Evaluation Results for the
Early Childhood Mental Health Consultation Pilot Sites

*Baltimore City: Early Intervention Project*
*Eastern Shore: Project Right Steps*

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Executive Summary

There is concern among many in the early care and education community that increasing numbers of young children are manifesting behavior problems. Young children with problem behaviors are at greater risk for expulsion from preschool, setting into motion a cascade of experiences that increase the likelihood that they will not enter kindergarten ready to learn. There is growing evidence to suggest that mental health consultation reduces the risk of preschool expulsion through: building skills in the early care and education providers in behavior and classroom management; increasing developmentally appropriate practices and expectations; and reducing staff stress and turnover (Brennan et al., 2005a). There are also data to suggest that mental health consultation reduces the levels of problematic behavior in young children (Brennan et al., 2005b).

Two pilot sites were funded over a three-year period in Maryland to assess the effectiveness of mental health consultation in Baltimore City and on the Eastern Shore—**The Early Intervention Project** (EIP) and **Project Right Steps**, respectively. Each site implemented a model that included on-site consultation to child care programs delivered by interventionists who were knowledgeable about early childhood development; Project Right Steps also included home-visits. Children who were at risk for expulsion from their child care programs received individualized consultation; consultation was also provided to child care staff seeking classroom-wide behavior management strategies.

Overall, the findings were very positive:

- Nearly 90% of children at risk for expulsion were maintained in their child care placement; in each site, only 2 children were expelled.
- Strong gains were seen in children’s social skills: roughly 75% of all children served in both sites had improved social skills.
- Reductions were seen in the highest rates of problem behaviors: across the two sites, the majority of children presented with extreme levels of behavior problems. At discharge the majority of these children had behavior in the normal range.
- Changes in teachers’ behaviors and improvements in the classroom environment were seen in child care programs that received consultation services.

These findings suggest that mental health consultation is a promising approach to reducing the number of children expelled from child care because of problem behavior. Additional funding for these strategies should be sought and more data on effectiveness should be collected.
There is concern among many in the early care and education community that increasing numbers of young children are manifesting behavior problems. There is evidence for clinically significant emotional and behavioral disabilities among young children, with estimates in the general population ranging from 4 to 10%; these prevalence estimates are substantially higher for low-income children (Center for Mental Health in Schools, 2005). Specifically, a recent review of the literature (Qi and Kaiser, 2003) reported that across six studies of Head Start children rates ranged from 16% to 30% for externalizing (acting out) behaviors and 7% to 31% for internalizing problems (e.g., withdrawal, anxiety). Across 18 studies in low-income community samples, estimates of significant problem behaviors in preschoolers ranged from 8% to 57% depending on where the sample was drawn and the risk factors examined (Qi and Kaiser, 2003). Other studies report between 30-40 percent of young children in child care and Head Start populations are exhibiting disruptive and/or aggressive behaviors (Gross et al, 1999; Kupersmidt et al, 2000). Finally, there are data to suggest that longer hours in child care are associated with increased levels of problem behavior; although these increases did not rise to the level of clinical significance for most of the children (NICHD, 2005).

**What are the numbers for Maryland?**

The Work Sampling System (WSS) data for the 2004-2005 school year provide a snapshot of the school readiness of all kindergarten students in Maryland. Children are divided into three groups of readiness: those that are fully ready, those that are approaching readiness (i.e., are exhibiting these skills and behaviors inconsistently) and those that are developing readiness. The latter group is not demonstrating the skills, abilities and behaviors that are needed to meet the expectations for kindergarten. Overall, approximately 60% of the children are fully ready overall (in the composite score). In the social-personal domain, four indicators of readiness involve: self-concept, self-control and
interaction with others (MSDE, 2005). In this domain, roughly two-thirds of the children are fully ready, while 7% are developing readiness. More boys than girls fall into this latter category, as do children from higher risk populations (i.e., Head Start, Special Education, and those with Limited English Proficiency).

A recent survey of more than 1,200 child care providers across the state conducted through Healthy Child Care Maryland (2005) found that behavior management was their number one health and safety training issue, endorsed by 780 child care providers. School readiness was ranked second (n=624) and early childhood mental health ranked fourth (n=489). When asked if they had disenrolled children due to behavior, roughly 25% said they had (372 of 1,296).

**What are the outcomes for children with early behavior problems?**

Young children with problem behaviors are at greater risk for expulsion from preschool, setting into motion a cascade of experiences that increase the likelihood that they will not enter kindergarten ready to learn. Recent data from a national study of state-funded pre-kindergarten programs found that rates of preschool expulsion were on average three times the rates of kindergarten through twelfth grade (K-12) rates of expulsion (Gilliam, 2005). Data were collected from the lead teacher in roughly 4,000 classrooms in 40 states across the country. In all but three states, preschool expulsion rates exceeded the K-12 rates; overall the national average was that for every 1,000 children served close to seven children were expelled. While a few state-funded pre-kindergarten programs did not expel any children, others had rates that exceeded three times the national average (24 per 1,000). Boys were expelled at five times the rate of girls; older children were at higher risk than younger children, as were those served in faith-based programs as compared to public school settings.

Outcomes for young children who exhibit serious challenging behaviors that go without intervention are significantly compromised (Center for Evidence-based Practice, 2005). Early appearing behavior problems are highly associated
with adolescent delinquency, school failure and drop out, and adult incarceration (Lorber & Farrington, 1998). There is a high degree of stability in levels of challenging behavior that begin in early childhood—even equaling the stability seen in measuring intelligence over time (Kazdin, 1987). Longitudinal studies have pointed to third grade as a critical point in the development of chronic problem behaviors; if effective interventions are provided, children who exhibited significant problem behaviors at a young age can go on to lead productive lives. However, without appropriate intervention, a large percentage of these children will continue to require more costly, ongoing services (Dodge, 1993).

**What are effective strategies for preventing preschool expulsion?**

Access to mental health consultation was found to be associated with lower rates of expulsion from pre-Kindergarten (Gilliam, 2005). Programs that reported on-site access to a psychologist or social worker expelled 5.7 children per 1,000; occasional access to a mental health consultant was associated with a somewhat higher expulsion rate; and the programs that lacked access to mental health consultation expelled children at the highest rates (10.8 per 1,000). There is growing evidence to suggest that mental health consultation reduces the risk of preschool expulsion through: building skills in the early care and education providers in behavior and classroom management; increasing developmentally appropriate practices and expectations; and reducing staff stress and turnover (Brennan et al., in press). There are also data to suggest that mental health consultation reduces the levels of problematic behavior in young children (Brennan et al., 2005). Early childhood mental health consultation allows for early identification of problem behaviors, referral for assessment and possible diagnosis, where needed; consultation also provides a critical means of support to the child care community, families and children who are manifesting problematic behaviors.
**What is mental health consultation?**

Early childhood mental health consultation “aims to build the capacity (improve the ability) of staff, families, programs, and systems to prevent, identify, treat, and reduce the impact of mental health problems among children from birth to age six and their families” (Cohen & Kaufmann, 2000). It involves a collaborative relationship between a professional consultant with mental health expertise and one or more individuals with other areas of expertise. Early childhood mental health consultation can be child-/family-focused, or classroom-/program-focused. In the former, the mental health consultant works with the child care provider and an identified child and/or family to address the specific behaviors of concern; program-focused consultation is intended both to improve the overall quality of the classroom environment, as well as provide strategies to build staff capacity to address problematic behaviors or system problems that may be affecting one or more of the children, families or staff. Most consultation models combine child- and classroom focused interventions, sometimes referred to as a “hybrid” model.

**Are there effective mental health consultation models in Maryland?**

The state of Maryland has been actively engaged in promoting the school readiness of their youngest citizens for more than a decade. One outcome of this work was the publication of a five-year action agenda by an interagency team representing state and local government agencies, advocates, and other stakeholders (Leadership in Action Program, 2002). Through this collaborative process, an initiative to test the effectiveness of mental health consultation provided to child care was designed and funded by the Child Care Administration (now the Office of Child Care in the Maryland State Department of Education). Two jurisdictions were selected to implement early childhood mental health (ECMH) consultation models—Baltimore City and the five-county region of the Eastern Shore. These “pilot sites” were provided an initial two-year
grant of $200,000 per year using federal Child Care Development Fund Quality Expansion dollars; a one-year extension was funded in both locations at a somewhat reduced level. An external program evaluation conducted by the Center for Child and Human Development at Georgetown University (GUCCHD) was also funded to ensure that data on the pilot sites’ implementation and impact would be collected and analyzed. A report to the Executive and Legislative branches on the outcomes of these pilot sites was mandated by HB 360.

Ongoing technical assistance which drew upon expertise from established mental health consultation models operating in Maryland was provided to the pilot sites. Consultation and peer mentoring was provided by two experienced programs: the BEST Project, part of the Anne Arundel County Local Management Board Community Partnership Agreement; and the Early Childhood Mental Health Consultation and Training project, operated by the Montgomery County Child Care Resource and Referral Center. Project ACT, which provides consultation to child care throughout the state, operated by Abilities Network, also participated in the peer mentoring and technical assistance efforts. Additional clinical training and support was provided by Rena Mohamed at the Baltimore City Core Services Agency—which drew upon the strong system of mental health consultation to Baltimore City Head Start programs—and Neal Horen a clinical psychologist with expertise in young children who is on faculty at GUCCHD.

*Highlights from the History of the Pilot Sites Implementation.*

The **Early Intervention Project (EIP)** is operated by the Baltimore City Child Care Resource Center; this project was expanded by the grant from the Office of Child Care, adding two full-time (bachelor’s level) early interventionists with expertise in child development to supplement the work of a part-time developmental pediatrician. This additional funding allowed **EIP** to expand
services to additional sites within Baltimore City, and reconfigure staffing so that the developmental pediatrician was able to focus on clinically-significant children and provide clinical supervision to the early interventionists. This also allowed the interventionists to focus on needed programmatic changes within the child care program.

The EIP initially implemented a child-focused program model. During the second year, EIP added shifted to an approach that relied more on longer-term commitments to an identified group of child care programs in low-income neighborhoods within Baltimore City. This strategy allowed the project to build relationships and trust with the child care community and reduced the amount of resistance that the interventionists experienced in working with child care providers on difficult changes to their practice. A partnership agreement is negotiated with each child care program, and one of the early interventionists spends approximately one-half day per week onsite working with staff on issues related to problematic behaviors.

Child-focused consultation is also provided to a subgroup of children who are in need of more individualized attention. With parent permission, data on the social skills and problem behaviors for these children are collected at the time of identification and then again when the child is discharged from services. Data are also collected on a seven-item scale, developed by the EIP staff, which measures aspects of the child care environment that might be impacted by the program-level consultation.

Project Right Steps is operated by Chesapeake College, through the Child Care Resource and Referral Center (CCCRC) that serves the five-county region of the Eastern Shore\(^1\). The project is operated as a partnership between CCCRC, Mid-Shore Mental Health Systems and the five mid-shore Local Management Boards (LMBs)—the LMBs provided an additional $60,000 in start-up funds during the first year to supplement the grant from the Office of Child Care, and

\(^1\) Kent, Talbot, Dorchester, Caroline and Queen Anne’s Counties.
several jurisdictions continue to provide small grants to support work with children in their counties. Initially, a project coordinator with a doctorate in early childhood education was hired as well as a cadre of bachelor’s level specialists who had backgrounds in early childhood and related fields. During the first year, there were 3-5 specialists mostly working part-time who served the five-county region using a child-focused model.

**Project Right Steps** developed a protocol for a “typical case” and drafted guidelines for the type and intensity of the consultation. The model was designed to support changes in the child’s behavior through work with both the child care provider and the family; a least one home-visit was made to each child identified as a case. Data were collected on children’s social skills and problem behaviors from parents and child care providers at intake and discharge. Later in the project’s implementation, program-focused consultation was added; several of these were Head Start centers that had referred a large number of children for child-specific intervention. A tool was developed in collaboration with the program evaluator to measure changes in the program/classroom environment. Due to reductions in funding during the latter years and changes in staffing, **Project Right Steps** currently has two-specialists who receive ongoing clinical case management/supervision from GUCCHD.

**Common program activities.**

Aspects of the mental health consultation services offered by **EIP** and **Project Right Steps** are very similar. Specialists provide:

- on-site observations of children and child care staff;
- modeling of appropriate child/staff interactions;
- written feedback on observations and effective intervention strategies;
- summaries/syntheses of effective practices for addressing specific presenting problems (e.g., biting);
• telephone consultation with child care directors, family members, other service providers involved with the child/family; and,
• referrals for community-based services and supports.

Additional activities that both pilot sites are engaged in include:
• scoring assessment data on cases;
• data input and data base management;
• meetings with the program evaluator and other staff meetings; regular reporting to the Office of Child Care; and,
• training on related topics (e.g., behavior management strategies).

Specialists from EIP and Project Right Steps offer training and technical assistance to the child care community primarily as an engagement and recruitment strategy. Being embedded within the Child Care Resource and Referral Centers also permits them to influence the content of the training offered to the broader child care community in each region, reflecting the issues and concerns raised by the programs they are serving through the early childhood mental health pilot projects.

**Evaluation design and approach.**

A participatory action approach to the evaluation of the pilot sites was developed by Dr. Deborah Perry at the GUCCHD that actively involved key stakeholders in the evaluation’s design and implementation. The framework was informed by in-depth work that she had done over the preceding four years with the BEST Project in Anne Arundel county, as well as consultation provided to the Montgomery County ECMH project. At the onset, a logic model was developed with each project that specified the target population, activities and outcomes. Core data elements and tools were selected that aligned with the logic models and allowed the findings from the pilot sites to be compared with data on outcomes collected by the BEST Project.
Common demographic variables were collected by EIP and Project Right Steps for each child-specific case including: age, gender, maternal education, zip code of home residence and child care provider, primary presenting concerns. The social skills and problem behaviors for each three-through-five year old served were assessed using the Preschool Kindergarten Behavior Scales (PKBS; Merrell,) in both sites. In addition, Project Right Steps collected similar data on infants and toddlers (1-3 years old) and from the parents of all children served (ages birth through five years old). Each site developed an instrument to assess changes in the child care environment. Case studies of children served were developed and satisfaction data were collected from consumers.

**Evaluation Results**

Overall, both the Early Intervention Project and Project Right Steps were successful in engaging the child care community, identifying children in need of consultation, and maintaining children in their child care programs. Since the two projects were funded in June 2002, data were collected on 98 children served in Baltimore City and 162 children served in the five-county region of the Eastern Shore. Demographic data describing the children served by each project are included in Table 1 below.

**Table 1. Demographics of Children and Families Served**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Baltimore City: Early Intervention Project</th>
<th>Eastern Shore: Project Right Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage Boys</td>
<td>71 %</td>
<td>74%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>14%</td>
<td>25%</td>
</tr>
<tr>
<td>African American</td>
<td>81%</td>
<td>54%</td>
</tr>
<tr>
<td>Latino</td>
<td>1%</td>
<td>6%</td>
</tr>
<tr>
<td>Other (Mixed)</td>
<td>4%</td>
<td>15%</td>
</tr>
<tr>
<td>Child’s Age at Referral</td>
<td>45 months</td>
<td>44 months</td>
</tr>
<tr>
<td>Mean (Range)</td>
<td>(20-66 months)</td>
<td>(8-71 months)</td>
</tr>
</tbody>
</table>
Children presented with a wide array of challenging behaviors, though the majority of these were aggressive/disruptive problems. In Baltimore City, the most prevalent problem behaviors were: temper tantrums, high activity level, hitting, and throwing things. On the Eastern Shore, a similar range of behaviors was seen in the children referred. Other troubling behaviors manifested by young children referred to Project Right Steps are: separation anxiety, extreme shyness, and self-harming behaviors. The tools used to measure changes in the children’s behaviors categorize these patterns into two main types: the acting out or aggressive behaviors are called “externalizing,” while the anxiety or withdrawal kinds of behaviors are called “internalizing.”

**Child outcomes.** In each of the two sites, only two children were expelled from their child care programs; other children were moved voluntarily by their parents: 20 (or 12% of cases) on the Shore, and 4 in Baltimore City. Across the two projects, nearly 90 percent of young children at highest risk for expulsion were maintained in their current child care placement. Given that children referred for consultation were at imminent risk of expulsion, this finding is a significant measure of the success of the intervention. The fact that parents chose to move their children to a different child care program can also be viewed as a positive outcome: in most cases, this decision was motivated by a desire to find a child care environment that would be responsive to the needs of their child (e.g., smaller classes or a shorter day); and this decision was undertaken in consultation with the EIP and Right Steps specialists. In addition, families were

<table>
<thead>
<tr>
<th>Variable</th>
<th>Baltimore City: Early Intervention Project</th>
<th>Eastern Shore: Project Right Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Years Maternal Education (Range)</td>
<td>13.3 Years (9-18 Years)</td>
<td>12.5 Years (3-20 Years)</td>
</tr>
<tr>
<td>Percent of Children with Diagnosis at Referral</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Number of Zip Codes Served (Child Care Program)</td>
<td>19</td>
<td>22</td>
</tr>
</tbody>
</table>
able to make this change of placement in a proactive not a reactive manner, which reduces stress for the parents and the child.

**Problem Behavior Scores.** Data collected at the time of initial referral from the child care providers indicate that these children are different from typical children in their low levels of social skills and high levels of problem behaviors. The Preschool Kindergarten Behavior Scale has a mean standard score of 100, with a standard deviation of 15 points. This means a typically developing child would have a score of about 100 for social skills and problem behaviors. Children who score more than one standard deviation above the mean on problem behaviors—that is above 115 for total problem behaviors, externalizing, or internalizing are far more likely to be removed from care than their peers. Likewise, children who are scoring less than 85 for social skills face similar challenges in being successful in a child care environment. The children referred to **Project Right Steps** and the **Early Intervention Project** had significantly lower scores on social skills and significantly higher scores on problem behaviors.

Specifically, at the time of referral, 71 percent of the children identified in Baltimore City and 56 percent of the children identified on the Eastern Shore were more than 15 points higher than their peers would be on problem behaviors overall. These children were especially high in “externalizing” or acting out behaviors: roughly two-thirds of these preschoolers scored more than 15 points higher than the norm. In Baltimore City, there were also a large percentage of children who had high levels of “internalizing” behaviors at the time of referral—which typically manifest as withdrawal, sadness or anxiety. At intake, children also had lower than expected social skills scores: a little more than half of the children identified in both sites had scores below 85, indicating significant deficits in these school readiness skills.
Table 2. Percentage of Children Scoring More Than 1 Standard Deviation Off The Mean on the Preschool Kindergarten Behavior Scales

<table>
<thead>
<tr>
<th></th>
<th>Intake</th>
<th>Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EIP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n=61)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Behaviors</td>
<td>71%</td>
<td>36%</td>
</tr>
<tr>
<td>Externalizing</td>
<td>69%</td>
<td>33%</td>
</tr>
<tr>
<td>Internalizing</td>
<td>59%</td>
<td>29%</td>
</tr>
<tr>
<td>Social Skills</td>
<td>53%</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Right Steps</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n=105)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Behaviors</td>
<td>56%</td>
<td>41%</td>
</tr>
<tr>
<td>Externalizing</td>
<td>66%</td>
<td>41%</td>
</tr>
<tr>
<td>Internalizing</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>Social Skills</td>
<td>56%</td>
<td>28%</td>
</tr>
</tbody>
</table>

After children and their caregivers received mental health consultation services from **EIP** and **Project Right Steps**, the majority of the children were manifesting behaviors that were in the normal range, as rated by their child care provider\(^2\). Shifting this proportion of children who were exhibiting troubling levels of problematic behaviors into the normal range is a significant accomplishment for these projects.

Another way to look at the impact of these projects is to examine the percentage of children who showed improvements in social skills and reductions in problem behaviors. In both **EIP** and **Project Right Steps**, the majority of child care providers reported positive changes in the children’s school readiness behavior after the consultation was completed. The majority of children served by the Early Intervention Project showed decreases in total problem behavior, decreases in externalizing and internalizing behaviors, and improvements in their social skills.

\(^2\) Pre- and Post-intervention data were available on a percentage of each population of children served: for EIP 42 of 98 children had complete data; for Project Right Steps: 74 of 105 for the PKBS; 83 of 128 for the ASQ:SE; and 12 of 16 for the BITSEA.
Table 3. Percentage of Children in EIP Who Demonstrated Improvements on the Preschool Kindergarten Behavior Scales (n=42)

<table>
<thead>
<tr>
<th></th>
<th>% Improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased Total Behavior Problems</td>
<td>69%</td>
</tr>
<tr>
<td>Decreased Externalizing</td>
<td>71%</td>
</tr>
<tr>
<td>Decreased Internalizing</td>
<td>67%</td>
</tr>
<tr>
<td>Improved Social Skills</td>
<td>76%</td>
</tr>
</tbody>
</table>

**Project Right Steps** collected data on competence and problem behaviors using two additional tools: parents completed the Ages and Stages Questionnaires: Social Emotional (ASQ: SE; Squires, Bricker, & Twombly, 2002) for children birth through five years old; and the child care providers completed the Brief Infant Toddler Social Emotional Assessment (BITSEA; Briggs-Gowan & Carter, 2000) for children aged 12 though 36 months. Improvements in social skills and problem behaviors were seen across age groups and measures. Using the Preschool Kindergarten Behavior Scales (PKBS), similar gains were seen for the preschool-aged children as in Baltimore City. In addition, at intake, two-thirds of the parents indicated concerns about their child’s social-emotional development as rated on the ASQ: SE; following the consultation, only a third of the children exceeded the cut-off score for referral for additional mental health services. Likewise, gains in social competence and reductions in problem scores for infants and toddlers served on the Eastern Shore were reported by child care providers using the BITSEA. All but one of twelve infants and toddlers showed reductions in problem scores, and all but two of twelve showed gains in social competence. Of note, the best results were seen for the youngest children served by **Project Right Steps**.
<table>
<thead>
<tr>
<th>Table 4. Percentage of Children in Project Right Steps Who Showed Gains in Social Skills and Reductions in Problem Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age of Child</strong> (Rated by)</td>
</tr>
<tr>
<td><strong>Ages and Stages Questionnaire: Social Emotional</strong></td>
</tr>
<tr>
<td><strong>Brief Infant Toddler Social Emotional Assessment</strong></td>
</tr>
<tr>
<td>Increased Competence</td>
</tr>
<tr>
<td>Decreased Problem Scores</td>
</tr>
<tr>
<td><strong>Preschool Kindergarten Behavior Scales</strong></td>
</tr>
<tr>
<td>Decreased Total Behavior Problems</td>
</tr>
<tr>
<td>Decreased Externalizing</td>
</tr>
<tr>
<td>Decreased Internalizing</td>
</tr>
<tr>
<td>Improved Social Skills</td>
</tr>
</tbody>
</table>

**Program and Staff Outcomes.** Gains were also seen in the program-classroom level data collected by the Early Intervention Project. The tool used to measure the changes was developed by the Baltimore City Resource and Referral Center and contains six items ranked on a three-point scale based upon the frequency with which each indicator is observed by the consultant (1=Not often; 2=Sometimes; 3=Often). Significant improvements were seen in all six-items from the time a child was referred for intervention and the time the child was discharged.
Table 5. Environmental checklist scores for Baltimore City (EIP)

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Intake</th>
<th>Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider interacts frequently with children showing affection and respect.</td>
<td>2.34</td>
<td>2.55</td>
</tr>
<tr>
<td>Provider uses positive approaches to help children behave constructively.</td>
<td>1.72</td>
<td>2.43</td>
</tr>
<tr>
<td>Provider’s expectations of children’s social behaviors are developmentally appropriate.</td>
<td>1.89</td>
<td>2.28</td>
</tr>
<tr>
<td>Children are encouraged to talk about feelings and ideas instead of solving problems with force.</td>
<td>1.57</td>
<td>2.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Intake</th>
<th>Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmentally appropriate hands-on activities for children to achieve the following goals:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Foster positive self-concept</td>
<td>2.17</td>
<td>2.51</td>
</tr>
<tr>
<td>• Develop social skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Encourage children to think, ask questions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Encourage creative expression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Encourage communication skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider conducts smooth transitions between activities.</td>
<td>1.66</td>
<td>2.28</td>
</tr>
</tbody>
</table>

Note: All differences statistically significant at p>.01

Similarly, when Project Right Steps added program-focused consultation to their array of services, strong gains were seen in teacher’s behavior in the intervention classrooms. Using a tool that was developed in collaboration with the consultants from both pilot sites, Project ACT and other early childhood experts, there was significant improvement in the scores on the Child Care Environments scale across the four domains measured. The 17-item scale documents elements of the daily practices, interpersonal environment, physical environment, and affective environment of the classroom, rating on a four-point scale (0=not observed; 1=rarely; 2=occasionally; 3=frequently). These domains and content for the items were adapted from a self-assessment tool developed and disseminated by the Early Childhood Resource Center at Research Triangle.
Institute through the *Nurturing the Brain* trainings funded by the Maryland State Department of Education (1998).

The positive staff- and program-level findings from both sites—using similar tools—suggest that children’s behaviors are being impacted by changes in teachers’ behaviors and modifications made to the child care environment. Some of the most common areas that consultants worked on were: strategies to address and reduce problematic behaviors; managing transitions between activities; and, modifying expectations for young children based upon their developmental capacities (such as shortening the length of circle time for two-year olds). These changes in teachers’ behaviors have a cascading effect, improving the quality of the child care program overall, and yielding positive results for children who were not specifically referred for intervention.

**Limitations of the Findings.** These findings demonstrate the positive effects that mental health consultation can have on a population of children at risk for expulsion from preschool and deficits in school readiness. However, there are limitations to these findings based upon the design and implementation of this evaluation. To begin with, there is no true comparison group nor were children randomly assigned to receive the intervention or care as usual. We did use a normed tool to collect the majority of the child-level outcomes, and were therefore able to compare their social skills and problem behaviors to a national sample. Because this is a standard score, it is adjusted for maturational changes that occurred in the norming sample. However, without this “gold standard” it is not possible to rule out maturation or other plausible threats to the validity of these improvements in children’s outcomes.

Another weakness in these findings in that there are not complete data on all of the children at intake and discharge; these findings are based upon a subgroup of children. These results for children could be different from the results we might have seen if we had data on everyone. While the pilot sites
worked hard to get these data, they found collecting the post-intervention data to be very challenging. There are legitimate reasons why post-data would not be available on all children (e.g., families move away, staff turnover in child care programs). Child care providers were not as motivated to complete the assessments once the consultant had finished their work; documenting the problem behaviors at intake helped make the case for why they needed help from the pilot sites.

Finally, the state-of-the-art program evaluation does not currently include standardized tools to measure the impact of mental health consultation on the wide array of outcomes of interest to policy makers and researchers. Specifically, this evaluation was designed to focus on changes in child-level outcomes (i.e., expulsion, social skills and problem behavior) based upon child-specific consultation. To a lesser extent, data on the impact of program-focused consultation was gathered; but home-grown tools were used, and complete data on all of the programs and child care staff that participated are not available. What is also missing is any measure of the possible benefits reaped by other children served concurrently in the classrooms that received consultation; nor is there any measure of the possible benefits for children who will be served in the future by a child care provider whose skills have been significantly improved. There is only occasional, incidental measure of the acquisition of these new skills by the providers who received the consultation—an important element to include in future evaluations since it likely to be the pathway through which child- and program-level improvements are achieved.

**Policy Recommendations**

The State of Maryland has made a significant and sustained effort to improve the school readiness of young children. As a result of a commitment to high quality, universal kindergarten assessment, documented gains have been made through a combination of results-based accountability, training for early
care and education personnel in the Maryland Model for School Readiness, and collaborative work such as the Leadership in Action process. There remain subgroups of particularly vulnerable young children across the state, for which additional services and supports are needed to help them arrive at school ready to be successful. The results of these two early childhood mental health consultation projects, together with findings from similar projects both within Maryland and nationally, suggest that this strategy should remain part of a comprehensive approach to school readiness. While there are limitations to the current findings, the data strongly suggest that children gained important social skills, manifest reductions in problem behavior and are maintained in their current child care programs at encouraging rates. The following policy recommendations are offered to state and local planners:

- Continue to fund the existing pilot sites and expand access to early childhood mental health consultation efforts statewide. Require consultation projects to collect process and outcome data; this will allow policy makers to monitor the extent to which sites are implementing high quality programs and whether they are effective.
- Provide funding for an ongoing evaluation of statewide expansions so that stakeholders have access to data on program effectiveness and outcomes.
- Identify additional sources of flexible funding to support mental health consultation services through the ongoing work of the State Early Childhood Mental Health Steering Committee, co-chaired by Carol Ann Baglin at MSDE and Al Zachik at DHMH. Other mental health consultation programs (e.g. in San Francisco) have been able to use Temporary Assistance to Needy Families as well as Medicaid financing to partially support these services to vulnerable groups.
- Expand partnerships with existing efforts to leverage additional funding and support for building capacity to provide a range of early
childhood mental health services. Work collaboratively with DHMH—including the Early Childhood Comprehensive Systems grant efforts being led by Mary La Casse in the Center for Maternal and Child Health, and the new federal Mental Health Transformation Grant—to expand early childhood mental health consultation services.

- Continue to expand high-quality training for child care providers in young children’s social emotional development. Include evidence-based strategies for promoting healthy social-emotional development as well as preventing mental health problems and provide support to implement these approaches.

- Expand services to families at-risk for poor outcomes due to domestic violence, substance abuse, and/or maternal depression. Of particular concern are those children who are exposed to these risks and also live in poverty. Young children’s mental health is intimately tied to the well-being of their caregivers and services must be responsive to the needs of the whole family.

- Continue the development of local systems of care for young children and their families concurrent with state-level policy and infrastructure development. Partnerships between local and state-level stakeholders should include a substantive role for families in designing these systems and defining their outcomes.

Maryland is one of the leaders in this country in making a long-term commitment to building a system of services and supports for young children and their families. Access to high-quality mental health consultation is an important component of a comprehensive school-readiness strategy that will allow more children to arrive with the social emotional competence needed to be successful in kindergarten.
References


