THE PERFECT COUPLE: CLINICAL QUALITY & PROGRAM OUTCOMES

Using Data to Improve Clinical Practice

Cathie McLean MA, LPC, CAC-III
P. Antonio Olmos-Gallo, Ph.D.
C.J. McKinney, ABD
Mental Health Center of Denver

American Evaluation Association Conference 2010
San Antonio, TX
Health Care Reform

Emphasis on accountability and performance measurement

- How do you know progress is being made?
- What’s the likelihood the change was attributable to specific services/programs?
- What implications does that information have for the clinician? Team? Program? Agency?
Interplay of Outcomes in Quality Management

- Service Trends & Relationships
- Benchmarking & Best Practice
- Cost-Benefit Analysis

Consumer Level
- Collaboration
- Engagement

Program Level

Agency Level
- Efficient Resource Utilization
- Increased Capacity
- Funding Opportunities
- Learning Collaborative
Philosophical Conviction
- People can and do recover from mental illness
- Recovery is a dynamic process

Scientific Evidence
- Instrument development with the help of logic models
- Rigorous testing of instruments

Informed Practice
- Timely assessment of service efficacy
- Easy access to reports
Our Organization and Philosophy
Recovery is at the very heart and soul of our work at the Mental Health Center of Denver (MHCD).

We believe people can, and do, recover from mental illness. We are recognized nationally for our successful, ground-breaking approach to mental health treatment. Here our consumers are involved in shaping their own recovery and given the chance to regain control of their lives. See Robert’s story.

Recovery takes on many meanings but for most it means appropriate and compassionate treatment for a mental health problem so that the individual can get back to living a happy and productive life. That’s what we provide at MHCD...

More about what MHCD believes.

Come meet MHCD at
Enriching Lives and Minds
March 12 7:45 - 9am

Addressing the Needs of Underserved Populations through Community Involvement

Dr. Lydia Prado's and Kate DeRoche's article on Weaving Cultural Competency throughout Community Mental Health Care appeared in the January, 2008
Development of Recovery Instruments
Recovery Markers

1. Recovery Marker Inventory (RMI)
2. Recovery Needs Level (RNL)
3. Promoting Recovery in Organizations (PRO)
4. Consumer Recovery Measure (CRM)

To what degree is Recovery happening?
Clinician assessment of consumer recovery across eight dimensions and completed every 3 months

Reliability
- IRT Reliability: Person = .75; Item = 1.00
- CTT Reliability = .78

Validity
- $r(\text{GAF-RMI}) = 0.298^*$
- $r(\text{CCAR LOF-RMI}) = -0.397^*$
- $r(\text{CCAR Empowerment-RMI}) = -0.312^*$
- $r(\text{CCAR Hope-RMI}) = -0.250^*$
- $r(\text{CCAR Recovery-RMI}) = -0.363^*$

* $n = 2761$, $p < 0.01$
Recovery Instruments

To what degree is Recovery happening?

Recovery Marker Inventory (RMI)

Recovery Needs Level (RNL)

Promoting Recovery in Organizations (PRO)

Consumer Recovery Measure (CRM)
Consumer Recovery Measure

- Consumer’s perception of their recovery, across five dimensions associated with recovery; completed every 3 months

- Reliability
  - CRM V1.0 had a CTT reliability of 0.65
  - CRM V2.0 had an IRT person reliability of 0.67
  - CRM V3.0 has an IRT reliability: Person = 0.83, Item = 0.99
  - CRM V3.0 has a CTT reliability = 0.88

- Validity
  - Basis24 Overall -0.30 (N = 150)
  - REE Recovery Markers -0.29 (N = 87)
  - CCAR Recovery Factor -0.19 (N = 4013)
Recovery Instruments

To what degree is Recovery happening?

Recovery Marker Inventory (RMI)

Recovery Needs Level (RNL)

Promoting Recovery in Organizations (PRO)

Consumer Recovery Measure (CRM)
Consumers rate their mental health program performance factors associated with promoting hope, sense of meaning, wellness, and resiliency.

Specific sections for each type of staff that interacts with our consumers (front-desk clinical, medical, case managers, rehabilitation).

For more information regarding analysis of findings, please visit [www.outcomesmhcd.com](http://www.outcomesmhcd.com) for last year’s AEA presentation of “Evaluation of how mental staff promotes recovery: A Rasch analysis of the PRO survey.”
Recovery Instruments

Recovery Marker Inventory (RMI)

Recovery Needs Level (RNL)

To what degree is Recovery happening?

Promoting Recovery in Organizations (PRO)

Consumer Recovery Measure (CRM)
Clinician recording of consumer needs across 15 indicators; completed every 6 months

Electronically scored algorithm that indicates appropriate level of service (assumption: consumer needs change over time)

Rasch analyses showed the need for expanding levels to include traditional outpatient services
IRT Discrimination (aka Ordering of Items)

Overall, this is a good spread, but the RNL is not hitting the upper spectrum of recovery

*These are mean “difficulties” of items as a whole, the responses are more spread.
Successful information sharing means:

- Easily accessible – bring it to me, don’t make me go look for it because I probably won’t
- Easily understood – tell me what is important so I don’t have to sift through a bunch of “stuff” and/or make erroneous guesses
- Part of the valued organization culture – help me understand the importance of quality systems, outcomes, and my role in those processes
Individual Profile
Consumer Information

Name: XXXXXXXXXXXX
Team: XXX
Date of Birth: XX/XX/XXXX
Status: Active
Age: XX
GAF: XX

Primary Diagnosis: XXX.xx Primary Diagnosis
Secondary Diagnosis: XXX.xx Secondary Diagnosis
Substance Abuse Diagnosis: XXX.xx Substance Diagnosis

Primary Clinician Name: XXXXXXXXXXXXX
Psychiatrist Name: XXXXXXXXXXXXX

Consumer’s Assessment of Recovery Scores

<table>
<thead>
<tr>
<th>Domain 1</th>
<th>Domain 2</th>
<th>Domain 3</th>
<th>Domain 4</th>
<th>Date</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>xx/xx/xxxx</td>
<td>xx.xx</td>
</tr>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>xx/xx/xxxx</td>
<td>xx.xx</td>
</tr>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>XXX</td>
<td>xx/xx/xxxx</td>
<td>xx.xx</td>
</tr>
</tbody>
</table>

Consumer’s Assessment of Recovery

Consumer’s Assessment of Recovery over Time

Score
Consumer progress is significantly in the negative direction - investigate what is happening.
As compared to peers, consumer progress is significantly positive.
Clinical Quality: Service Outliers

High score at admission, but rate of change is decreasing more than expected.
In addition to improving outcomes, are we getting a reasonable return on investment through the program or service?

Cost-Benefit Analysis

Cumulative Treatment Savings
Your PROGRAM here

[Graph showing cumulative treatment savings over time with a linear trend]
Outcome measurement helps ensure that goals and service standards of a program are being met. Comparing outcomes with the fidelity level of the program helps:

- Determine the overall effectiveness of the program
- Identify areas where service improvements can be made.

To the left is a display of the average improvement of consumers in a particular program over a period of time.
Many times we are not just interested in outcomes performance, but performance within specific indicators important to the program or treatment service.

- Evaluate performance within key outcomes (domains) to determine which aspects of the program work best.
- At the right, Domain 1 is supported well through the program; but Domain 4 can show more improvement.

<table>
<thead>
<tr>
<th>Key Indicator</th>
<th>% at intake</th>
<th>% at Follow-up</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1</td>
<td>21%</td>
<td>67%</td>
<td>219%</td>
</tr>
<tr>
<td>Domain 2</td>
<td>80%</td>
<td>80%</td>
<td>0%</td>
</tr>
<tr>
<td>Domain 3</td>
<td>24%</td>
<td>24%</td>
<td>0%</td>
</tr>
<tr>
<td>Domain 4</td>
<td>94%</td>
<td>84%</td>
<td>-10%</td>
</tr>
</tbody>
</table>
MHCD Midyear Improvement Report

Begin Date – End Date

Service Efficiency

Admissions 2601  Discharges 2406  A/D Ratio: 11/10  Expected: >1 Total Consumers 8333

Improvement Metrics

Consumer Service Transfers

*Note: Decreased Service level refers to less intense services, whereas Increased Service level refers to more intense Services.

Utilization Management Tool

<table>
<thead>
<tr>
<th>Consumers Admitted Prior to Cut off Date</th>
<th>Consumers Admitted After Cutoff Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased Service Level: 18%</td>
<td>Decreased Service Level: 11%</td>
</tr>
<tr>
<td>Sustained Service Level: 75%</td>
<td>Sustained Service Level: 82%</td>
</tr>
<tr>
<td>Increased Service Level: 7%</td>
<td>Increased Service Level: 8%</td>
</tr>
</tbody>
</table>

Changes in Resiliency and Recovery Supportive Environmental Factors

Clinicians Assessment Tool (CAT)

<table>
<thead>
<tr>
<th>Consumers Admitted Prior to Cutoff Date</th>
<th>Consumers Admitted After Cutoff Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Environmental Factors: 43%</td>
<td>Increased Environmental Factors: 52%</td>
</tr>
<tr>
<td>Sustained Environmental Factors: 18%</td>
<td>Sustained Environmental Factors: 19%</td>
</tr>
<tr>
<td>Decreased Environmental Factors: 39%</td>
<td>Decreased Environmental Factors: 30%</td>
</tr>
<tr>
<td>Average CAT Change: 0.04</td>
<td>Average CAT Change: 0.27</td>
</tr>
</tbody>
</table>

Changes in Consumers’ Perception of Their Own Improvement (Parents if child under 8)

Consumer Self-Assessment (CSA)

<table>
<thead>
<tr>
<th>Consumers Admitted Prior to Cutoff Date</th>
<th>Consumers Admitted After Cutoff Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Improvement: 41%</td>
<td>Increased Improvement: 45%</td>
</tr>
<tr>
<td>Sustained Improvement: 23%</td>
<td>Sustained Improvement: 26%</td>
</tr>
<tr>
<td>Decreased Improvement: 37%</td>
<td>Decreased Improvement: 30%</td>
</tr>
<tr>
<td>Average CSA Change: 0.10</td>
<td>Average CSA Change: 0.23</td>
</tr>
</tbody>
</table>
Meeting our agency mission by ...

- Increasing number of consumers served
- Providing empirical evidence of our program quality and efficacy
- Meeting community needs and expectations for quality mental health services
- Leading the Mental Health field with education and tools employing outcomes in accountable clinical practice
Continuous Quality Improvement

- Improved Program Outcomes
  - 80% reduction in homelessness
  - 67% reduction in substance abuse

- Greater Number of Consumers Being Served
  - 27% increased service capacity
  - 12% reduction intake no-show rates

- More Effective Resource Utilization
  - 80% reduction in detoxification facility admission days
  - 70% reduction in jail days
  - 40% decrease in psychiatric hospitalizations

- Greater Opportunity for Funding
  - 36 grants and 4.2 million in revenue
  - Current SAMHSA Grants: 7 Awarded and 1 Pending
For a copy of this presentation please go to our website at

www.outcomesmhcd.com

Cathie McLean  
Cathie.McLean@MHCD.org
Antonio Olmos  
Antonio.Olmos@MHCD.org
CJ McKinney  
Christopher.McKinney@MHCD.org

For more information about Recovery @ MHCD:  
http://www.reachingrecovery.org/