EBP Symposium
April 21, 2016
Data-Driven Decision Making
eBHS
(*electronic Behavioral Health Solutions*)

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CIBHS Evaluation Team
Background

- **Health Care Reform** is transforming health and behavioral health service systems and practices, and increasing need for IT capacity (need data **NOW**!)
- Continual Quality Improvement (**CQI**)
- **Accreditation**, Affordable Care Act (**ACA**) etc.
- **Integration/Care Collaboration**
Types of Data

• Screening
• Clinical Assessments /Client outcomes
• Administrative/Compliance
• Financial/Cost Effectiveness
• Fidelity to the Model
• Client Satisfaction
• Social/Housing/Employment, etc.
So what does it take?

• Data has to be accessible in real-time!! *(Easier said than done)*

• Data systems have to be flexible enough to add new reporting features in a reasonable time frame – and with reasonable costs

• True Dashboard Reports! Yes, *like the one in your car!*
The Dashboard

Social Factors (Housing/Employment/Relationships)

Substance Use Disorder Data (Alcohol/drugs)

Data from clinical assessment tools
Current level of depression, anxiety, etc.

Physical Health Indicators
Rethinking “Data Entry”

Example 1
Cognitive Behavioral Therapy for Psychosis (CBTp)
CBTp Assessment Tools/ “Dashboard”

Pre and Post (and in-between)

- Patient Health Questionnaire (PHQ-9)
- Generalized Anxiety Disorder (GAD-7)
- Distress Rating Scale
- Global Functioning Scale
- The Work and Social Adjustment Scale
<table>
<thead>
<tr>
<th>Evaluation Questions:</th>
<th>CLIENT DEMOGRAPHICS</th>
<th>WHAT WAS CLIENT’S DISCHARGE STATUS?</th>
<th>IS SERVICE BENEFITTING CLIENT AS INTENDED?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Sources</td>
<td>Intake Paperwork</td>
<td>Discharge Form</td>
<td>PHQ-9</td>
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<td>GAD-7</td>
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<td></td>
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<td>Distress Rating Scale</td>
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<td>Global Functioning Scale – Role &amp; Social</td>
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<td>Work and Social Adjustment Scale</td>
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<tr>
<td>Description of Data</td>
<td>DOB</td>
<td>Completion status</td>
<td>Measure of Depression</td>
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<td></td>
<td>Gender</td>
<td></td>
<td>Measure of Anxiety</td>
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<td>Race/Ethnicity</td>
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<td>Current Distress Level</td>
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<td>Diagnosis</td>
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<td>Measure of global functioning</td>
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<td>Psychotic symptom</td>
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<td>Measure of functioning and Adjustment</td>
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<tr>
<td>Data Collection Intervals</td>
<td>Baseline</td>
<td>Discharge</td>
<td>Baseline &amp; every 1 month</td>
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<td>Baseline &amp; every 1 month</td>
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<td>Baseline &amp; every 3 months</td>
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<td>Baseline and every 3 months</td>
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<td>Baseline &amp; every 3 months</td>
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<tr>
<td>Completed by?</td>
<td>Client/Practitioner</td>
<td>Practitioner</td>
<td>Client</td>
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<td>Client</td>
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<td>Client</td>
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<td>Practitioner</td>
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<td>How long to complete?</td>
<td>10-15 minutes</td>
<td>1-2 minutes</td>
<td>5-10 minutes</td>
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<td>5-10 minutes</td>
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<td>5-10 minutes</td>
<td>5-10 minutes</td>
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Preferably data entry and data creation is the same (concurrent data entry)

Data entered by either:
- Clinician
- Client
- Data entry staff
PHQ-9
Interpretation/Clinical Utility

• Total Score indicates Depression Severity:

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Depression Severity</th>
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</thead>
<tbody>
<tr>
<td>0-4</td>
<td>None/Minimal depression</td>
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<tr>
<td>5-9</td>
<td>Mild depression</td>
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<tr>
<td>10-14</td>
<td>Moderate depression</td>
</tr>
<tr>
<td>15-20</td>
<td>Moderately severe depression</td>
</tr>
<tr>
<td>21-27</td>
<td>Severe depression</td>
</tr>
</tbody>
</table>
Report: PHQ-9 Individual

Q10: "If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?"

"Entry" depends on the interval set for the program (i.e., monthly, weekly, etc.). If PHQ-9 is collected at each session, entry can also refer to session.
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

- 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

- Total Score PHQ-9 Entry 2 (n=45):
  - Mean Level of Difficulty:
    - 12.6
    - 10.7

Levels:
- None or Minimal Depression
- Mild Depression
- Moderate Depression
- Moderately Severe Depression
- Severe Depression

Levels of Care:
- All
- Program/Service: All
- Client Age (Min): 0 | Client Age (Max): 100
- County: All | Location: All
Example 2

Functional Family Therapy
FFT Data Upload

• Clinicians enter data in FFT Data Platform (CSS Data System)
• Excel export uploaded to eBHS
• Reports available to staff and supervisors
Statistical analyses

Several Filtering Options

Generate reports: Chart or Grid
Youth Outcome Questionnaires
Total Score
FFT Aggregate Data
August 2008 thru to July 2015

Interactive Chart
Ability to export
Reliable Change on YOQ Total Score
Pre-FFT to Post-FFT:
Aggregate Data
August 2008 thru to July 2015

- Parent Figure 1 (n=5,068): 2,657 (Positive Change), 1,852 (No Change), 559 (Negative Change)
- Parent Figure 2 (n=780): 381 (Positive Change), 286 (No Change), 113 (Negative Change)
- Youth Client (n=5,326): 2,247 (Positive Change), 2,464 (No Change), 615 (Negative Change)
Lessons Learned FFT and CBTp

- Implementation efforts specifically for use of data system and client feedback
- Collaboration with sites to identify best “data entry” option
- Apply specific implementation strategy to evaluation/use of data
- Be mindful of “Data Fatigue”
Traditional CIBHS EBP Implementation

The Community Development Team Model

• **The Pre-implementation Phase** is designed to promote engagement and commitment.

• **The Implementation Phase.** This phase involves the CDT working to support and improve the site’s adherence and fidelity to the evidence-based practice model and to promote practitioner competence during the formal implementation of the practice at the sites.

• **The Sustainability Phase** is designed to promote autonomous, model-adherent use of the practice by the sites, including removing barriers to eventual site certification or licensure.
Challenges

• Staff already entering a lot of data in the EHR
• Compliance Data prioritized
• Perceptions of data entry as administrative task
• When and how to provide feedback to clients
• Moving from data results to concrete changes
Strategies

• Increased implementation focus
• Technical/computer use training
• Changing our language/perception of data (*data* versus *client feedback*)
• Develop training for staff on how to provide feedback (good and bad)
• Implement Evidence-Based Client Feedback Systems (*i.e.* OQ and PCOMS)
Questions?

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