USING DATA FOR DECISION MAKING IN IDD SETTINGS

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“MOST OF THE WORLD WILL MAKE DECISIONS BY EITHER GUESSING OR USING THEIR GUT. THEY WILL BE EITHER LUCKY OR WRONG.”

SUHAIL Doshi, CEO, MIXPANEL

OVERVIEW

- Importance of using Data for Decision Making
- Teams
- Fidelity Data
- Outcome Data

CRITICAL FEATURES OF PBIS

Agency Wide PBIS Practices

- Smallest #
- Evidence-based
- Biggest, durable effect

Supporting Culturally Equitable Social Competence & Academic Achievement

Supporting Culturally Knowledgeable Staff Behavior

Supporting Culturally Relevant Evidence-based Interventions

Supporting Culturally Valid Decision Making
TEAMS

Purpose
- Brief data based monthly review of individuals receiving intensive supports.
- Conducting Functional Behavior Assessments (FBA) and developing positive behavior plans and are responsible for implementing the BSP.
- Implement, Monitor, & Evaluate Tier 1 (Program-wide) supports.
- Program directors, clinical staff, direct staff, individuals, family members.

Composition
- Administrative and senior clinical and other representative staff of the agency.
- Clinical, staff, family, who know the individual best and the individual where feasible.

Intensive Tier 3 Systems Team

Intensive Tier 3 Individual Team

FIDELITY OF IMPLEMENTATION

IDD Tiered Fidelity Inventory (TFI)
Implementation of PBIS by Agency or Program

Quality of Universal Implementation Checklist (QUIC)
Implementation of Practices by Staff

MEASURING FIDELITY OF PROGRAM OR AGENCY

Tiered Fidelity Inventory (TFI)

TYPES OF INFORMATION (DATA)

Fidelity Data
Did we implement the systems and strategies we agreed on?

Outcome Data
Is the plan resulting in progress toward our goals?

IMPORTANT DATA POINTS IN PBIS

Fidelity of Implementation
- IDD TFI - Implementation of PBIS by Agency or Program - TIER 1, 2, & 3
- QUIC – Implementation of Practices by Staff - TIER 1

Outcome Data
- Incident Tracking - Externalizing Disruptive Behavior (Agency, Program, Individual) - TIER 1, 2, & 3
- Quality of Life Screener – Individual Goals and Progress - TIER 1
- Behavior Rating Scale – Individual progress on Targeted Behaviors - Tier 3
The purpose of the SWPBIS Tiered Fidelity Inventory is to provide a valid, reliable, and efficient measure of the extent to which program personnel are applying the core features of program-wide positive behavioral interventions and supports.

The TFI Evaluates all three tiers
Each tier can be evaluated separately and at different times
The Inventory is completed by the program team together annually
Each tier has an action plan

Categories Measured:
- Team
- Implementation
- Evaluation

Categories Measured:
- Team
- Resources
- Support Plans
- Evaluation

Categories Measured:
- Team
- Resources
- Support Plans
- Evaluation
ACTION PLANNING

<table>
<thead>
<tr>
<th>Action</th>
<th>Yes</th>
<th>No</th>
<th>Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Program Implementation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Program Support Resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Program Policy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Program Implementation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Program Review</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DECISION MAKING

TFI Tier 1
- Is the program implementing with fidelity? Yes/No
- What changes do we need to make to Tier 1 so that all individuals are accessing Tier 1 supports?
- What training does staff need?

TFI Tier 3
- Do the behavior support plans include prevention, teaching and consequence strategies?
- Are staff implementing plans with integrity?
- What training does staff need?

MEASURING STAFF FIDELITY

Quality of Universal Implementation Checklist (QUIC)

QUALITY OF UNIVERSAL IMPLEMENTATION CHECKLIST - QUIC

The QUIC was designed by the Massachusetts Department of Developmental Services October 2013 Revised August 2014

The QUIC is designed to provide a brief snapshot of PBS universal support interactions occurring in a setting

Adapt to meet the needs of your agency

QUALITY OF UNIVERSAL IMPLEMENTATION CHECKLIST - QUIC
### DECISION MAKING

**QUIC**
- Are the questions on the QUIC relevant to your program guidelines?
- What changes should be made to the QUIC?
- How often should the QUIC be used? By whom?
- Are staff interacting with individual in accordance to program guidelines?
- What training does staff need?

### OUTCOME DATA

- **Incident Tracking** – Externalizing Disruptive Behavior (Agency, Program, Individual)
- **Quality of Life Indicators** – Individual Goals and Progress
- **Behavior Rating Scale** – Individual Intensive Behavior Tracking

### EVALUATING OUTCOMES

**Quality of Life Screener (QoL)**

### QUALITY OF LIFE SCREENING

The QLS was designed by the May Institute, Inc.

The QLS is designed to evaluate life skills and goals for individuals receiving supports. It may be completed by staff or when able with input from the individual.

**Per Individual Scoring:**
- Complete the QLS Questionnaire once per year (or more frequently as needed) from the dates the questionnaire is taken to the QLS 2015 sheet for the year it was taken. Enter scores into a teaching plan for items that scored low.

**ADAPTAION:**
- Use one Score Sheet per Residence or Program. Enter the name of the house or program in the NAME Area. Change the years to names of individuals in house or program. Analyze data by service program and determine which skills are covered or length.

### QUALITY OF LIFE SCREENING

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
<th>Current</th>
<th>Target</th>
<th>Change</th>
<th>Range of</th>
<th>Range of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervision</td>
<td>Communication:</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1. Can communicate needs, wants, and feelings 2. Can express wants, needs, and feelings for social, educational, and physical services 3. Can communicate physical needs, wants, and feelings 4. Can communicate wants, needs, and feelings in general</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comprehension:</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1. Can understand what is being said 2. Can understand what is being written 3. Can understand what is being shown 4. Can understand what is being done</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Competency:</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1. Can perform one or more tasks 2. Can perform one or more tasks 3. Can perform one or more tasks 4. Can perform one or more tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Functioning:</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1. Can perform one or more tasks 2. Can perform one or more tasks 3. Can perform one or more tasks 4. Can perform one or more tasks</td>
<td></td>
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</tr>
</tbody>
</table>
QUALITY OF LIFE SCREENING

Quality of Life Screener
• Does the screener match the needs/desires of the individuals served?
• What changes do we want to make to the screener?
• How often will we use the screener?
• How will we create individual goals from the screener?
• What training does staff need?

EVALUATING OUTCOMES

INCIDENT REPORTS

PROGRESS MONITORING MEASURES:
• are valid
• are reliable
• are quick to administer
• are relatively easy to complete & to summarize
• can be repeated frequently
• are relatively inexpensive
• provide relevant information
• can indicate potential problem(s)
• are sensitive to small changes

INCIDENT TRACKING

Incident tracking allows the PBS Data Team to review externalizing behavior and look for patterns and red flags that need to be addressed.
• Teams identify areas for improvement and then action plans to implement new or improved systems and practices for staff and individuals.
• Incident data should be readily available and easy to read. Preferably in graph format.
• Teams should review this data at a minimum monthly.
• Data should be shared with staff monthly.
**PIVOT TABLES FOR DRILL DOWN**

**DECISION MAKING**

**Incident Tracking**
- Are you collecting all relevant problem behaviors?
- Who enters data into incident tracker?
- How often will we review data? (minimum monthly)
- Will sub-programs, residences, work programs review data separately from overall program? How often?
- Who will share the data with staff? How often?
- What training does staff need?

**ANALYZING AND EVALUATING OUTCOMES**

**Tier 3**

**FEASIBLE AND EFFICIENT PROGRESS MONITORING WITHIN A TIER 3 SYSTEM: INDIVIDUAL OUTCOMES**

**Direct Observation**
- Frequency, Rate
- Latency
- Duration
- Intensity
- Behavior Report Cards/Behavior Rating Scale
  - Once per day
  - Throughout day

**EXAMPLE: DIRECT OBSERVATION (FREQUENCY, SPECIFIC TIME PERIOD)**

<table>
<thead>
<tr>
<th>Monitoring Ralph’s Outcomes</th>
<th>School: Jackson Elementary School</th>
<th>Incidents</th>
<th>Date</th>
<th>Self-injurious Incidents</th>
<th>Date</th>
<th>Self-injurious Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>9:00 – 11:00</td>
<td>11:00 – 1:00</td>
<td>1:00 – 3:00</td>
<td>3:00 – 5:00</td>
</tr>
<tr>
<td>Monday</td>
<td>1</td>
<td>1</td>
<td>1111111</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Tuesday</td>
<td>1111111</td>
<td>1</td>
<td>111111</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Wednesday</td>
<td>1111111</td>
<td>1</td>
<td>111111</td>
<td>111111</td>
<td>1</td>
<td>111111</td>
</tr>
<tr>
<td>Thursday</td>
<td>1111111</td>
<td>1</td>
<td>111111</td>
<td>111111</td>
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<tr>
<td>Friday</td>
<td>1111111</td>
<td>1</td>
<td>111111</td>
<td>111111</td>
<td>111111</td>
<td>111111</td>
</tr>
</tbody>
</table>

**PRECISE PROBLEM STATEMENT:** Many individuals are engaging in problem behavior in the indoor and outdoor common areas during lunch transition times and the behavior is maintained by attention.

**Goal:** Reduce problems in common area by 50% by Jan. 31

**Solution Components**

<table>
<thead>
<tr>
<th>What are the Action Steps?</th>
<th>What is Responsible?</th>
<th>By When?</th>
<th>How will it be Monitored?</th>
<th>Notes/Updts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prevention**
- Staff interventions for the common and hallway
- Staff will post notices in the hallway

**Teaching**
- Make sure intervention is effective
- Staff will post notices in the hallway

**Recognition**
- Staff will recognize behavior
- Staff will post notices in the hallway

**Extinction**
- Post weekly data
- Staff will post notices in the hallway

**Data Collection**

<table>
<thead>
<tr>
<th>What data?</th>
<th>Who is responsible for gathering the data?</th>
<th>Where/How often will data be gathered?</th>
<th>Where will data be shared?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ANALYZING AND EVALUATING OUTCOMES**

**Tier 3**

**FEASIBLE AND EFFICIENT PROGRESS MONITORING WITHIN A TIER 3 SYSTEM: INDIVIDUAL OUTCOMES**

**Direct Observation**
- Frequency, Rate
- Latency
- Duration
- Intensity
- Behavior Report Cards/Behavior Rating Scale
  - Once per day
  - Throughout day
### Table: Support Strategies

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Percent</th>
<th>Total Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/12/15</td>
<td>9:00-11:00</td>
<td>70%</td>
<td>4</td>
</tr>
<tr>
<td>10/13/15</td>
<td>11:00-1:00</td>
<td>75%</td>
<td>5</td>
</tr>
<tr>
<td>10/14/15</td>
<td>1:00-3:00</td>
<td>75%</td>
<td>3</td>
</tr>
<tr>
<td>10/15/15</td>
<td>8:00-10:00</td>
<td>85%</td>
<td>4</td>
</tr>
<tr>
<td>10/16/15</td>
<td>10:00-12:00</td>
<td>80%</td>
<td>6</td>
</tr>
</tbody>
</table>

Average Percent: 77%
Average Incidents: 5.40
Mean Incidents: 2.40
Mean Percentage: 77%
Mean Time Duration: 2.60

### Behavior Rating Scale (IBRST)

- Addresses Intensive Target behaviors for an individual
- Efficient for staff use
- Targeted behaviors must be operationally defined
- Behaviors can be measured by frequency, duration or intensity
- Easily translates into a line graph
- Requires minimum of 1 appropriate and 1 inappropriate behavior

### Example: Behavior Report Card with Specific Goals

#### Rating Scale

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Percent</th>
<th>Total Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/12/15</td>
<td>9:00-11:00</td>
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<td>4</td>
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<td>80%</td>
<td>6</td>
</tr>
</tbody>
</table>

Average Percent: 77%
Average Incidents: 5.40
Mean Incidents: 2.40
Mean Percentage: 77%
Mean Time Duration: 2.60

### Behavior Rating Scale (BRST)

- Addresses Intensive Target behaviors for an individual
- Efficient for staff use
- Targeted behaviors must be operationally defined
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- Easily translates into a line graph
- Requires minimum of 1 appropriate and 1 inappropriate behavior

### Example: Behavior Rating Scale (BRST)

- Addresses Intensive Target behaviors for an individual
- Efficient for staff use
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TIER 3 TEAM SYSTEM MEETINGS

- Each person is discussed during the meeting for no more than 2 or 3 minutes.
- Graphs of the daily frequency of no more than 3 of their most challenging behaviors over the past 60 days are reviewed.
- Determine current trends by using trend line and/or mean frequency per day of behavior
  - Decreasing trend/Behavior improving (+)
  - About the same/No change in behavior (0)
  - Increasing trend/Behavior not improving (-)
- Decisions are made as to what should be done to address the problem behaviors that are not improving
  - Develop an action plan

TIER 3 PRACTICES: BSP

- DDS Behavior Support Plan
  - Prevention Strategies
    - Antecedent interventions
    - Environmental design
    - Communication style
  - Teaching Replacement and Desired Behaviors
    - Consequence Strategies
      - Positive acknowledgement & reinforcement procedures

DECISION MAKING

Individual data tracking
- How can we use Behavior Rating Scale to track problem behaviors? Frequency, duration, intensity
- How often will we use the screener?
- Who will graph the data? Is the BRS sheet enough for graphing?
- How often will we share data with the team/staff?
- Do we have data rules for modifying/discontinuing plan?
- What training does staff need?
“THE GOAL IS TO TURN DATA INTO INFORMATION, AND INFORMATION INTO INSIGHT.” – CARLY FIORINA, FORMER EXECUTIVE, PRESIDENT, AND CHAIR OF HEWLETT-PACKARD CO.

### CASE SAMPLE

#### TIER 3 OUTCOMES

- 21 individuals
- 7 females, 14 males
- Diagnoses of ASD and other developmental disabilities
- Some have mental health and psychiatric diagnoses
- All attend and/or live in May Institute day and residential programs

#### Tiered Fidelity Inventory – Tier 3 Total Implementation Score

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2014</td>
<td>44%</td>
</tr>
<tr>
<td>Q2 2014</td>
<td>51%</td>
</tr>
<tr>
<td>Q3 2014</td>
<td>Data Unavailable</td>
</tr>
<tr>
<td>Q4 2014</td>
<td>56%</td>
</tr>
<tr>
<td>Q1 2015</td>
<td>79%</td>
</tr>
<tr>
<td>Q2 2015</td>
<td>56%</td>
</tr>
<tr>
<td>Q3 2015</td>
<td></td>
</tr>
<tr>
<td>Q4 2015</td>
<td>79%</td>
</tr>
</tbody>
</table>

#### Percent of Individuals Responding to Tier 3 Intervention

- Non-Responder: Aug-13: 79%, Sep-15: 10%
- Partial Responder: Aug-13: 29%, Sep-15: 42%
- Responder: Aug-13: 34%, Sep-15: 50%

#### Percent of Tier 3 Target Behaviors Improving

- 13-Aug: 45%
- 15-Sep: 65%
Total Protective Holds

Year 1: 40
Year 2: 6

85% decrease

QUESTIONS

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CREDITS

EXCEL Data Management – 2000
Quality of Universal Implementation Checklist - QUIC – 2014
Massachusetts Department of Developmental Services
Quality of Life Screener (QLS) – 2015
May Institute, Inc.
Rating Scale (RS) (ed. Kohler & Irons, 1992)
Tiered Fidelity Inventory - TFI – 2015
OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports