Behavioral Treatment through In-Home Telehealth for Young Children with Autism

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**Parents and children** who have welcomed us into their lives

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Strategies Used for Behavioral Intervention in the Iowa ABA Studies

• Use functional analysis (FA) and functional communication training (FCT) to replace problem behavior with social communication
• Train parents to use FA/FCT with their children under the direction of a behavioral consultant
• Use telehealth to reach underserved areas
Summary of ABA Telehealth Results

- Social functions were identified through functional analysis for over 90% of children
- Most children with ASD show escape and/or tangible functions
- FA was completed in an average of 4-5 visits
- FCT was completed in an average of 8-10 visits
- An average reduction in problem behavior of at least 90% has been achieved in both clinic and home settings
Telehealth and Autism: Treating Challenging Behavior at Lower Cost
(Lindgren, Wacker, Suess et al., *Pediatrics*, 2016)

<table>
<thead>
<tr>
<th></th>
<th>In-Home Therapy</th>
<th>Clinic Telehealth</th>
<th>Home Telehealth</th>
<th>P value</th>
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</thead>
<tbody>
<tr>
<td>Reduction in problem behavior</td>
<td>95.76%</td>
<td>91.00%</td>
<td>97.27%</td>
<td>.074</td>
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<tr>
<td>Number of weekly treatment visits</td>
<td>17.05</td>
<td>9.05</td>
<td>9.10</td>
<td>&lt;.001</td>
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<td>Acceptability ratings</td>
<td>6.55</td>
<td>6.53</td>
<td>6.25</td>
<td>.457</td>
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Average Weekly FA+FCT Treatment Costs Per Child

- **In-Home Therapy**
  - Staff Costs: $220
  - Facility Costs: $60
  - Family Costs: $0

- **Clinic Telehealth**
  - Staff Costs: $120
  - Facility Costs: $60
  - Family Costs: $0

- **Home Telehealth**
  - Staff Costs: $80
  - Facility Costs: $40
  - Family Costs: $0
Challenges for ABA Telehealth

• Not all parents have the confidence and interest needed to learn ABA methods
• Not all families are comfortable with communication through teleconferencing
• Technical problems with equipment and internet connections can interfere with completing sessions
• For clinic-based telehealth, families must still find the time and transportation to attend clinic sessions
• Even though telehealth can extend the reach of behavioral consultants into underserved areas, there are still not enough trained behavior analysts to meet the need for ABA services
• All Family Navigators with Child Health Specialty Clinics CHSC are a parent or primary caregiver to a child or youth with a special health care need.

• RAP Family Navigators offer care coordination and family-to-family support by:
  ▫ Collaborating with health care providers and specialists to connect virtually via telehealth to increase accessibility statewide.
  ▫ Exploring insurance coverage and payment options for intervention services (e.g., Applied Behavior Analysis) and other service needs.
  ▫ Navigating education and other systems.
  ▫ Connecting families to ASD resources, advocacy and family support groups.
  ▫ Making reminder phone calls to families for approaching appointments
  ▫ Offering encouragement and support to families through this difficult and emotional process
Making an Impact

- Function-based behavior analysis and treatment are highly effective for children with ASD.
- As little as 1 hour/week of behavioral consultation can teach parents how to reduce challenging behavior and increase social communication significantly.
- Problem behavior can be reduced from 3 hours per day to 3 minutes per day.
- Telehealth can extend ABA expertise to rural, underserved areas.
Peace and Joy
(An Autism Haiku)

Hopes dashed and rooms trashed
until parents restore peace,
turning pain to joy!