Reliable Evidence Based Outcomes
Optimization Technologies (REBOOT):

Technology infrastructures and
decision-support to increase positive outcomes

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Grafton at a Glance

• Program Locations:
  – USA: Virginia, West Virginia, Florida
  – Melbourne, Victoria, Australia

• Types of Programs:
  – Community-based group homes for children and adolescents
  – Psychiatric residential treatment program for children and adolescents
  – Special Education Schools
  – ABA Services
  – Infant and Toddler Program
  – Outpatient Mental Health Services
  – International Consultation and Training

Serve > than 500 individuals per year in residential services and 1500-2000 clients in outpatient services.

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People inherently want to do well, and those with disabilities are no exception. When we see an individual with a disability struggling, it is our responsibility to figure out why and teach the skills necessary for success.
Keeping it real: Data-Driven Process

- Assessment
- Setting Goals
- Data Collection
- Graphing
- Analysis
- Modify
- Achieve
What is REBOOT

Web-based and tablet accessible technologies that provides guided data entry, automated updates and notifications, and ongoing decision-support to optimize positive outcomes.
AIM
Analysis of Influences Matrix

Prevention/Intervention
- Services
- Resources
- Accommodations
- Strategies
- Technology

Measurement
- Data collection
- Graphing
- Data-driven analysis
- Inter-observer agreement

Sustainability
- Generalization
- Reduction in resources
- Transition to less restrictive services
- New goal planning

Client Functioning

Internal
- Physiological
- Medical
- Cognitive
- Psychiatric/Psychological
- Sensory
- Trauma-related symptoms

External
- Environmental
- Social
- Family-related
- Trauma-related triggers
- Naturalistic supports
- Naturalistic reinforcement

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When Billy gives a tight hug, blow and whisper quietly in his ear. He may laugh and move his hands to his ears, you can then move back away from him and use other responses to redirect his behavior.
Setting Goals

- Condition
- Behavior/Skill
- Mastery Level
- Duration

**Grafton Integrated Health Network**

**ADD GOAL OR OBJECTIVE: STEP 1 - G/O DETAILS**

- Goal: 
- Objective: 

**Service** | **Category (Optional)** | **DCM Type** | **Label (Optional)**
---|---|---|---
Behavioral | Behavior of Concern | Event Recording | 

**Load from Existing:**

- Exclude Goal Objective(s)
  - Objective Title 1
  - Objective Title 2
  - Objective Title 3

**Title / Name of Goal**

- Decrease Physical Aggression Toward Others

**Start Date**

- DD
- MM
- YYYY

**Closure Date**

- DD
- MM
- YYYY

**Description / Comments (Use #NAME to maintain privacy)**

In all settings, #NAME will decrease incidents of physical aggression toward others (hugging others really hard and punching them in the stomach and chest) as compared to the baseline period for 3 consecutive weeks.

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Meet Billy
(all identifying information has been changed)

Billy Thompson

Strengths
Billy enjoys being with other people and enjoys physical contact (e.g., hugs, handshakes, high-5). He has a good sense of humor and laughs quickly when he thinks something is funny. Billy likes to keep busy and will help staff complete a variety of household tasks when asked.

Communication
Billy is able to communicate many items he wants verbally when he is calm and motivated. If you have an idea of what he wants but are not sure, you may offer him two choices, and he will often repeat the choice he wants. Billy also uses large-size pictures for communication (8"x11" color photographs). If he is unable to state what he wants even after prompts, hold up one picture at a time, and he will typically take the picture representing what he wants.

Medical Status
Billy has a visual impairment in both eyes. He is able to navigate his environment in well-lit conditions and is able to recognize people and objects that are within 2 meters of him. He does not have glasses. Billy currently takes no medication.

Caregiver(s)
- Kay Johnson, Therapist
- Susan Tiller, Teacher

Location(s)
- Maple Hill Court, School
- Grouprooms, Van, Community

Recent Goals
- Decrease physical aggression
Compare functioning with Minimum Growth Line.
Decrease physical aggression
Alerts and Notifications

Kay Johnson

Notifications

AIM Review per Susan Tiller, Teacher
June 11, 2013 at 8:13 am

Billy Thompson
ID # 400741

External: When Billy gives a tight hug, blow and whisper quietly in his ear. He may laugh and move his hands to his ears, you can then move back away from him and use other responses to redirect his behavior.

View »

Billy Seem to be Regressing

Susan Tiller, Teacher
June 10, 2013 at 7:43 am

Hi Kay, Looks like Billy will have another Significant record for the coming end of week tally. Can we discuss? Comment »
Medical intervention reduces aggression
Increase functional autonomy

Data collection

<table>
<thead>
<tr>
<th>Trial</th>
<th>Prompts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Got two pieces of bread</td>
<td>Hand-Hand</td>
</tr>
<tr>
<td>Open peanut butter</td>
<td>Touch</td>
</tr>
<tr>
<td>Using butter knife, spread peanut butter on one piece of bread</td>
<td>Hand-Hand</td>
</tr>
<tr>
<td>Open jelly</td>
<td>Touch</td>
</tr>
<tr>
<td>Using butter knife, spread jelly on one piece of bread</td>
<td>Hand-Hand</td>
</tr>
<tr>
<td>Put pieces of bread together</td>
<td>Touch</td>
</tr>
</tbody>
</table>

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Increase functional autonomy
Graph
3 Phases of REBOOT Development

1. • Goal-Writing Decision-Support and Goal bank
   • Data collection methodologies
   • Graphing
   • Alerts and notifications to Transdisciplinary team

2. • AIM automated decision-support
   • Generation of reports to monitor outcomes and compliance with approach

3. • Data mining analytics that drive practice-based evidence
   • Real time upgrades to goal bank and AIM based on anonymous client profiles

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Grafton’s Goal Mastery Rates

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