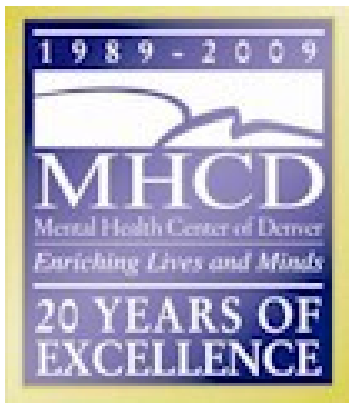


Evaluation of How Mental Health Staff Promotes Recovery: A Rasch Analysis of the PRO Survey



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MHCD's Recovery Evaluation System

- CRM (Consumer Recovery Measure)
 - Recovery
 - Completed by the consumer every 3 months
- RMI (Recovery Markers Inventory)
 - Recovery related factors/Resiliency
 - Complete by therapist every 3 months
- PRO (Promoting Recovery in Mental Health Organizations)
 - Recovery Environments
 - Yearly



Importance of Recovery Environments

- Multiple environments are important to recovery
 - Outside a mental health center
 - Cannot really measure this directly- but we have indirect measures
 - CRM (“I have friends and family I can count on”)
 - Within a mental health center
 - We can have influence
 - “Do therapists, case manager, psychiatrist, front desk staff... promote a recovery-oriented environment?”
- History of measuring Recovery Environments
 - Complication with survey validity (e.g., length of survey, reading level, type of questions, etc.)



Creation of the PRO

1. Developed a list of questions based on the feedback provide by the survey team
2. Brainstorming session with managers to define what staff characteristics are recovery oriented.
 - “how do we know that we are doing a good job?”
3. Evaluation team developed 7 potential survey
 - One for each major category of staff members at MHCD
4. Reviewed by MHCD’s Recovery Committee
5. Participant check by the survey team



Sub-scale of the PRO

- Designed to measure characteristics of staff members that promote recovery, divided among 7 types of staff members:
- Premise: different categories of staff members promote consumer recovery in various manner.
 - Therapist & Clinicians (Section A)
 - Case Managers (Section B)
 - Medical Staff (Section C)
 - Psychiatrists (M.D.) or prescriptive authority nurses
 - Nursing Staff (Section D)
 - Includes nurses (LPN or RN) and medical assistants (CMA)
 - Residential Staff (Section E)
 - Front Desk Staff (Section F)
 - Rehabilitation Staff (Section G)
 - Includes staff at 2 succeed and the resource center at Bannock
- The PRO examines what specific characteristics of consumer recovery are found to be important for measuring recovery-oriented skills among the various types of staff members.



Data Collection

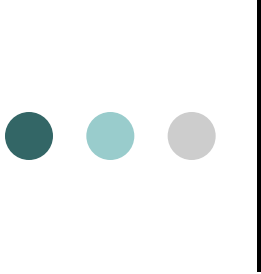
- Consumer Survey Team Administered from September 2007 – May 2008
- Stratified random sample of 450 consumer
 - Stratified by teams (type of services provided)
- 235 consumers completed the survey:
- By sub-sections:
 - A: Therapeutic staff: N = 86
 - B: Case Manager: N = 158
 - C: Medical Staff: N = 210
 - D: Nursing Staff: N = 131
 - E: Residential Staff: N = 29*
 - F: Front Desk Staff: N = 185
 - G: Rehabilitation Staff: N = 32*

Note: * indicates that limited analysis could be conducted due to the low sample size



Development of the PRO: Short Version

- Applied Rasch modeling techniques to develop short-version for each sub-scale (10 to 15 items)
- Items were selected into the short version based on the following characteristics:
 - Items with high information (low error in measurement)
 - Items with acceptable fit indexes (infit and outfit indexes between 0.6 and 1.4)
 - Items that improved the reliability and separation values of the total scale
 - Items that created a range of item difficulty (“*stepping stones*” of item difficulty)
 - Items found to be contextually essential to the evaluation based on the frequency analysis presented before



Summary of Psychometric Properties

Sub-Scale	# Items	CTT:	Rasch Person Estimates:			Rasch Item Estimates		
		alpha	Reliability	Infit	Outfit	Reliability	Infit	Outfit
A: Therapist	15	.91	.70	1.00	.99	.79	.99	.99
B: Case Manager	13	.88	.75	1.00	1.01	.92	1.01	1.01
C: Medical Staff	15	.91	.70	1.01	.98	.82	1.01	.98
D: Nursing Staff	10	.92	.77	.99	.99	.94	1.00	1.00
F: Front Desk Staff	11	.91	.73	1.02	1.00	.87	.99	1.02



Similarities among the Sub-scales

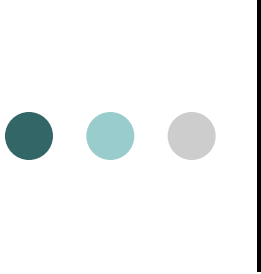
- Therapists, Case managers, medical staff, nursing staff:
 - Focusing on strengths
 - Making decision together
- Therapists & Case managers:
 - Believe consumer can recovery
 - Encourage new skills
 - Able to contact when needed
- Therapists, Case managers and nursing staff:
 - Search for employment
 - Develop hope
- Therapists, medical & front desk:
 - Is Approachable
- Therapist & nursing staff:
 - provides resources to live a healthy lifestyle
- Medical staff and nursing staff
 - Talks to me about recovery
 - Encourages me to live healthy
- Medical staff and front desk staff
 - Explains things so that I can understand
 - Has a warm personality
- Case managers, medical and front desk:
 - Communicate with other MHCD employees
- Case managers and nursing staff
 - Search for employment
 - Develop hope
- Therapists and front desk staff
 - Good role model
 - Stay calm in crisis



Uniqueness among the Sub-scales

- Therapists: positive relationship, want to help me in txt, encourages me (primarily overlap)
- Case Managers: following through on tasks, listening, providing appropriate assistance,
- Medical Staff: flexible and open to change, helps me to guide my txt, supportive, good at prescribing drugs
- Nursing staff: discuss healthy living options, recognizes achievements (primarily overlapping items)
- Front Desk Staff: happy to see me, resourceful, professional appearance

Therefore, it is necessary to have multiple scales to capture the differences and similarities in recovery oriented skills (which are able to discriminate) among the various categories of staff member within a community-based mental health center



Example Item Difficulty for Therapist Sub-scale

○ 15 item scale, including:

- 46. encourage me to search for employment ($b = 1.74$)
 - 45. encourage me to learn new skills ($b = .53$)
 - 14. can contact therapist when I need to ($b = .49$)
 - 5. Focus on my strengths ($b = .43$)
 - 3. believes I can recover ($b = .42$)
 - 2. help me to develop hope ($b = .32$)
 - 4. relationship makes me feel good about myself ($b = .21$)
-
- 39. follows through on tasks ($b = -.16$)
 - 34. provides me with resources to live a healthy lifestyle ($b = -.26$)
 - 30. is a good role model ($b = -.29$)
 - 37. provides appropriate assistance when needed ($b = -.47$)
 - 8. positive relationship ($b = -.49$)
 - 36. can approach and talk to ($b = -.51$)
 - 25. make decisions together ($b = -.80$)
 - 13. is committed to helping me with treatment ($b = -.1.16$)

Items with difficulty level greater than zero were recovery traits, whereas item with difficulty levels below zero were standard skills for a therapist



Training/Hiring Characteristics

- Based on the items that were found to be harder to agree with/less frequently endorsed we can develop training programs and additional hiring criteria specific to each type of staff member:
- **Therapists:**
 1. Encouraging employment and new skills
 2. Contacting the therapist when I need to (within 24 hours)
 3. Focusing on strengths, “believing” in consumer recovery and developing hope (doing this with HOPE training)
- **Case Manager:**
 1. Encourage consumers to learn new skills and search for employment/training,
 2. Focus on consumer strengths, help to develop consumer’s hope, and CM need to “believe” that consumers ***can*** recover.



Training/Hiring Characteristics

- **Medical Staff:**

1. Focusing on strengths and “talking” to consumers about recovery
2. Assisting consumers in making txt decisions (Flexible to change, guide txt, make own choices/decisions, being approachable)

- **Nursing Staff:**

1. Encourage consumers to engage in employment/training
2. Focusing on a consumers strengths, help to develop hope, and talk about recovery
3. Discusses healthy living “options”-

- **Front Desk Staff:**

1. Good role model
2. Stay calm in a time of crisis
3. Resourceful, approachable, and enjoy their jobs.

Recovery-Oriented Skills predicting Consumers' Recovery

Do ... significantly predict ...	Recovery (CRM)	Resiliency Factors to Recovery (RMI)
A: Therapists (N=34)	$r = .29, p = .09$	$r = -.03, p = .82$
B: Case Manager (N= 86)	$r = .19, p = .07$	$r = .18, p = .09$
C: Medical Staff (N=100)	$r = .17, p = .08$	$r = .15, p = .12$
D: Nursing Staff (N=67)	$r = .32, p < .01^*$	$r = .14, p = .23$
F: Front Desk Staff (N=84)	$r = -.03, p = .75$	$r = .12, p = .27$

$r = .20$ small, $r = .35$ moderate, $r = .50$ large relationship, $p < .05$ indicates a significant relationship (beyond chance alone)

- * Nursing staff recovery-oriented skills were significant predictors of consumer's recovery, suggesting that as recovery oriented skills of nurses **increase by $\frac{1}{3}$ (0.34) of a standard deviation** on the PRO, consumers recovery **increases one standard deviation** on the CRM

Therapists, case managers, medical staff displayed a **small to moderate positive** non-significant relationship, but **they were close**



Future Directions

- Currently in the process of conducting the second pilot sample of the PRO
 - Expected to be completed by March, 2010
- Working on complex models to identify the interactions between recovery and recovery environments

Questions ???

- For a copy of this presentation please go to our website at www.outcomesmhcd.com/
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