THE PERFECT COUPLE: CLINICAL QUALITY & PROGRAM OUTCOMES

Using Data to Improve Clinical Practice

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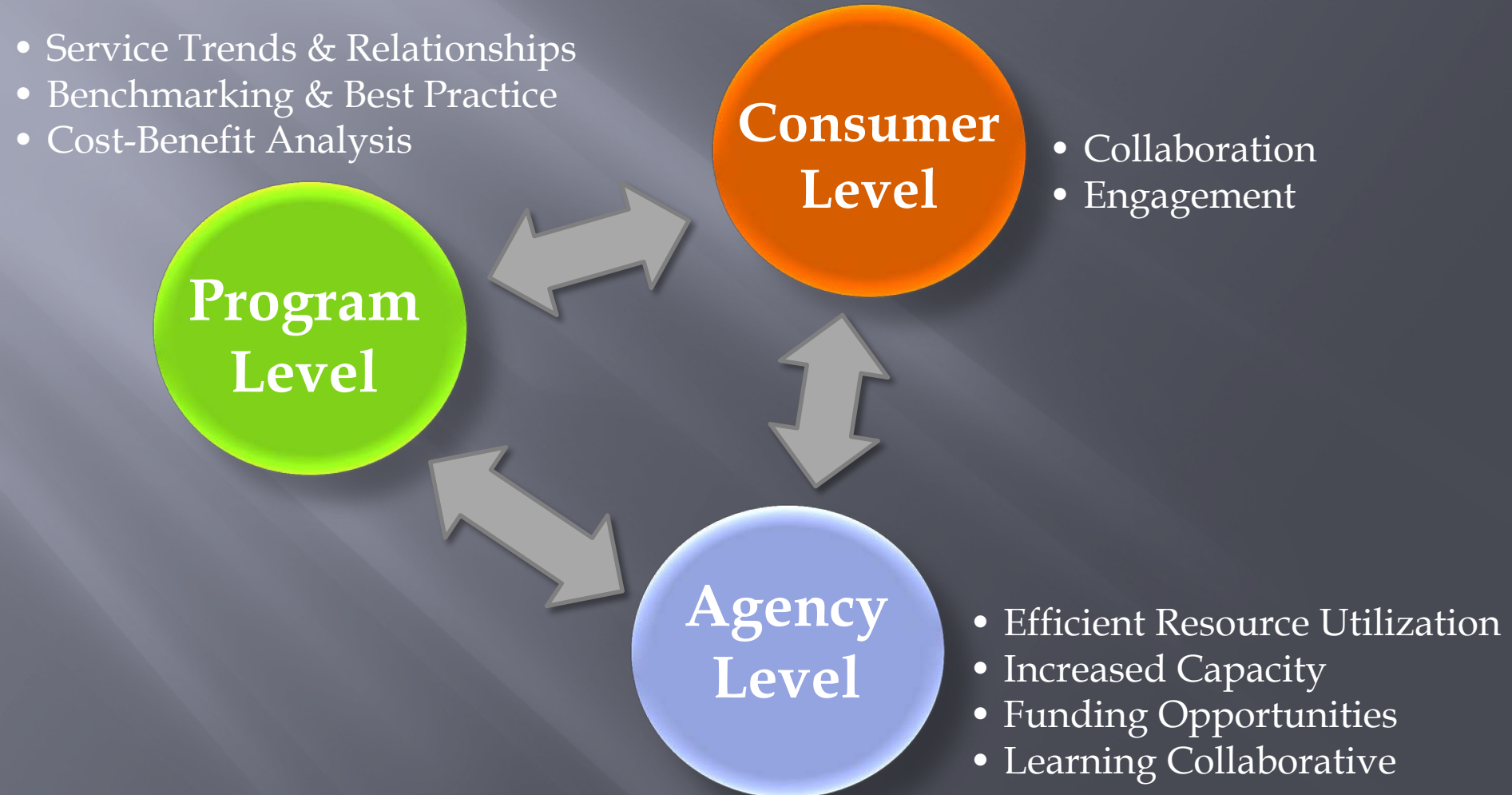
American Evaluation Association Conference 2010

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

Our Data Driving Journey

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

Mental Health Center of Denver

Development of Recovery Instruments

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)

Recovery Marker Inventory

- **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(GAF-RMI) = 0.298*
  - r(CCAR LOF-RMI) = -0.397*
  - r(CCAR Empowerment-RMI) = -0.312*
  - r(CCAR Hope-RMI) = -0.250*
  - r(CCAR Recovery-RMI) = -0.363*

  * n = 2761, p < 0.01

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

Recovery Marker Inventory (RMI)

Recovery Needs Level (RNL)

To what degree is Recovery happening?

Promoting Recovery in Organizations (PRO)

Consumer Recovery Measure (CRM)

Promoting Recovery in Mental Health Organizations

- **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 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)

Recovery Needs Level

- **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

RNL: Item-Person Map

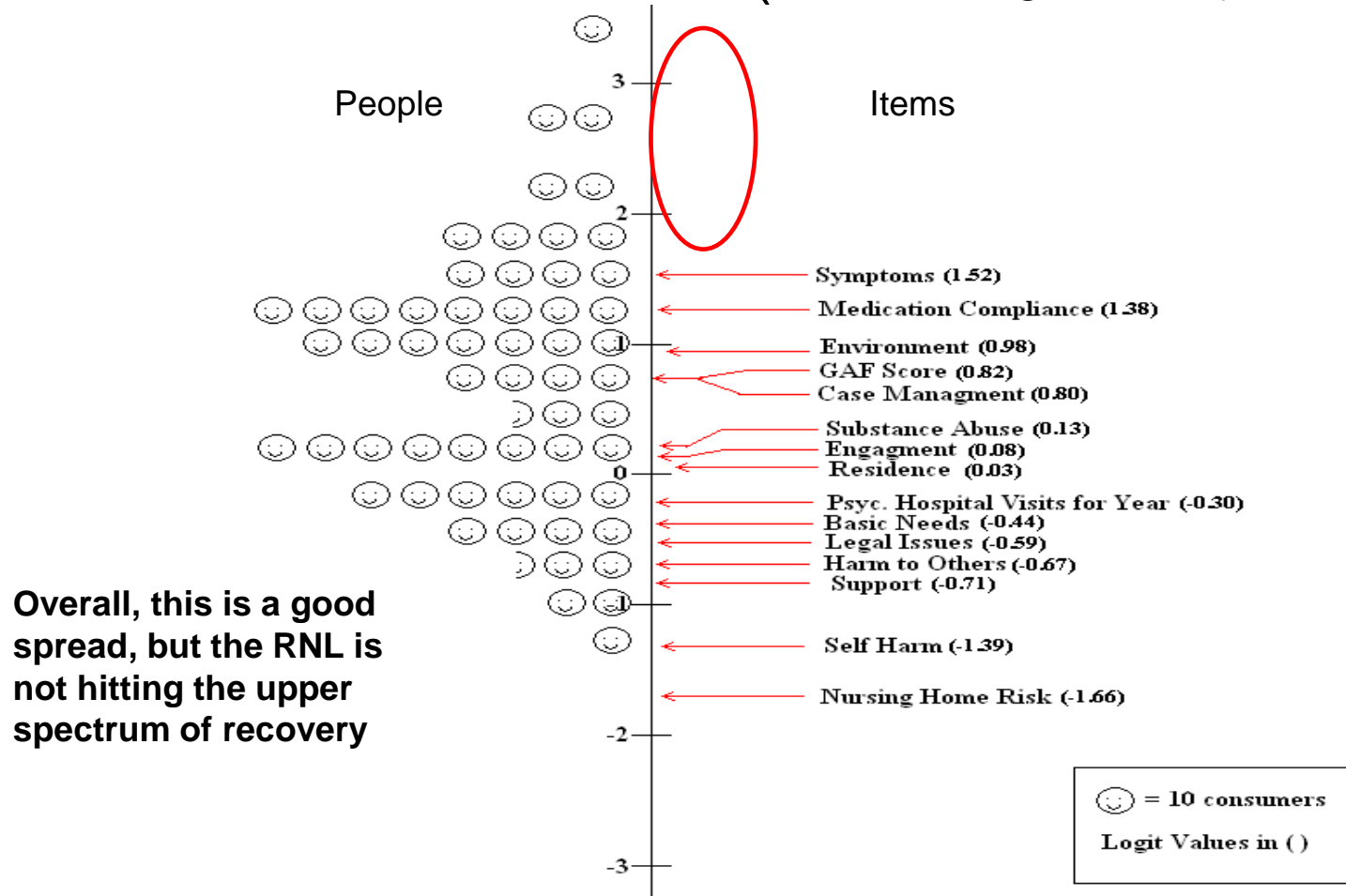## IRT Discrimination (aka Ordering of Items)

People   Items

Symptoms (1.52)
Medication Compliance (1.38)
Environment (0.98)
GAF Score (0.82)
Case Managment (0.80)
Substance Abuse (0.13)
Engagment (0.08)
Residence (0.03)
Psyc. Hospital Visits for Year (-0.30)
Basic Needs (-0.44)
Legal Issues (-0.59)
Harm to Others (-0.67)
Support (-0.71)
Self Harm (-1.39)
Nursing Home Risk (-1.66)

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

☺ = 10 consumers

Logit Values in ( )

*These are mean "difficulties" of items as a whole, the responses are more spread.

Data Informed Clinical Practice

Informed Clinical Practice

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

How well is this individual progressing?

Change: Self-comparison

Change: Peer-Comparison

As compared to peers, consumer progress is significantly positive.

Clinical Quality: Service Outliers

Utilization Management Review Form

MHCD — *Enriching Lives and Minds*

Your System here

Consumer Name: XXXXXXXXXXX XXXXXXXXX   Consumer ID: XXXXXX

Clinician: Xxxxxxxxxxxxxx Xxxxxxxxxxxxxx   Reviewer Name Xxxxxxxx

Team: XXX   Date of Review XX/XX/XXXXX

Diagnosis

View Currrent UM Tool Score

Axis I:
Axis II:
Axis III: *Appears if there is a SA Dx* →   **View S.A. Assessment**
Axis IV:
Axis V:
SA DX:

Display Progress Summaries

Progress Concern:

View Range of Notes

Progressing at a slower rate than expected

View Individual Change chart

	Service Hours this month	% Total Hours
Direct		
Indirect		
Total		

View Individual Profile Report

% of Expected Service Hours Delivered

0 10 20 30 40 50 60 70 80 90 100

View Service Hours Detail

Is a Transition Plan indicated?   Y ☐   N ☐   If Yes, There is a Plan Present?   Y ☐   N ☐

What might be contributing to this being an outlier?
Suggestions for improving outcomes?
Additional comments or issues for follow up?

Save ←   Clicking here saves review responses and emails a copy of the completed review to the Program Manager

Cost-Benefit Analysis

In addition to improving outcomes, are we getting a reasonable return on investment through the program or service?

Cumulative Treatment Savings
Your PROGRAM here

Evaluation and Fidelity

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.

Average Improvement Environmental Factors

To the left is a display of the average improvement of consumers in a particular program over a period of time.

Improvement of outcomes over 18 months

Effective Program Components

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

Key Indicator	% at intake	% at Follow-up	Change
Domain 1	21%	67%	**219%**
Domain 2	80%	80%	0%
Domain 3	24%	24%	0%
Domain 4	94%	84%	**-10%**

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

Consumers Admitted Prior to Cut off Date

Decreased Service Level:	18%
Sustained Service Level:	75%
Increased Service Level:	7%

Consumers Admitted After Cutoff Date

Decreased Service Level:	11%
Sustained Service Level:	82%
Increased Service Level:	8%

Changes in Resiliency and Recovery Supportive Environmental Factors

Clinicians Assessment Tool (CAT)

Consumers Admitted Prior to Cutoff Date

Increased Environmental Factors:	43%
Sustained Environmental Factors:	18%
Decreased Environmental Factors:	39%
Average CAT Change:	0.04

Consumers Admitted After Cutoff Date

Increased Environmental Factors:	52%
Sustained Environmental Factors:	19%
Decreased Environmental actors:	30%
Average CAT Change:	0.27

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

Consumer Self –Assessment (CSA)

Consumers Admitted Prior to Cutoff Date

Increased Improvement:	41%
Sustained Improvement:	23%
Decreased Improvement:	37%
Average CSA Change:	0.10

Consumers Admitted After Cutoff Date

Increased Improvement:	45%
Sustained Improvement:	26%
Decreased Improvement:	30%
Average CSA Change:	0.23

Impact for our Informed Practice

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
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