

Rural Behavioral Health: Using Data to Analyze Outcomes & Costs

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Session Overview:

1. Selection of reportable outcomes
2. Utilization of numerous data sources to gather and report outcomes in a meaningful way
3. Examination of how to “Quantify Quality”

South Carolina

- SC is a small, predominantly rural state
 - Approximately 30,100 sq mi
 - Only 1,425 sq mile (5%) is non-rural
- SCDMH is a vertically integrated system of CMHCs and inpatient facilities
 - 17 CMHCs serving 46 counties
 - 3 in-patient facilities

South Carolina & Rural ACT

- **1987** - ACT Experience Began
- **1988** - First rural ACT team (ROADS) at 1 of 17 CMHCs begins
- **1997** - Community Actions Grants for consensus building and replication
- **1999** - Five (5) additional rural ACT teams added
- **2003** - Six (6) teams continue; preparation for statewide expansion

Essential Questions Before Constructing an Outcome Report

1. WHO IS REQUIRING THE INFORMATION?
2. WHAT IS BEING REQUIRED?
3. WHAT INDICATORS WILL BEST DEMONSTRATE PROGRAM IMPACT?
4. WHAT INSTRUMENTS WILL MOST ACCURATELY MEASURE THE INDICATORS?
5. HOW CAN THE REPORT BE MAXIMALLY USEFUL?

Who Is Requiring The Information?

- **Who is the Primary Audience?**
 - Funding source
- **Can this report also be useful to Key Stakeholders?**
 - Administrators, decision-makers
 - Grant applicants
 - Partner agencies
 - National colleagues
 - Staff
 - Historical value
 - Training value
 - Consumers and family members

What is required?

- Process, outcome, or both?
- Quantitative, qualitative data, or both?
- Restrictions?
 - Page or style limits?
 - Penalties for additional information?
- How much flexibility do you have as a reporter of outcomes?
 - Greater flexibility lends itself to writing for numerous audiences

What Indicators are Best?

- **CLINICAL INDICATORS**
 - Community tenure, functioning, employment
- **SYSTEM INDICATORS**
 - Staff productivity, continuity of care
 - Consumer perception
- **FISCAL INDICATORS**
 - Decreased cost of ER use and inpatient stay
 - Decreased cost of incarceration

What Measurements are Best for the Selected Indicators?

- What data is already being collected?
- Who collects the data and how strong is the communication link between “them and us”?
- Can both quantitative & qualitative data be found?
- Do we need new measures? If so, how do we get buy-in from key players?

Rural ACT in SC:

Matching Indicators to Measurements

Community tenure

- SCDMH CIS
- Dept. of Health and Human Services (DHHS) database
- SC Office of Research and Statistics (ORS) aka the Data Warehouse

Employment and school/ involvement in treatment/satisfaction with treatment

- Mental Health Statistics Improvement Program (MHSIP) Consumer Survey
 - National, standardized
 - Selected items

Rural ACT in SC:

Matching Indicators to Measurements

Clinical functioning

- BASIS-32 scores (already required)
- GAF results (later eliminated due to input inconsistency)

Housing stability

- DMH-mandated housing data field in the Management/Clinical Information System (MIS/CIS)
- Selected items from the MHSIP Consumer Survey.

Data Available in the SC Data Warehouse

- Public and Private Sector Healthcare Data
- Individual State Agency Databases (Claims and Administrative Data)
- Who is Receiving Services
- What Services are Provided
- Where Services are Provided

Warehouse Goldmine

- All records in the Data Warehouse are protected with a unique tracking number which replaces personal identifiers
- Tracking can be done across agencies for outcome and other performance measurement, planning, program evaluation, cost analysis, monitoring quality and other research

OUTCOMES:

The Usual Suspects

**Emergency Department Utilization (ψ Diagnoses): RBHS Clients
12 months prior to enrollment vs. 12 months enrolled
Source: SC Data Warehouse**

	12 months prior	12 months enrolled	Change/percent
Admissions	47	31	(-) 16 / (-) 34%
Un-Duplicated Clients	27	21	(-) 6 / (-) 28%
Costs	\$30,397.96	\$14,452.12	(-) \$15,945.84 / (-) 52%

Inpatient Utilization: RBHS clients 12 months prior to enrollment vs. 12 months enrolled Source: SC Data Warehouse			
	12 months prior	12 months enrolled	Change / %
Inpatient Admissions	18	13	(-) 5 / (-) 28%
Unduplicated Clients	15	12	(-) 3 / (-) 13%
AV. Length of Stay	6.6	4.8	(-) 1.8 / (-) 27%
Total Cost	\$118,472.82	\$82,319.16	(-) \$36,153.66/ (-) 31%

BASIS 32 Scores

Of those consumers who had a repeat measure on the BASIS 32 (90):

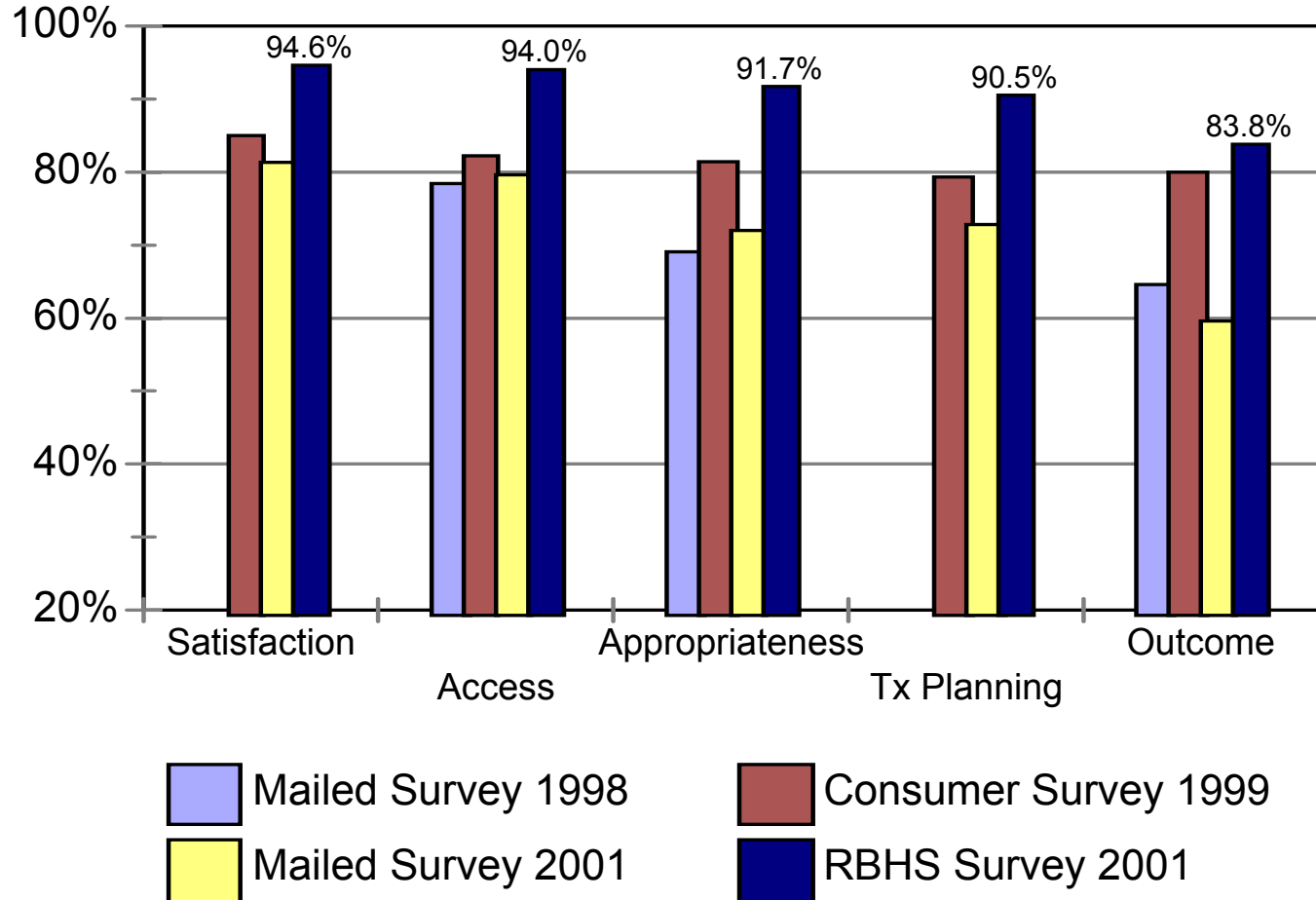
68% reported improvement in symptoms and functioning

25% reported increased difficulty

7% reported no change.

RBHS vs SCDMH

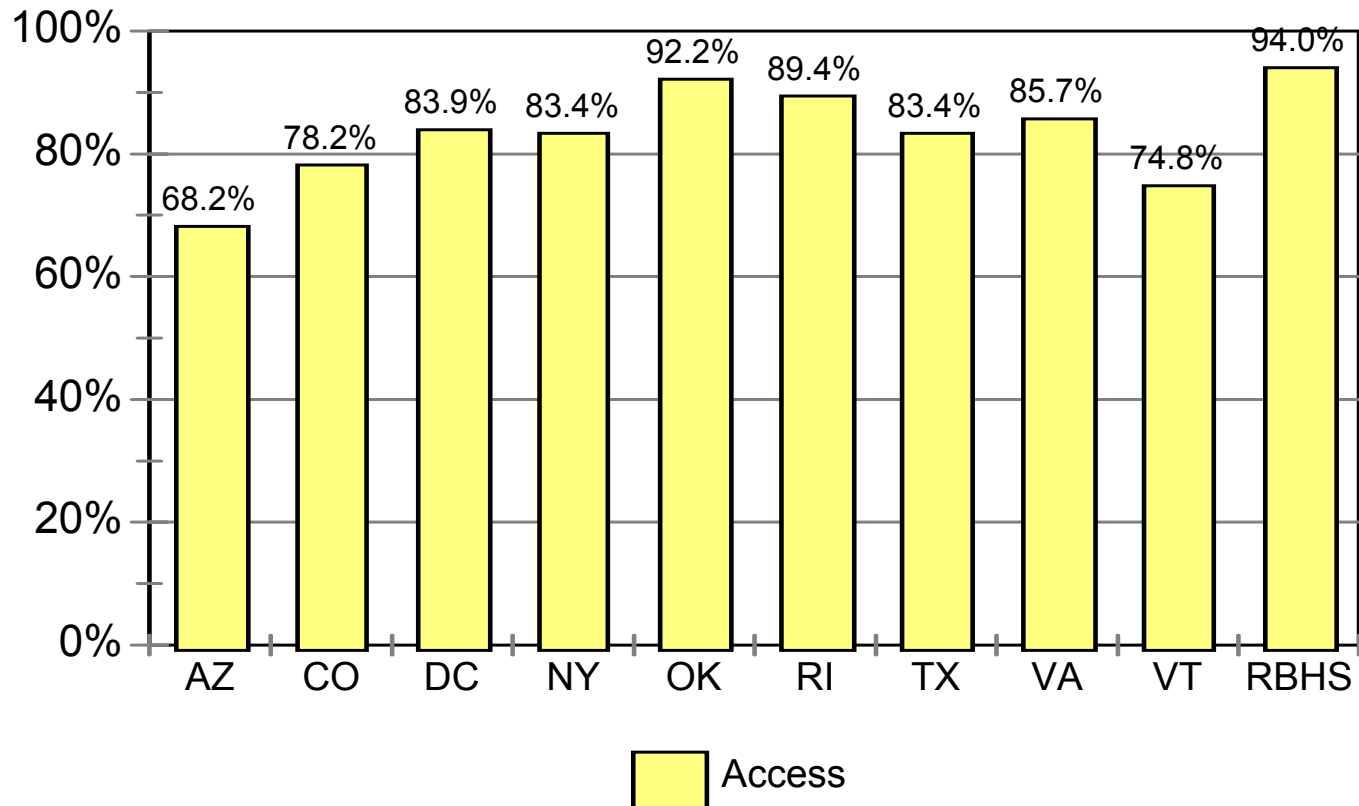
MHSIP Consumer Survey Results



RBHS MHSIP results vs: state test sites

Source: MHSIP 16 state study/RBHS data

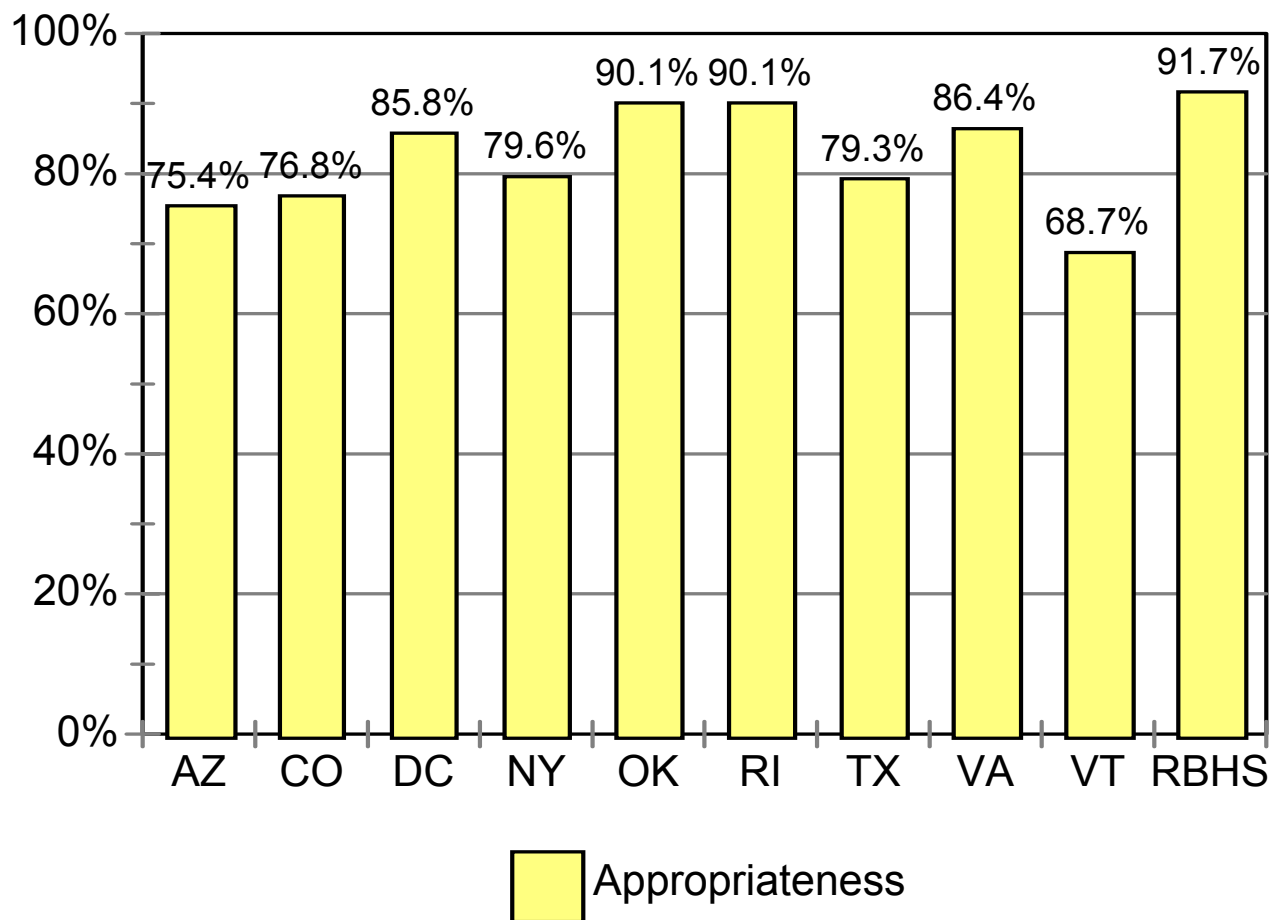
Access to Services



RBHS MHSIP survey results vs statewide study sites

Source: MHSIP 16 state study/RBHS data

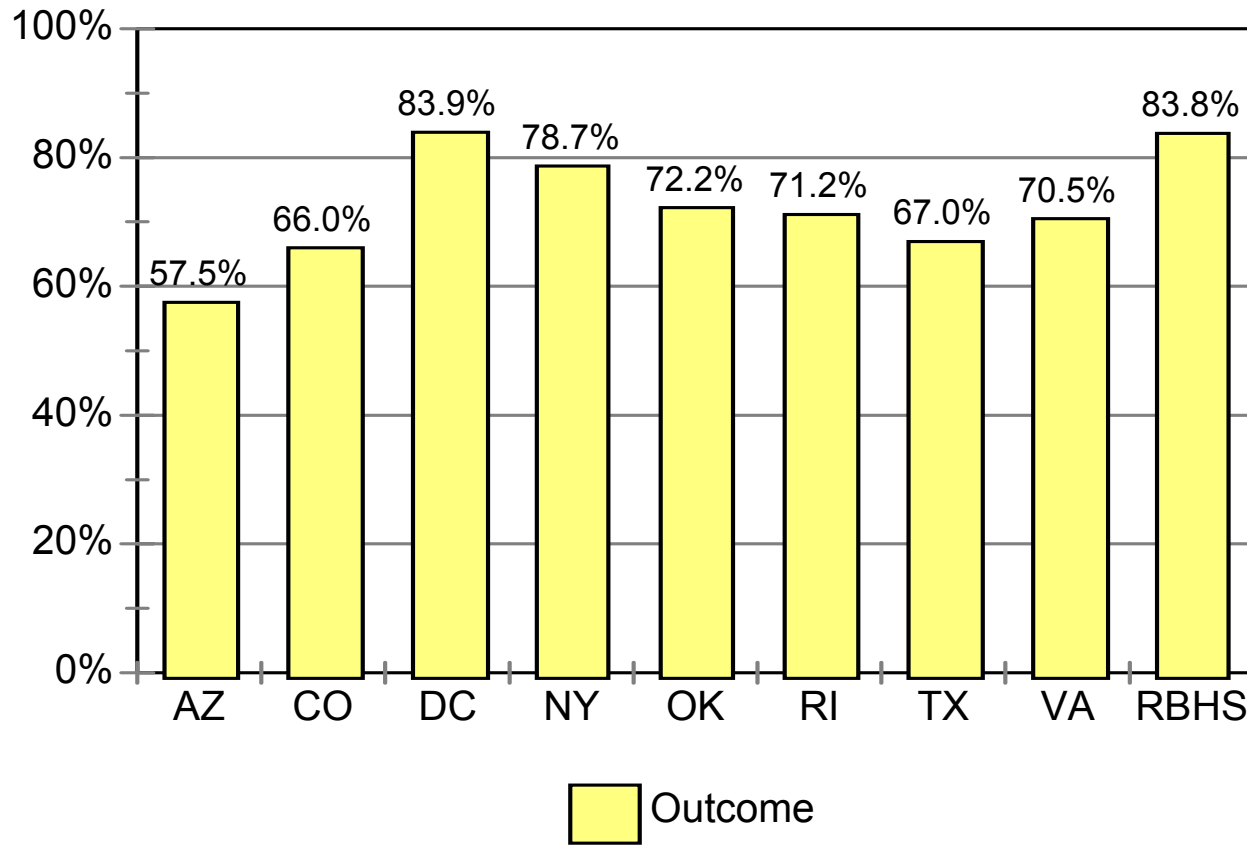
Appropriateness of Services



RBHS MHSIP survey data vs statewide study sites

Source: 16 State MHSIP study/RBHS data

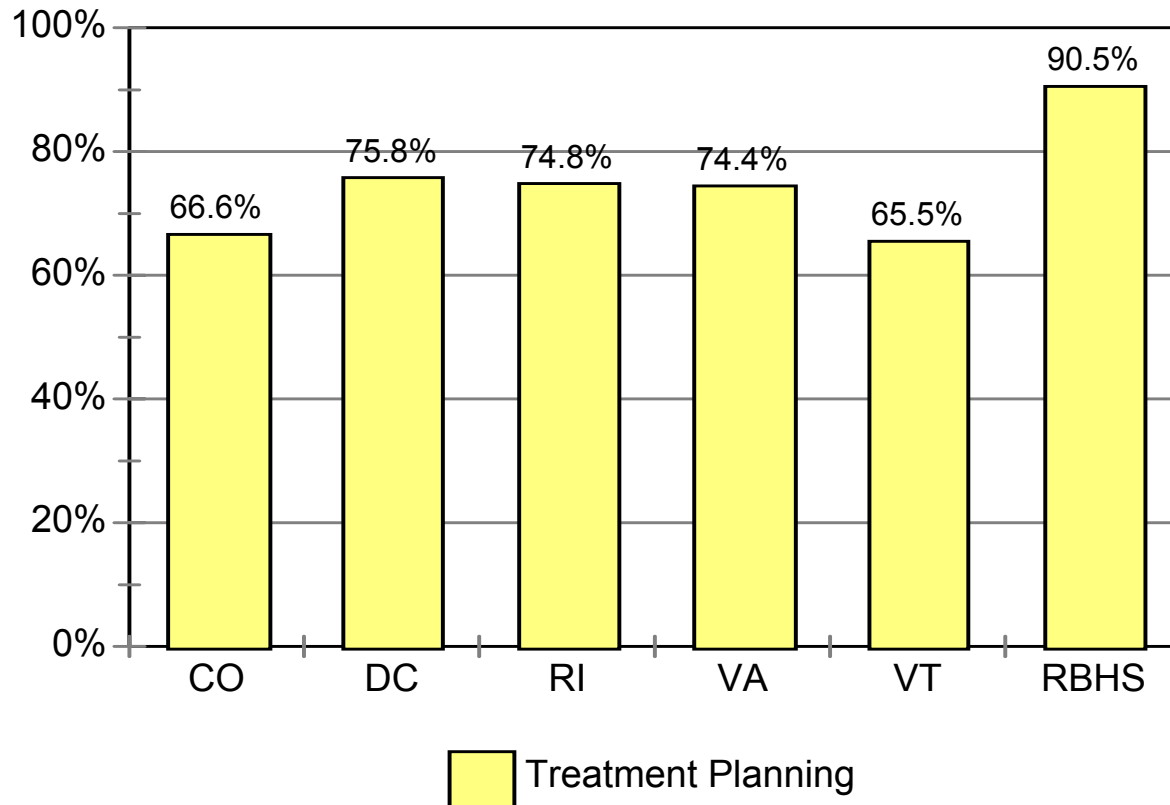
Outcomes of Service



RBHS MHSIP Survey data vs statewide study sites

Source: MHSIP 16 state study/RBHS data

Participation in Treatment Planning



Quantifying Quality:

Some thoughts from experience

- Program staff are often the repository of non-reported but invaluable information
- Asking staff and consumers to tell their stories strengthens not only the report, but the ACT process as well
- Info which is not 'readily available' can bring hard data to life
- Don't be afraid to give credit!

OUTCOMES:

The *Less than Usual* Suspects

Quantifying Quality: Housing

- “Since the start of the RBHS program, what number of clients were identified as needing housing repairs and improvements? And, of this number, how many clients’ housing needs were addressed, corrected and/or improved?”

Housing Response:

- Among 6 teams, 56 clients had been identified as needing housing repairs and improvements
- 45 (or 80%) of these clients' housing needs had been fully resolved by Rural ACT personnel

Housing Examples:

- Acquired electricity for consumer who had been without it for more than one year;
- Sealed windows, added steps to mobile home, electricity turned on;
- Helped homeless woman (sleeping in mini-storage area) get entitlements and move to affordable county housing;
- Two clients were moved to Community Care Homes due to extreme self neglect and poor living conditions;
- Six people moved into their own homes and now have food stamp access;
- Obtained appliances and furniture;
- Well repairs; assistance with a mortgage payment; road repairs/repaving;
- Helped person in unsafe home relocate to safe apartment.

Other accomplishments attributed to Rural ACT ...

- “Two consumers were allowed to attend family members’ funerals because staff offered to accompany them.”
- “ One client who had been afraid to ride in a car now allows staff to drive him to doctors’ appointments.”
- “One consumer obtained a student driver’s license; another got a car; a third is now attending a day treatment program.”

CORE MESSAGES:

- Outcome reporting can be more than a mechanical, mandated exercise
- Staff and other key informants can be actively and meaningfully engaged in the outcome reporting process
- Useful outcomes include both “hard data” and “soft data”
- Reporting of Rural ACT outcomes has been a key factor in program development and dissemination

THANKS!

For additional information:

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