Chapter 10
Summary and Conclusions of Best Practices in Providing Services for YCCB

Abstract This final chapter utilizes case studies within the prevention framework in an effort to integrate theories of development, evidence-based practice, behavioral principles, progress monitoring data, and evaluation of outcomes. When possible, the outcomes from each case study are graphically presented so that progress can be observed.

Challenging behavior problems are common among young children, and can be transitory, episodic, or chronic. When their families are stressed due to issues such as poverty, disabilities, health or mental health issues, children are at increased risk for more serious behavior problems and subsequently, poor developmental outcomes. Early identification and early intervention are critical approaches to ensuring that all children reach their full potential, leading to happy, healthy, and productive lives.

There are a number of evidence-based approaches available that can help children and their families by educating parents, improving early relationships, and promoting children's social and emotional competence. These approaches are rigorously tested strategies in which research has documented decreases in mental, emotional, and behavioral health problems, and increases in success in the home, school, and community. This manual aims to guide the practitioner in selecting, implementing, and documenting preventive interventions that contribute to healthy development and improved functioning, especially for children who are at increased risk for poor outcomes due to developmental delays and disabilities or environmental factors.

Prevention and early intervention are keys to improving health and well-being of children and their families. Effective prevention/intervention can best be understood within a developmental framework, which is tailored to address the needs of the individual child and their family. Prevention/intervention is a model in which some

supports are made available for all children and families in order to maximize development, while more intensive and individualized supports are used to prevent a problem from getting worse or stop a related problem from developing. For example, all children thrive when their parents are nurturing, attentive, and provide consistent discipline, which in turn promotes children's cooperation, motivation, and readiness for school. Many of the challenging behavior problems commonly seen in young children will quickly improve when parents learn to ignore minor misbehavior, and reinforce cooperative behavior, by simply providing praise which is specific, enthusiastic, and immediate. However, some children, especially those challenged with multiple risk factors such as developmental delays, poverty, and insecure attachments will need more intensive interventions in which their families are strengthened and skills are reinforced which improve developmental outcomes.

Prevention and early intervention efforts which incorporate the principles of behavioral theory offer the most evidence for improving children's functioning, and decreasing maladaptive behavior, and have been outlined in this guide. The principles of behavior theory are well defined, and have been supported by thousands of scientific investigations that have helped us to understand how children learn, and what will be most influential towards improving their behavior and teaching new skills. Teaching children social and emotional skills and teaching parents parenting skills decreases problem behaviors and leads to success and achievement. The problem-solving model offers practitioners a practical approach towards understanding the problem behavior, developing, implementing and documenting interventions which will improve functioning, and thereby, healthier developmental outcomes. Ideally, these interventions should take place where children live, play, and learn, and must incorporate their caregivers and family members. Approaches should be developmentally appropriate, culturally sensitive, family centered, and optimistic, if they are to endure.

The following case studies are illustrations of the problem-solving process as it can be applied in early intervention situations. All cases are fictitious, but come from the experiences of the authors in their work with children and families.

Daniel: An Example of Primary Prevention

Daniel and his mother Nicole presented for his regularly scheduled Well-Child Visit. Daniel is 24 months old and Nicole has some concerns regarding his development, specifically:

- He shows no interest in toilet training.
- He seems clumsy and falls when he runs.
- He only uses short phrases (2–3 words) to communicate, which concerns Nicole as Daniel's older sister was talking "up a storm" at this age, and his playgroup friends are more verbal.

With this information the practitioner begins the problem-solving process, and asks Nicole additional questions about her concerns, for example, phrases he might use for requests. She also observes Daniel at play, and observes him as he runs down the hallway. She also asks Nicole to complete the *Ages & Stages Questionnaire* (ASQ; Bricker & Squires, 1999) to document developmental skills. This screening tool is reliable, easy to use, and increases the likelihood that children needing early intervention will be identified (Hamilton, 2006).

Based upon the information gathered through this process, it is determined that Daniel is on target developmentally. Nicole is shown a graph showing Daniel's milestones with those of similar age peers. She is assured that Daniel is meeting expectations, and provided with guidance to help Daniel build his vocabulary. For example, Nicole might describe what is happening during everyday activities, label objects, repeat and extend what Daniel says, sing songs, and read books aloud to him. She is encouraged to put toilet training on hold, until he shows more interest in the process. To help with coordination, she will enroll Daniel in a toddler gymnastics class, where he will have the added benefit of meeting other children his age.

Since Daniel shows no evidence of developmental delays, there is no need for any further assessment. However, Nicole is encouraged to talk to her pediatrician at the next Well-Child Visit if she continues to have concerns. She is provided with handouts about developmental milestones and ideas that turn everyday activities into learning adventures.

Diane: An Example of Secondary Prevention

Diane is a 28-month-old girl who was removed from her parents' home about 5 months ago, due to neglect. Her aunt and uncle are now taking care of her, and are concerned with her temper tantrums. Tantrum behaviors include hitting, crying, and screaming at an ear-piercing level, and last upwards of an hour. She is very resistant to efforts to comfort her.

The Battelle Developmental Inventory Screening Test (BDIST; Newborg, 2005) is used to screen for developmental delays and does not identify concerns which would warrant full assessment for early intervention. However, her caregivers indicate that even though they want to help Diane, they cannot manage her behavior, and are considering returning Diane to foster care because her behavior problems are so problematic.

The practitioner continues the problem-solving process by gathering additional information about Diane's current behavior, including her aunt & uncle's reactions and discipline strategies that they have put into place. The practitioner also gets more information about why Diane was removed from her biological parents' custody, and several important facts emerge. For example, she learned that when Diane's aunt and uncle began taking care of her, she was very underweight, could not feed

herself, and was listless. Secondly, Diane's aunt and uncle had little preparation to adapt their lives to that of a young child, had never had children of their own, and they relied on more punitive measures for discipline such as spanking or time out.

In thinking about attachment and how that plays a role in the development of young children, the practitioner hypothesizes that Diane has not had an opportunity to form a secure attachment with adults, and Diane's aunt and uncle do not have knowledge of child development and caregiving skills that will be necessary to help her feel safe and secure.

Diane's caregivers are encouraged to enroll in the local HOT DOCS parenting classes that are held in the community center, so that they will learn more about child development, and meet other parents. In the interim, the practitioner begins working with them on strategies to build a trusting relationship with Diane. The practitioner selects strategies from PCIT as the intervention approach, specifically child directed interaction or CDI. They are directed to spend 5 min every day playing with Diane, during which time they will focus on their use of labeled praise, descriptions of her behavior, and reflection of her words. The practitioner models these skills, and then coaches the caregivers in the implementation. The practitioner is careful to provide ample praise for the caregivers as they practice to enhance their development of these important skills. Diane's aunt and uncle attend all the HOT DOCS classes and begin to utilize the problem-solving chart to help them understand what situations trigger Diane's tantrums, and how they respond to problem behavior. They begin to put prevention efforts in place, such as keeping to predictable routines throughout the day, and giving her warnings prior to transitions.

To monitor changes in Diane's problem behavior, the caregivers kept a record of the number of tantrums per day, which were summarized on a graph. They agreed upon a goal of reducing tantrums to once per day. The data summarize below show that tantrums decreased as caregivers' knowledge and skills improved.
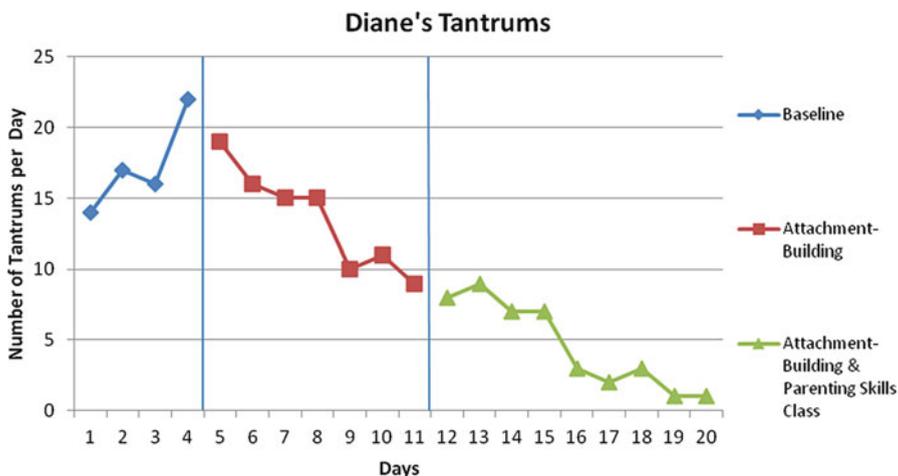
Review of Diane's Case

Although Diane was not experiencing any delays in her development (meeting all milestones), her caregivers clearly needed more assistance in learning how to manage her behavior. By intervening at this point, Diane's behavior was kept from escalating to a point where extensive intervention resources would be needed to address it. Also, the use of a locally available, group parent training program freed up the practitioner's time to work on other concerns (attachment building), and work with other families in need.

Elizabeth: An Example of Tertiary Prevention

Elizabeth, a now 20-month-old girl, was born 8 weeks early, tested positive for cocaine, and spent 2 weeks in the NICU to stabilize her breathing. She was brought home from the hospital by her foster parents, who have since then adopted her. The initial referral concern was that she was not gaining enough weight, showed limited interest in foods, which lead to a diagnosis of failure to thrive. Furthermore, she would not sleep by herself, and became very distressed when people outside of her parents approached her.

The practitioner and parents decided that the first goal they would like to address would be feeding. Elizabeth's current feeding issues included limited acceptance of Stage 2 baby food, gagging or vomiting when given food with textures, and refusal to even hold a spoon. A first step in problem solving was to refer Elizabeth to a gastroenterologist specialist (GI) to make sure that there were no physical issues that would explain her poor feeding, and to a dietician, for recommendations for calorie consumption. No medical problems, including chewing and swallowing, were found that would explain the feeding issues. The GI recommended supplementing Elizabeth's limited food intake with PediaSure for the calories and vitamins.

The practitioner observed Elizabeth during mealtimes and noticed that she would engage in a variety of "resistance" behaviors such as crying, pushing the food away, and sometimes even vomiting. Mealtimes were extended to over 45 minutes, during which time Elizabeth's parents coaxed her to eat, or distracted her with toys, but did not eat themselves. At the conclusion of mealtime, Elizabeth's mother would take her into the family room and hold her in the rocking chair as she consumed a bottle of PediaSure. Based upon these observations, the EIP concluded that Elizabeth's behaviors were escape motivated (for the food), and at the same time, maintained by parents' undivided attention. In addition, she was reinforced with the PediaSure and rocking with her mother after a very unsuccessful mealtime.

A plan was developed to increase Elizabeth's willingness to eat solid foods, which included the following steps: (1) Elizabeth would be offered 5 meals/snacks each day, at consistent times, always in her high chair, and limited to 10 minutes in length (determined by a timer); (2) parents would eat the same food during this

time, and communicate their enjoyment; (3) PediaSure would be offered after timer, but Elizabeth had to stay in her chair and drink it by herself; (4) small portions of acceptable food, paired with a new food would be presented; and (5) parents would turn away and ignore all inappropriate mealtime behaviors. Parents and the practitioner developed a social story about eating, which they then read to Elizabeth several times a day.

To document Elizabeth's response to this intervention, The practitioner devoted part of her weekly visit to observing her behaviors during mealtimes, such as touching or tasting new foods, holding her spoon, and swallowing bits of food. Parents were also collecting data on the number of bites of food she consumed.
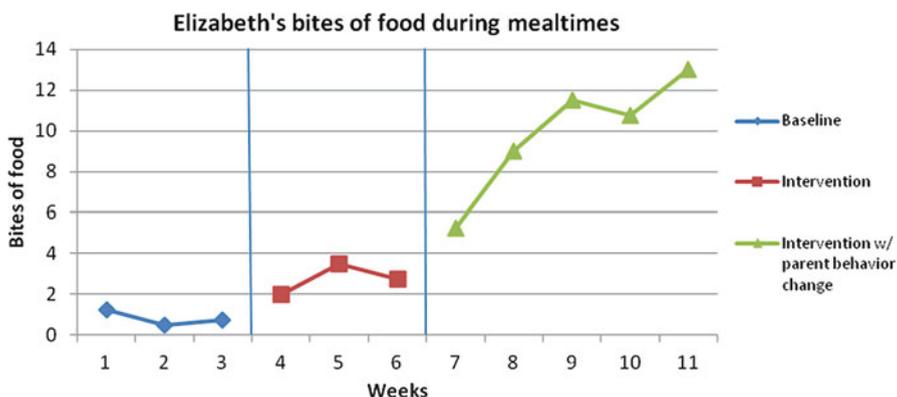
In the first few weeks of implementation, Elizabeth's parents had a difficult time ignoring problem behaviors, and little change was seen in her eating. To assist them, the EIP modeled differential attention, which combines planned ignoring of problem behavior, and attention for any attempt towards independent eating. The practitioner made sure to coach the parents sufficiently so that they were confident in implementing this approach. Within 5 weeks, Elizabeth's feeding problems had greatly improved, and mealtimes became much more enjoyable. Once these gains were solid, her parents indicated a readiness to address sleeping concerns, and along with their EIP problem solved the sleep routine.

Review of Elizabeth's Case

Elizabeth's case falls into the tertiary level of prevention due to the extensive resources needed to change her eating habits and the severity of her problem (resulting in failure to thrive). The problem-solving process had to be revisited several times before an intervention that was effective was developed. In addition, after addressing the most critical issue (feeding), the problem-solving process was applied to Elizabeth's other concerns including sleeping independently.

Easton: An Example of Tertiary Prevention

At 26 months of age, Easton was evaluated for eligibility for Early Steps services due to concerns around speech and language development. He had not met any communication milestones, did not respond to his name, gesture or point. Speech therapy was initiated, however, 6 months later, Easton had still not progressed as well as his mother Karen had hoped. Karen was worried that her son had autism, and wanted a diagnostic evaluation. The practitioner administered the Modified Checklist for Autism in Toddlers (M-CHAT) with Easton's mother to screen Easton for these concerns, and he failed all five critical items. Easton was referred to a pediatric psychologist who completed a comprehensive evaluation and diagnosed Easton with autistic disorder as well as global developmental delays. The team talked with Karen about what this diagnosis might mean for Easton and his future, the types of interventions that are the most beneficial, and asked Karen what she believed were Easton's most pressing needs.

Karen indicated that she really wanted Easton to look at her when she talked with him, and to stop throwing himself on the floor and biting his hand. She also wanted him to be able to play with a toy for more than a few seconds before throwing it aside. These were skills that she believed Easton would need to be successful when he started preschool.

A functional behavior assessment (FBA) was conducted, which included an extensive interview with Karen and observations. The FBA is an example of a problem-solving approach which offers a structured method for identifying the environmental events, circumstances, and interactions which trigger problem behavior, uncover the function of the behaviors, and leads to the development of support strategies to prevent problem behavior and teach new skills. The goal of the FBA is to provide information with respect to intervention strategies that will offer the most benefit to the child. Information gathered from the FBA will lead to the development of a support plan, which includes prevention strategies, techniques for teaching new skills, and changes in responses to any challenging behavior. As with any young child, the intervention strategies work best when they are applied by familiar people, in the home and in other natural settings. As with other problem-solving approaches, reductions in the problem behavior and skill acquisition are monitored and graphed.

The FBA identified that Easton threw himself on the floor and bit his hand whenever he wanted his mother's attention or when access to a favorite item was restricted. In addition, he engaged in these behaviors whenever he wanted to get out of something, such as cleaning up toys or taking a bath. The support plan included strategies to help Easton gain his mother's attention, to gain access to toys and activities, and to escape undesirable activities. The team decided to teach Easton new skills which would result in gaining his mother's attention, getting a toy or activity, or delaying a transition. Easton was taught to point to a picture showing what he wanted, and his mother or other adults would provide attention or access to the toy or activity. He was also taught to sign "more" when he wanted more time to play before

transitioning to a new activity, and it would be allowed for a couple extra minutes. Each time Easton made a request, his mother would repeat the word back to him, using shaping, differential reinforcement, and successive approximations to teach verbal skills.
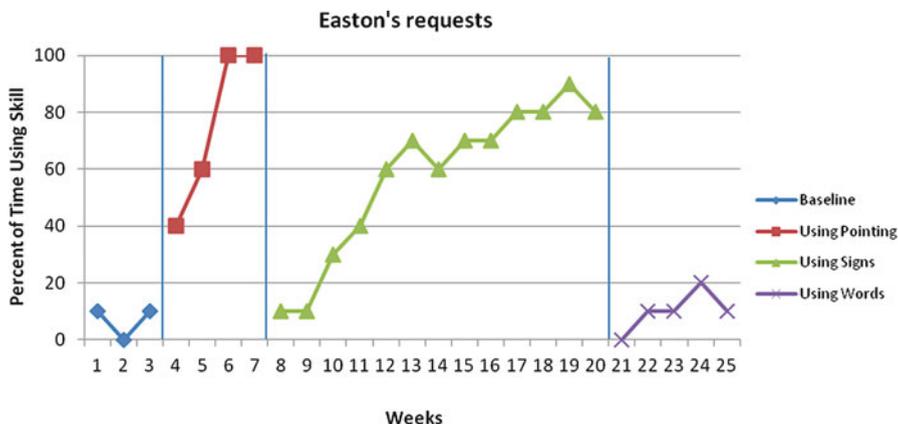
As the data show, Easton progressed well through the first two methods of communication but is still struggling with the use of words. The practitioner might decide to continue teaching the skill for a few more weeks before modifying the intervention to help Easton use words to access his wants and needs.

Notably, many children with autism and as well as with other developmental disabilities need intensive and specific interventions over extended periods of time to develop social and communication skills to prepare them for success in school and other environments. The practitioner has a responsibility to connect families with local resources and help them to plan for their child's transition into the educational system. In the case of Easton, the practitioner helped Karen to find resources and supports in her community, including an integrated primary care setting known as the "medical home," where Easton would have access to health and mental health care. This is especially important for children with diagnosed conditions or who may be at risk for poor outcomes.

Review of Easton's Case

Easton's case represents a tertiary level of services. Easton required very intensive interventions to be able to develop essential skills for the future. Due to Easton's ongoing needs, multiple supports were put in place for Karen and Easton. These supports included enrolling him in a special needs preschool so that he has opportunities to socialize and learn, providing contacts to local autism support groups and resources for Karen, and providing Karen with some extra parenting

skills to continue teaching Easton specific behaviors of importance. Throughout the practitioner's work with Easton, interventions were developed based on identified concerns that Karen and the practitioner had for Easton.

Conclusions

Case studies as conceptualized within the prevention framework were used as illustrations of how theories of development, evidence-based practice, and behavioral principles can be integrated in order to make decisions about how much help is needed, and to set individual intervention goals. Data gathered from screening and assessment tools and procedures were used to determine level of support needed, and set treatment goals, while progress monitoring data were used to gauge how well the intervention was working.

Behavioral challenges in young children are common, and most resolve fairly quickly by implementing positive parenting strategies such as routines, positive attention, redirection, and planned ignoring. However, between 9 and 14 % of children have problems serious enough as to require significant assistance (U.S. Department of Health and Human Services, 2010). Providing age appropriate services and supports to these children and their families have proven lifelong benefits, including school completion, less contacts with law enforcement, and ability to live independently.

The prevention model helps to maximize development and saves money by offering parenting and other general information to all families and reserving the more intensive and individualized supports for the most at-risk. By utilizing the problem-solving process, provider teams can determine what help is needed, and determine whether the intervention is working. Evidence-based practice guides providers in selecting scientifically supported interventions that are shown to improve outcomes or reduce complications that might impede healthy development. The most efficacious interventions are founded upon behavioral principles, making knowledge of the science of behavior critical to professionals who work with children and families. Lastly, intervention progress and effectiveness should be documented through data collection and progress monitoring. Graphic representations of these data are easy to make, and show progress towards meeting intervention goals.