines/"Black Boxes"
- Provider Training/Education/CME
- Academic detailing
- Preferred lists/Prior auth/Second opinion
- Certification/Accreditation/Licensure
- Provider Reminder System/Decision Support
- Patient Education/Reminders
- Quality Measurement/Performance Indicators
- Quality Improvement/PDSA/Six Sigma/IHI
- Public Reporting/Profiling/Feedback
- Financial Incentives/P4P
Back-up Slides
## Seven-Nation Summary Scores on Health System Performance

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<td>1</td>
<td>3</td>
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<tr>
<td>Patient-Centered Care</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>7</td>
<td>4</td>
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<tr>
<td><strong>ACCESS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cost-related access problems</td>
<td>6</td>
<td>3.5</td>
<td>3.5</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Timeliness of care</td>
<td>6</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td><strong>EFFICIENCY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
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<td>6</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>7</td>
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<tr>
<td><strong>EQUITY</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>4</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td><strong>LONG, HEALTHY &amp; PRODUCTIVE LIVES</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
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</table>

## Effective Care Measures (Percent)

<table>
<thead>
<tr>
<th></th>
<th>AUS</th>
<th>CAN</th>
<th>GER</th>
<th>NETH</th>
<th>NZ</th>
<th>UK</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chronic Care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physicians reporting it is easy to print out patients by diagnosis</td>
<td>61</td>
<td>34</td>
<td>68</td>
<td>67</td>
<td>56</td>
<td>97</td>
<td>41</td>
</tr>
<tr>
<td>Physicians reporting it is easy to print out list of all medications taken by ind. patients (incl. prescribed by other physicians)</td>
<td>71</td>
<td>33</td>
<td>55</td>
<td>70</td>
<td>57</td>
<td>89</td>
<td>45</td>
</tr>
<tr>
<td>Patients with chronic condition and did not follow recommended care or treatment because of cost</td>
<td>11</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>Practice routinely uses written guidelines to treat depression</td>
<td>71</td>
<td>45</td>
<td>26</td>
<td>31</td>
<td>65</td>
<td>80</td>
<td>49</td>
</tr>
</tbody>
</table>

* 2007 (all other results are based on 2009 data sources)

### Percent of Doctors Reporting Practice Is Well Prepared to Care for Chronic Diseases

<table>
<thead>
<tr>
<th>Percent reporting “well prepared”</th>
<th>AUS</th>
<th>CAN</th>
<th>GER</th>
<th>NETH</th>
<th>NZ</th>
<th>UK</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with multiple chronic diseases</td>
<td>69</td>
<td>55</td>
<td>93</td>
<td>75</td>
<td>67</td>
<td>76</td>
<td>68</td>
</tr>
<tr>
<td>Patients with mental health problems</td>
<td>50</td>
<td>40</td>
<td>70</td>
<td>65</td>
<td>48</td>
<td>55</td>
<td>37</td>
</tr>
</tbody>
</table>

Source: 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians.
Antidepressant Medication Management:
Optimal Practitioner Contacts
Trends, 1998-2005

Commercial
Medicaid
Medicare
Problem 2: Weak Measurement and Improvement Infrastructure

1. Clinical assessment and treatment practices not yet standardized and classified for use in administrative datasets
2. Outcome measurement not widely applied in spite of reliable and valid instruments (“measurement-based care”)
3. Dissemination of advances often fails to use effective strategies
4. Performance measurement for M/SU health care has not received sufficient attention in private or public sector
5. QI methods not yet permeating day-to-day operations
Barriers to Measurement

- Adjusting measure improvement strategy to country MH system/ needs/ context/ stakeholder consensus
- Adequacy of data sources/Documentation or Reality
- Costs of collection/monitoring
- Agreement/development of clinical measures (MH vital signs)
- Codifying assessment (visit v. lab test v. lab value)
- Codifying interventions in administrative data (e.g. CBT)
- Waiting for “Godot” (ideal EMR)
- Determining benchmarks/Risk adjustment
- Linking S-P-O (e.g. ACCORD)
- What improvement strategies work best, when and where?
- Who is charged with stewarding the development of quality indicators and improvement strategies?
- Who is accountable for performance? (6P’s)
“6 P” Conceptual Framework

- Patient/Consumer
  - Enhance self-management/participation
    - Link with community resources
    - Evaluate preferences and change behaviors
  - Improve knowledge/skills
  - Provide decision support
  - Link to specialty expertise and change behaviors
  - Establish chronic care model and reorganize practice
    - Link with improved information systems
    - Adapt to varying organizational contexts
  - Enhance monitoring capacity for quality/outliers
    - Develop provider/system incentives
    - Link with improved information systems
  - Educate regarding importance/impact of BH
  - Develop plan incentives/monitoring capacity
  - Use quality/value measures in purchasing decisions
  - Engage community stakeholders; adapt models to local needs
    - Develop community capacities
  - Increase demand for quality care enhance policy advocacy

- Providers

- Practice/Delivery Systems

- Payers/Plans

- Purchasers (Public/Private)

- Populations and Policies
WHO’s Assessment Instrument for Mental Health Systems (WHO-AIMS)

- Objective is to map all essential formal MH resources existing in a country (vs. measuring quality/ performance of MH services)

- Measures specifically relevant to resources in low- and middle income countries (e.g. measures addressing traditional healers and paraprofessional primary healthcare workers)

- Focus on six domains (covering the 10 *World Health Report 2001* recommendations through 28 facets and 156 items):
  - policy and legislative framework, MH services, MH in primary care, human resources, public information/ links with other resources, monitoring and research

- For data collection, if precise data are not available, respondents are instructed to provide best estimate based on other information

Source: Saxena et al., Psychiatric Services 58:816-821, 2007
OECD Health Care Quality Indicator (HCQI) Project

- OECD identified five priority areas for initial development of indicators (cardiac care, diabetes, mental health, patient safety, and prevention/health promotion)

- Focused on four key domains of MH care: Treatment - Continuity of Care - Coordination of Care - Patient Outcomes

- International expert panel recommended final list of 12 MH indicators across these four domains (out of 134 indicators from 24 different sources)

- Limited range of data potentially available on a comparable basis

- Follow-up project currently being planned
WHO - ICD 11 Quality and Patient Safety Topic Advisory Group (TAG)

- ICD coding chapters typically cover specific clinical content areas (‘vertical’ clinical chapter silos) - e.g., Mental/behavioral disorders, Diseases of the respiratory system, Oncology, etc.

- WHO-FIC identified additional ‘horizontal’ themes

- Quality and Patient Safety TAG to oversee how the entire classification system relates to the quality of care and safety across hospitals and health systems

- Goal is to enhance the coding of quality data in ICD-11 to assist measurement of quality, patient safety and outcomes

- Linked to ICD 10 CM/ HiTech Implementation in the US in 2013
## Preliminary Analysis of Survey Results (cont.)

### – Data sources of programs

<table>
<thead>
<tr>
<th>Data source</th>
<th>Total (38 Programs)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database/ or registry of MH care utilization or encounters</td>
<td>24</td>
<td>62</td>
</tr>
<tr>
<td>Client surveys or other direct consumer response</td>
<td>17</td>
<td>44</td>
</tr>
<tr>
<td>Compilation of patient clinical information</td>
<td>14</td>
<td>36</td>
</tr>
<tr>
<td>Chart reviews or abstractions</td>
<td>11</td>
<td>28</td>
</tr>
<tr>
<td>Regional/ national census, mortality, or other regional/ national statistics</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Database/ registry of non-clinical utilization or encounters</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Physicians or physician group surveys</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Insurance claims</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>26</td>
</tr>
</tbody>
</table>
### Preliminary Analysis of Measures (Grey Literature) Indicators by Domain and Sub-Domains

<table>
<thead>
<tr>
<th>Domain</th>
<th>Indicators (N)</th>
<th>Sub-Domains</th>
<th>Indicators/Sub-Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome assessment</td>
<td>72</td>
<td>Functioning</td>
<td>23</td>
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<tr>
<td></td>
<td></td>
<td>Mortality</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Client or family assessment</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employment or income</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change in reported symptoms</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Housing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>13</td>
</tr>
</tbody>
</table>
## Preliminary Analysis of Measures (Grey Literature)

### Indicators by Domain and Sub-Domains (cont.)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Indicators (N)</th>
<th>Sub-Domains</th>
<th>Indicators/Sub-Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>EB Psycho-Social Interventions</td>
<td>57</td>
<td>Psychotherapy</td>
<td>11</td>
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<tr>
<td></td>
<td></td>
<td>Family psycho-education</td>
<td>9</td>
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<td>Assertive Community Treatment</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employment support or assistance</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Case management</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Early intervention programs</td>
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</tr>
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<td></td>
<td></td>
<td>Other</td>
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## Preliminary Analysis of Measures (Grey Literature)

### Indicators by Domain and Sub-Domains (cont.)

<table>
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<th>Domain</th>
<th>Indicators (N)</th>
<th>Sub-Domains</th>
<th>Indicators/Sub-Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovery</td>
<td>32</td>
<td>Shared decision-making</td>
<td>20</td>
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<tr>
<td></td>
<td></td>
<td>Recovery environment</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access to peer or consumer services</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>4</td>
</tr>
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## Preliminary Analysis of Measures (Grey Literature) Indicators by Domain and Sub-Domains (cont.)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Indicators (N)</th>
<th>Sub-Domains</th>
<th>Indicators/Sub-Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuity and coordination of care</td>
<td>67</td>
<td>Outpatient follow-up after inpatient discharge</td>
<td>19</td>
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<tr>
<td></td>
<td></td>
<td>Inpatient readmission</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coordination with outpatient mental health</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inpatient discharge planning</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>18</td>
</tr>
</tbody>
</table>
We Used Four Data Sources to Carry out the Evaluation

- Structure of Care
  - Facility Survey & Administrative data

- Process of Care
  - Administrative data & Medical Record Review

- Outcomes of Care
  - Client Survey & Administrative data
Variable Performance in Assessment (Chart Review)

Proportion of Study Cohort Veterans Meeting Assessment Performance Indicators, VHA National Average (FY2007)

--- indicates 95% C.I.
Suicide Prevention Efforts Increased Substantially
P4P in Behavioral Health

- Early study by Bremer, Pincus, et al
- 23 programs identified
- 11 targeting primary care providers
- 10 focused on depression
- Movement to go beyond “black box” of visit to specific PHQ measures
- Longitudinal implementation of structure, process, outcomes measurement e.g. Minnesota DIAMOND project
We Developed a Comprehensive Set of Performance Indicators

- These covered assessment, acute and long-term treatment, and rehabilitation for each of the 5 diagnoses and for co-occurring mental health and substance use disorders.
- Some “cross-cutting” indicators (e.g., assessment for suicide risk) applied to all diagnoses.
- Development of performance indicators linked to specific mandates in Statement of Work.
- We graded indicators based on strength of evidence.
- Input from clinical advisory group of VHA experts was extremely valuable.
- Specification and testing of indicators represents a major contribution to VHA and the field.
Conflicts of Interest
Harold Alan Pincus, MD

Below I have provided details regarding the source of support for my research and any consulting arrangements or financial or commercial involvements for the past year that may represent a potential conflict of interest:

I am currently employed by (all not for profit):
- Columbia University/Research Foundation for Mental Hygiene
- New York-Presbyterian Hospital
- RAND Corporation

My research has been funded by the following organizations (all not for profit):

<table>
<thead>
<tr>
<th>National Institute for Mental Health</th>
<th>UPMC Health Plan (Community Care Behavioral Health)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Institute on Alcoholism and Alcohol Abuse</td>
<td>The Highmark Foundation</td>
</tr>
<tr>
<td>Substance Abuse and Mental Health Services Administration/Center for Substance Abuse Treatment/Center for Mental Health Services</td>
<td>Staunton Farm Foundation</td>
</tr>
<tr>
<td>Veterans Administration</td>
<td>FISA Foundation</td>
</tr>
<tr>
<td>The Robert Wood Johnson Foundation</td>
<td>The Eden Hall Foundation</td>
</tr>
<tr>
<td>The John A. Hartford Foundation</td>
<td>Centers for Medicare and Medicaid Services</td>
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<tr>
<td>The Heinz Endowments</td>
<td>AHRQ</td>
</tr>
<tr>
<td>Atlantic Philanthropies</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>Centers for Disease Control and Prevention</td>
<td>The governments of Australia, Canada, England, Germany, Japan, Ireland, The Netherlands, New Zealand, Scotland, Taiwan</td>
</tr>
<tr>
<td>National Center for Research Resources</td>
<td>SCAN Foundation</td>
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AHSR Meeting
10.05.2011
Conflict of Interest
Harold Alan Pincus, MD (cont’d)

In the past year, I have been a consultant (or on an Advisory Board) for:

<table>
<thead>
<tr>
<th>University of Washington</th>
<th>ValueOptions (travel only)</th>
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<tbody>
<tr>
<td>Tufts University</td>
<td>Altarum Institute</td>
</tr>
<tr>
<td>University of Michigan</td>
<td>University of California at San Diego</td>
</tr>
<tr>
<td>University of New Mexico</td>
<td>Rutgers University</td>
</tr>
<tr>
<td>SUNY Stony Brook</td>
<td>OECD (travel only)</td>
</tr>
</tbody>
</table>

I have received royalties for publications (none of which involved specific products):

-  American Psychiatric Press
-  Current Opinion in Psychiatry/Lippincott, William and Wilkins

Any other commercial or financial involvements within the past year that might present an appearance of a conflict on interest (e.g. institutional or corporate affiliations, paid consultancies, stock ownership or other equity interests, patent ownership, royalties, and interests in patents, instruments, and technologies):

-  None
## Preliminary Analysis of Survey Results (cont.) – Level at which program results are reported

<table>
<thead>
<tr>
<th>Level of reporting</th>
<th>Total (38 Programs)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>National or regional/ state level</td>
<td>29</td>
<td>74</td>
</tr>
<tr>
<td>Clinic/ organization/ hospital or health plan level</td>
<td>19</td>
<td>49</td>
</tr>
<tr>
<td>By demographic cohort (age, gender etc.)</td>
<td>14</td>
<td>36</td>
</tr>
<tr>
<td>By diagnosis</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>Individual provider level</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>31</td>
</tr>
</tbody>
</table>
## Preliminary Analysis of Survey Results – Entities being measured by programs

<table>
<thead>
<tr>
<th>Entity</th>
<th>Total (38 Programs)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital (inpatient care)</td>
<td>28</td>
<td>72</td>
</tr>
<tr>
<td>Local, state, or provincial MH care systems or programs</td>
<td>22</td>
<td>56</td>
</tr>
<tr>
<td>The national MH care system as a whole</td>
<td>19</td>
<td>49</td>
</tr>
<tr>
<td>Outpatient MH care clinics</td>
<td>18</td>
<td>46</td>
</tr>
<tr>
<td>Emergency care</td>
<td>13</td>
<td>33</td>
</tr>
<tr>
<td>Early intervention</td>
<td>13</td>
<td>33</td>
</tr>
<tr>
<td>Individual psychiatrists/ psychiatrist groups</td>
<td>12</td>
<td>31</td>
</tr>
<tr>
<td>Specific service or treatment programs (e.g. community teams)</td>
<td>12</td>
<td>31</td>
</tr>
<tr>
<td>Individual primary care physicians/ primary care provider groups/ clinics</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Partial hospitalization program</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Other individual non-physician MH care providers</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>Crisis management</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>Private health care plan or insurers</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>26</td>
</tr>
</tbody>
</table>

75
**Preliminary Analysis of Measures (Grey Literature) Indicators by Domain and Sub-Domains (cont.)**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Indicators (N)</th>
<th>Sub-Domains</th>
<th>Indicators/ Sub-Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient safety</td>
<td>48</td>
<td>Use of seclusion/ restraint</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elopement/ Drop-out</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medication errors or adverse events</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Falls/ injuries</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>16</td>
</tr>
</tbody>
</table>