The Evolution of CIBHS Program Performance and Outcome Evaluation:

eBHS
eBehavioralHealthSolutions

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CIBHS EBP and Evaluation Teams
April 24, 2015
Overview of Presentation

• Why conduct program performance and outcome evaluation?
• Historical EBP program performance and outcome evaluation protocols
• What is eBHS?
• The transition is underway!
• Beyond EBP evaluation: other needs eBHS is meeting/can meet
Why Conduct Evaluation?

• Inform clinical impressions and guide diagnostic formulation
• Inform treatment planning
• Monitor treatment progress
• Document outcomes
• Quality Improvement
Why Conduct Evaluation?

- Multiple stakeholders of evaluation information
  - Clients/Consumers
  - Clinicians/Practitioners
  - Program Managers
  - Agency Administrators
  - Funders
  - Community Members
CIBHS Historical EBP Protocols

• First EBP Evaluation Protocol 2006
  – Aggression Replacement Training
• More than a dozen EBP evaluation protocols established over the years
• ‘Standard’ evaluation materials
  – Training PowerPoint and Webinar recordings
  – Guide and Forms pdf (when in public domain)
  – Data dictionary
  – Excel data entry file
CIBHS Historical EBP Protocols

• ‘Standard’ process
  – Sites enter data into Excel
    • Maintain historical, ongoing record of clients served
  – Yearly or twice yearly submissions to CIBHS
  – CIBHS generates aggregate and site-specific reports
    • Merging multiple Excel files into SPSS (often 100+)
    • Data cleaning and analyses
    • Populating tables in Word and generating graphs in Excel
      – Varying number of reports (5-100+)
CIBHS Historical EBP Protocols

• ‘Standard’ process
  – Resource intensive
  – Inhibits use of data for quality improvement purposes
  – Not linked to real-time data-driven decision-making at the client, program, agency, county or state levels
What is eBHS?

• Web-based platform for real-time data collection, analysis and reporting
  – Developed and maintained by eCenter Research, Inc.
  – HIPAA and CFR42 Compliant
  – Dedicated server for CIBHS data in Northern Cal

• Multiple methods of data capture
  – Direct data entry
  – Custom import
  – Upload from existing EHR
  – Client portal

• Flexible, highly adaptable

• Robust, responsive programming that is accomplished in relatively short periods of time
What is eBHS?

• Responsive to needs of clients
  - Clients include consumers, practitioners, agencies, counties and the state

• Multi-functional
  • Screening
  • Referral
  • Care coordination
  • Treatment planning
  • Monitoring treatment progress
  • Concurrent data entry and clinical service delivery
  • Outcome tracking
  • Registry / Population health management
  • Reducing disparities
The Transition is Underway!

- **Current CIBHS evaluation protocols**
  - Functional Family Therapy (FFT) is complete!
    - CIBHS FFT Reports have been replicated in eBHS
      - Generated in Aggregate and for each Team at the click of a button!
    - All 44 teams will have access to their own team’s data
  - In addition to receiving their site report, they can manipulate / filter / “slice and dice” the data by a number of characteristics
    - Client age, gender, ethnicity
    - Date range
    - Therapist
  - All data graphs have a ‘drill-down’ function that allows the user to delve deeper into any given set of data
    - e.g., Reliable Change Index – clients represented in any of the three change categories
Youth Outcome Questionnaires
Total Score – FFT Aggregate Data
August 2008 thru to January 2015

Solid lines indicate clinical cutpoints
Reliable Change on YOQ Total Score
Pre-FFT to Post-FFT:
Aggregate Data
August 2008 thru to January 2015

Level of Care: All
Episode of Care: Episode of Care 1
Program/Service: All
Client Age (Min): 0 | Client Age (Max): 100
County: All | Location: All

Client (n=4,988)
- Positive Change: 1,650
- No Change: 2,869
- Negative Change: 449

Parent Figure 1 (n=4,491)
- Positive Change: 2,039
- No Change: 2,068
- Negative Change: 382

Parent Figure 2 (n=784)
- Positive Change: 327
- No Change: 362
- Negative Change: 94

Legend:
- Positive Change
- No Change
- Negative Change
The Transition is Underway!

**Current CIBHS evaluation protocols**
- Over the next 2-3 years will transition all existing EBP evaluation protocols into eBHS

**New CIBHS evaluation protocols**
- Cognitive Behavioral Therapy for Psychosis (CBTp) is almost complete!
  - Clinicians can do concurrent data entry while working with a client
  - Visual displays of current functioning and treatment progress in real time
- All new EBPs supported by CIBHS will have evaluation built in to eBHS
Beyond EBP Evaluation

• Current Applications and/or In Development
  – Registry / Population Health Management
    • Advancing Recovery Collaborative
    • Care Coordination Collaborative
  – Small County Data Center Pilot
  – Statewide Outcomes for CBHDA

• A Vision for the Future
  – CDP Evaluation
  – Usual Care Services Evaluation
  – Reducing Disparities Projects
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<tr>
<th>Client Information</th>
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<tr>
<td><strong>Last Name:</strong> Doe</td>
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<tr>
<td><strong>First Name:</strong> John</td>
</tr>
<tr>
<td><strong>MR#:</strong> 12345</td>
</tr>
<tr>
<td><strong>Address:</strong> 12345 Pine Street, Mammoth Lakes, California</td>
</tr>
<tr>
<td><strong>DOB:</strong> Jun 13, 1969</td>
</tr>
<tr>
<td><strong>Age:</strong> 44</td>
</tr>
<tr>
<td><strong>Race/Ethnicity:</strong> African American/Black, not Latino</td>
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<tr>
<td><strong>Sex:</strong> M</td>
</tr>
<tr>
<td><strong>Last MOR#:</strong></td>
</tr>
<tr>
<td><strong>Current MOR#:</strong> 5</td>
</tr>
<tr>
<td><strong>Program:</strong> Mammoth Lakes Wellness Center</td>
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<tr>
<td><strong>Level:</strong> Outpatient Mental Health</td>
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<tr>
<td><strong>Program Start Date:</strong></td>
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<tr>
<td><strong>Living Situation:</strong> Permanent Supportive Housing</td>
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<tr>
<td><strong>Date Started in Living Situation:</strong></td>
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<tr>
<td><strong>Would you like to make any changes to your living situation?</strong> Yes</td>
</tr>
<tr>
<td><strong>Would you like additional education or to learn new skills?</strong> Yes</td>
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<td><strong>Employment Status:</strong> Non-Paid (Volunteer) Work Experience</td>
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<tr>
<td><strong>Experience:</strong> 4</td>
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<tr>
<td><strong>Hours Worked:</strong> 4</td>
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<td><strong>Would you like to make any changes to your work situation?</strong> Yes</td>
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<th>Short Term Goals</th>
<th>Target Date to be Achieved</th>
<th>Usable Strengths</th>
<th>Achieved?</th>
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<th>Other Services: Date</th>
<th>NOTES:</th>
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<td>Primary Care:</td>
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<tr>
<td>Dental:</td>
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<td>ER/Urgent/Hospital:</td>
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<td>Other:</td>
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### Screening and Other Frequent Data

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<th>Type</th>
<th>Date Taken</th>
<th>Agency</th>
<th>Value</th>
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<tr>
<td>BP (Systolic)</td>
<td>05/07/2014</td>
<td>eCenter Testing Site</td>
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<td>BP (Diastolic)</td>
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<td>Weight</td>
<td>05/07/2014</td>
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<tr>
<td>Height</td>
<td>05/07/2014</td>
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<td>BMI</td>
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<td>PHQ-9</td>
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<td>A1c</td>
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<tr>
<td>LDL</td>
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### Diagnoses

#### Medical
- DM: Yes
- HTN
- Dyslipidemia

#### Psychiatric
- Bipolar
- Schizophrenia
- Depression
- Anxiety
- PTSD
- Psychosis

#### Substance Use Disorder
- Alcohol Use
- Opiate Use
- Stimulant Use
- Tobacco Use
### Care Coordination Team

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<tr>
<th>Type</th>
<th>Name</th>
<th>Agency Name</th>
<th>Phone</th>
<th>Email</th>
<th>Agency Identifier</th>
<th>ROI Date</th>
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<td>Clinical Care Manager</td>
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<td>Substance Use</td>
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<tr>
<td>Peer and/or Family Member Provider</td>
<td>select</td>
<td>Partnership Health Plan</td>
<td>707-863-4100</td>
<td><a href="mailto:rilemng@partnership.org">rilemng@partnership.org</a></td>
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<tr>
<td>Other</td>
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### Referral(S) Status

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<tr>
<th>Agency Referred to</th>
<th>Contact Name</th>
<th>Phone Number</th>
<th>Date of Referral</th>
<th>Current Status</th>
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5. Emergency Room Utilization

- Percentage of clients with one or more visits to ER
- Number of clients in the target population
Aggregate PHQ-9 Depression Questionnaire

The PHQ-9 is a brief, self-report questionnaire that measures depressive symptoms. It is used in a variety of settings to screen for depression and to monitor treatment progress over time.

PHQ-9 Mean Score

Level of Care: All | Episode of Care: Episode of Care 1 | Program/Service: All | Client Age (Min): 0 | Client Age (Max): 100 | County: All | Location: All

Severe Depression
Extremely difficult
Very difficult
Somewhat difficult
Not difficult at all

Extremely difficult
Very difficult
Somewhat difficult
Not difficult at all

Total Score PHQ-9 (n=80):
Most answered: Somewhat difficult
Number of responses for all possible answers:
   Extremely difficult: 15
   Not difficult at all: 11
   Somewhat difficult: 34
   Very difficult: 18

12.6
10.7

Total Score PHQ-9 (n=80)
Total Score PHQ-9 Entry 2 (n=45)

Mean Level of Difficulty
The Possibilities are Endless!

• So much progress in eBHS has been made in such a short period of time

• Creative and flexible thinking will help advance the ways in which eBHS can support the myriad of needs in California’s behavioral health service system
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