Early Childhood Behavioral Health Integration Activities and HealthySteps: Sustaining Practice, Averting Costs

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The practice of early childhood behavioral health (ECBH) integration in primary care settings promotes optimal care for families with young children while simultaneously improving health care utilization and averting unnecessary health care expenditures. Implementing ECBH integration activities across four domains—screening processes, prevention and health promotion, case-based consultation and intervention, and care coordination—has the potential to enhance the lifelong health and well-being of children and families. Unfortunately, billing and reimbursement for activities focused on prevention, early identification, and early childhood intervention in primary care settings presents challenges. The current article describes a financial analysis of a grant-funded project focused on ECBH activities delivered by pediatric psychologists and psychology fellows. A business case for HealthySteps (HS), an evidence-based intervention to enhance primary care in early childhood, was applied in a site serving a high risk pediatric population. Delivering HS in this pediatric primary care setting yielded significant cost aversion across both maternal and child level interventions. Estimated costs averted exceeded the program operating costs of HS implementation in this setting. In a changing health care landscape that is shifting away from volume-based, fee-for-service models to value-based, cost-control models, optimizing the potential of primary care for early childhood populations is necessary to improve health outcomes and reduce the total cost of care across the life span.

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Delivering mental health services in the context of pediatric primary care (PPC) is a recommended strategy for addressing the vast, unmet needs of children and families (American Academy of Child and Adolescent Psychiatry Committee on Health Care Access and Economics Task Force on Mental Health, 2009). In PPC, 25% to 30% of families’ concerns are related to development or behavioral health (Boreman, Thomasgard, Fernandez, & Coury, 2007). Findings from a national survey of 43,000 patients indicate that one third reported that their primary care provider (PCP) was the sole source for mental health treatment (Anderson, Chen, Perrin, & Van Cleave, 2015). However, addressing behavioral health issues nearly doubles the visit length for PCPs (Meadows, Valleley, Haack, Thorson, & Evans, 2011), underscoring the need for integrating behavioral health services and supports into PPC settings (Briggs-Gowan, Horwitz, Schwab-Stone, Leventhal, & Leaf, 2000; Stancin & Perrin, 2014; Wissow, Van Ginneken, Chandna, & Rahman, 2016).

In pediatric populations, the medical home model has gained traction as an approach designed to meet the complex needs of all children and their families in PPC. Medical homes provide children with individualized, strength-based, culturally sensitive, accessible, comprehensive, and family-centered care (Kazak, Nash, Hiroto, & Kaslow, 2017; Strickland, Jones, Ghandour, Kogan, & Newacheck, 2011; Stille et al., 2010; Zeanah & Gleason, 2009). Delivering on the medical home promise requires establishing long-term relationships between families and providers, developing high-quality care models, and addressing child and family level factors that impact well-being as early as possible.

Fortunately, PPC affords frequent contact with young children and their families over the first few years of life during designated well-child checks (WCCs). The frequency of these visits—seven visits between birth and 12 months and up to 11 by age four—provides an opportunity for ongoing assessment of growth and development, environments, relationships, and developmental contexts; provision of preventive care; delivery of anticipatory guidance; and promotion of optimal mental health and well-being (Committee on Psychosocial Aspects of Child and Family Health and Task Force on Mental Health, 2009).

The Bright Futures guidelines were developed 25 years ago to support health promotion, disease prevention, and optimal growth for all children by providing a family centered framework for WCCs (American Academy of Pediatrics, 2017). Unfortunately, studies suggest that caregivers and children spend an average of 18 minutes with providers during WCCs (Halfon, Stevens, Larson, & Olson, 2011). The brevity of WCCs, in combination with lofty Bright Futures guidelines (Hagan, Shaw, & Duncan, 2008), leaves too little time for conducting a physical examination, screening, assessing and discussing development, building relationships, and addressing the multifaceted needs of young children and their families. This is especially true when PCPs need to elaborate on preventative behavioral health topics (e.g., feeding, sleep, and behavioral support). Importantly, longer visit duration is associated with increased de-
Developmental screening, psychosocial risk assessment, and patient satisfaction (Halfon et al., 2011).

**Early Childhood Behavioral Health Integration Activities**

The practice of early childhood behavioral health (ECBH) integration in PPC settings promotes optimal care for families with young children while simultaneously improving health care utilization and averting unnecessary costs. This is achieved through prevention and early identification of issues that, if left untreated, would require more intensive and expensive interventions (Miller et al., 2017). The current article describes ECBH integration practice as characterized by the following activities: (a) screening processes, (b) prevention and health promotion, (c) case-based consultation and intervention, and (d) care coordination.

**Screening Processes**

_Screening processes_ involve implementation of screening, identification of children and families at risk, referral, and referral completion or “closing the loop” where providers are aware of and document the results of the referrals. With pediatric populations, screening is often narrowly defined as utilizing a standardized developmental screening tool at a minimum of three WCCs in the first 30 months of life (American Academy of Pediatrics, 2006). Beyond developmental screening, PPC settings are well suited for psychosocial (Garg et al., 2007), pregnancy-related mood disorder (O’Connor, Rossom, Henninger, Groom, & Burda, 2016), and adversity or trauma screening (Kerker et al., 2016).

**Prevention and Health Promotion**

When engaging in _prevention and health-promotion activities_, integrated ECBH clinicians meet with families in the absence of an identified problem. Addressing common developmental, environmental, and behavioral topics that emerge in the context of routine care enhances well child care and broadens the scope of the visit to include content that might otherwise not be discussed (e.g., pregnancy-related mood disorders, breastfeeding, sleep, fussiness; Buchholz & Talmi, 2012) due to time constraints or PCP lack of comfort.

**Case-Based Consultation and Intervention**

In _case-based consultation and intervention_, clinicians are consulted to address a particular issue, concern, or screening result. The presenting problem may be related to development (e.g., feeding, milestones), behavior (e.g., tantrums, risk-taking behaviors), health (e.g., prematurity, medication adherence, lifestyle), mental health (e.g., depression, anxiety, ADHD), family or environmental circumstances (e.g., caregiver mental health, traumatic events, school), or adjustment (e.g., life transition, death, stressor). Clinicians provide consultation, assessment, and recommendations during these visits. They can also see families for brief therapy, typically up to six sessions (Kolko, Cheng, Campo, & Kelleher, 2011; Weersing, Gonzalez, Campo, & Lucas, 2008), before referring them to outpatient behavioral health providers.

**Care Coordination**

_Care coordination_ and systems navigation activities are essential to ensure that patients receive the necessary resources, referrals, and services. These activities depend on adequate mechanisms for identification of needs, triage personnel to help navigate the system (e.g., care coordinators), the availability of internal resources within the practice setting (i.e., internal mental health providers), external community resources (i.e., community mental health centers), and processes that ensure referral completion and “closing the loop.” Care coordination is especially important during early childhood when resources are more limited and early identification and early intervention may have a bigger impact on health outcomes than services provided later in development.

**Financial Considerations for ECBH Services**

Financially sustaining integrated ECBH services, particularly those targeting prevention and health-promotion, screening, and early identification, is challenging (Talmi, Buchholz, & Muther, 2016). These services are intended to prevent diseases and disorders, promote health and well-being, identify concerns as early as possible, and
initiate treatment before the emergence of serious disruptions and disorders. The intention is to keep individuals, and consequently the population, healthy and well. While ECBH services focus on promoting optimal developmental trajectories so that diagnostic thresholds are not reached, the health care system is designed to deliver care and address existing problems that meet criteria for a disorder or diagnosis. Barriers to delivering and sustaining ECBH services include mental health carve-outs that artificially silo mental and physical health and regulatory requirements for billing and reimbursement of integrated behavioral health services (e.g., same day billing limits, nonreimbursable care coordination activities, poor incentives for prevention activities; Mauch, Kautz, & Smith, 2008).

This article examines ECBH activities provided by pediatric psychologists and fellows within HealthySteps (HS), an evidence-based, preventative model that focuses on health promotion for families with children ages birth through three in their medical home. HS has been shown to positively impact parent and child outcomes (Minkovitz et al., 2003). Additionally, important developmental topics such as home safety, family adjustment, temperament, routines, feeding, and sleep are more likely to be discussed during WCCs with HS families than with families who are not enrolled and receive care as usual (Buchholz & Talmi, 2012). The model pairs HS Specialists (HSS)—professionals with specialized training in child development and early childhood mental health (in our clinic, pediatric psychologists and pediatric psychology fellows)—with PCPs. The HSS and the PCP work collaboratively to address the physical, emotional, behavioral, and intellectual growth and development of young children.

The aim of the current study is to identify the financial potential of implementation of ECBH integration activities delivered to a high-risk PPC population through HS. The clinic described in this study has been implementing HS since 2006. In 2013, the clinic received support from the Maternal Infant Early Childhood Home Visitation Program (MIECHV) to expand HS. However, in 2015 the HRSA (Health Resources Services Administration, 2017) determined that HS was no longer eligible to receive MIECHV funding, necessitating the identification of alternative sustainability strategies. A business case was developed, and the findings were applied to this clinic’s population. We hypothesize that applying the business case model that was developed for sustainability planning (i.e., estimating potential cost savings and aversions of implementing HS) will provide evidence for the financial potential of engaging in ECBH integration practices in PPC settings. This evidence can also be used to demonstrate reduction in total cost of care and improvement in quality of care to insurance payers (e.g., Medicaid and commercial insurers) as well as hospital systems and private pediatric clinics.

Method

HealthySteps in Colorado

The current article describes a model focused on ECBH integration activities and details the financial implications within a single HS site utilizing a business case developed by Zero To Three (ZTT). ZTT is the national office for HS and has a vested interest in the sustainability of HS sites across the country. ZTT partnered with Colorado’s HS intermediary office and HS sites to develop a business case that would estimate the potential for cost savings and aversions when implementing HS.

In Colorado, HS has been expanded to seven PPC settings serving more than 1,300 families in urban and rural communities using MIECHV funding from HRSA. In 2015, when funding was discontinued, it became imperative to identify alternative funding strategies, which drove the development of the business case.

The HS site described in this article is located in a children’s hospital that is part of an academic medicine center in a large metropolitan area serving a diverse population. The site provides care to more than 16,000 children, the majority of whom are publicly insured, with over 30,000 PPC visits completed annually. The site offers universal developmental and pregnancy related depression screening and screens for psychosocial concerns (e.g., intimate partner violence, food insecurity, mental health issues, etc.; Talmi, Burnett, & Buchholz, in press).

Development of the HealthySteps Business Case Model

ZTT partnered with the Colorado State Intermediary HealthySteps Office (Colorado Assur-
The business case examined seven intervention strategies implemented by HSS, four addressing maternal well-being (birth spacing, breastfeeding, maternal depression, and intimate partner violence) and three specific to the child (oral health, increasing immunization adherence, and reducing emergency room utilization; see Table 1). Please see the online supplemental materials for a detailed description of the methods used to determine cost aversion in each of the seven intervention strategies. The seven intervention strategies fell within specific ECBH integration practices. Screening activities included maternal depression and intimate partner violence screening. Prevention and health promotion activities included birth spacing, breastfeeding, oral health, immunization adherence, and emergency room utilization. Many of the identified intervention strategies might have been delivered through case-based consultation (e.g., in response to elevated screening results). Care coordination included oral health and immunization adherence. Findings from the literature review were used to develop a Microsoft Excel spreadsheet calculat-

Table 1

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Example</th>
<th>Estimated costs averted</th>
<th>ECBH domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal intervention strategies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birth spacing</td>
<td>Discussing healthy birth spacing and connecting mothers to family planning resources in the clinic or community</td>
<td>$184,037–$276,055</td>
<td>Prevention/Health promotion</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>Connecting mothers to lactation resources and providing information about delaying the start of solid foods</td>
<td>$5,325–$7,987</td>
<td>Prevention/Health promotion</td>
</tr>
<tr>
<td>Maternal depression</td>
<td>Universally screening for maternal depression, discussing self-care strategies to protect against mood concerns, and connecting mothers to mental health resources</td>
<td>$51,055–$76,582</td>
<td>Screening case-based consultation</td>
</tr>
<tr>
<td>Intimate partner violence</td>
<td>Universally screening for IPV, safety planning and connecting mothers to safe houses or other resources</td>
<td>$3,191–$12,766</td>
<td>Screening case-based consultation</td>
</tr>
<tr>
<td>Child intervention strategies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral health</td>
<td>Encouraging parents to brush teeth/gums often and seek dental care before age 1</td>
<td>$6,162–$9,243</td>
<td>Prevention/Health promotion</td>
</tr>
<tr>
<td>Immunization adherence</td>
<td>Ensuring the family has a relationship with the medical home and adhere to well-child care and vaccinations</td>
<td>$1,628–$2,930</td>
<td>Prevention/Health promotion</td>
</tr>
<tr>
<td>Reducing emergency utilization</td>
<td>Informing parents about appropriate use of emergency care and providing them with tools (such as a nurse support line) to avoid emergency visits when unnecessary</td>
<td>$23,243–$25,690</td>
<td>Prevention/Health promotion</td>
</tr>
</tbody>
</table>
ing costs per child for each intervention area. The spreadsheet used dynamic inputs including caseload and percentage of publicly insured patients to generate high/low estimates of potential costs averted by intervention.

**HealthySteps**

The HealthySteps (HS) program at this site is staffed with 2.4 FTE (full time equivalent) HealthySteps Specialists (HSS). The total cost of the HS program is 2017 USD $246,000 ($575 per child) annually. The total cost is based on the current operating budget and includes HSS’s salaries, materials for families, a part-time research assistant, travel funds for home visits, and miscellaneous operating expenses (e.g., database maintenance and administrative time for documentation, data collection, and reporting). As an established site since 2006 and the designated State Intermediary for HS, start-up costs were subsumed in faculty FTE (approximately .1 FTE) for the Program Director who onboards, trains, and provides weekly supervision to HSS. Above and beyond annual operating expenses, start-up costs for new sites would include training and technical assistance from ZTT.

Eligible families have a newborn younger than 40 days old being seen in the PPC clinic. PCPs or ECBH clinicians enroll as many newborns as possible. The program is voluntary and offered at no additional cost to families. After enrollment, HSS complete WCCs with PCPs; conduct home visits; document in an electronic medical record (EMR); and enter additional information including health care utilization, topics discussed during visits, and screening and referral outcomes into a statewide HS database.

**Participants**

Four hundred and twenty-eight children were enrolled into the HS program at the site described here between May 15, 2013 and August 15, 2017. For the current article, demographic information was abstracted from the HS database and inputted into the business case model spreadsheet (see Table 2). Caseload at this site was used to estimate potential costs averted across each of the seven interventions.

**Results**

High and low estimates of potential costs averted were based on a caseload of 428 families, which was inputted into the business case spreadsheet. Child participants were 44% female ($n = 190$). The racial composition of the sample included 34% white ($n = 145$), 26% African American ($n = 110$), 17% more than one race ($n = 72$), 4% Asian ($n = 15$), and 1% American Indian/Alaskan Native ($n = 4$), with

<table>
<thead>
<tr>
<th>Demographic category</th>
<th>$N = 428$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>190</td>
</tr>
<tr>
<td>Female</td>
<td>44.3</td>
</tr>
<tr>
<td>Male</td>
<td>238</td>
</tr>
<tr>
<td>Insurance</td>
<td>329</td>
</tr>
<tr>
<td>Medicaid or CHIP</td>
<td>329</td>
</tr>
<tr>
<td>Tri-Care</td>
<td>3</td>
</tr>
<tr>
<td>No insurance coverage</td>
<td>38</td>
</tr>
<tr>
<td>Unknown/Did not report</td>
<td>20</td>
</tr>
<tr>
<td>Child ethnicity</td>
<td>191</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>191</td>
</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>219</td>
</tr>
<tr>
<td>Unknown/Did not report</td>
<td>18</td>
</tr>
<tr>
<td>Child race</td>
<td>145</td>
</tr>
<tr>
<td>American Indian/Alaska native</td>
<td>4</td>
</tr>
<tr>
<td>Asian</td>
<td>15</td>
</tr>
<tr>
<td>Black/African American</td>
<td>110</td>
</tr>
<tr>
<td>Native Hawaiian/Other Pacific Islander</td>
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</tr>
<tr>
<td>White</td>
<td>145</td>
</tr>
<tr>
<td>Child language</td>
<td>298</td>
</tr>
<tr>
<td>English</td>
<td>298</td>
</tr>
<tr>
<td>Spanish</td>
<td>80</td>
</tr>
<tr>
<td>Other</td>
<td>31</td>
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<tr>
<td>Unknown/Did not report</td>
<td>19</td>
</tr>
<tr>
<td>Parental marital status</td>
<td>165</td>
</tr>
<tr>
<td>Married</td>
<td>38.5</td>
</tr>
<tr>
<td>Never married</td>
<td>149</td>
</tr>
<tr>
<td>Not married but living with partner</td>
<td>75</td>
</tr>
<tr>
<td>Separated/Divorced/Widowed</td>
<td>15</td>
</tr>
<tr>
<td>Unknown/Did not report</td>
<td>24</td>
</tr>
<tr>
<td>Parental education</td>
<td>70</td>
</tr>
<tr>
<td>Less than high school diploma</td>
<td>70</td>
</tr>
<tr>
<td>High school diploma/GED</td>
<td>238</td>
</tr>
<tr>
<td>Some college/training</td>
<td>43</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>5</td>
</tr>
<tr>
<td>Technical training/ certification</td>
<td>7</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>31</td>
</tr>
<tr>
<td>Unknown/Did not report</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>7.9</td>
</tr>
</tbody>
</table>
45% of the sample identifying as Hispanic or Latino (n = 191). Seventy-seven percent of the sample was publicly insured through Medicaid or CHIP (n = 329), 9% privately insured (n = 38), and 9% uninsured (n = 38). Most caregivers were between the ages of 25 and 29 (n = 102; 24%), married (n = 165; 39%), and had a high school diploma or GED (n = 238; 56%). Table 2 details the demographic composition of the sample, which is representative of the site’s diverse and low resource population.

Table 1 lists each of the seven interventions articulated in the business case, the estimated range of potential cost aversion, examples of activities implemented by the HSS, and the corresponding ECBH activities. Discussions about healthy birth spacing and connecting mothers to family planning resources showed the greatest potential for cost aversion followed by screening and addressing maternal depression, supporting breastfeeding, and identifying and addressing family violence. For child-level interventions, supporting appropriate use of care and reducing emergency and urgent care visits yielded the highest estimated cost aversion followed by discussion of appropriate oral health and connecting children to oral health resources. Finally, encouraging on-time immunizations demonstrated the lowest potential to avert costs.

To illustrate how the estimates were derived, the following section reviews the business case application to birth spacing. The literature suggests that approximately 12% of low-income women do not use contraception in the postpartum period (Zapata et al., 2015) and that 85% of these women will become pregnant over a one-year period when not using contraception (Guttmacher Institute, 2017). In Colorado, the cost of an unwanted birth is estimated at approximately 2017 USD $17,568 and 56% of unwanted pregnancies result in a birth (Sonfield & Kost, 2015). Applying the formulas from the business case to the site’s HS caseload results in calculating estimated costs averted as follows: Assuming that 85.7% of the 428 cases are publicly insured or uninsured (n = 367), the caseload of 367 was multiplied by 12% (i.e., the estimated percent of women not using contraception; n = 44 cases). Of the remaining 44 cases, 85% were estimated to become pregnant (n = 37), with an estimated 56% of these having unwanted pregnancies (n = 21) over the course of one year. The model estimates that 50% (n = 10 as the low estimate) to 75% (n = 16 as the high estimate) of these unwanted births could be averted as a result of HS interventions around family planning and contraception resources. With the 2017 USD $17,568 as the cost of one unwanted birth in Colorado (Sonfield & Kost, 2015), the cost aversion potential ranges from 2017 USD $184,037 to $276,055 annually. Similar calculations were used to derive high and low cost estimates for each of the seven intervention areas in the business case. Please see the online supplemental materials for detailed information about how the estimates for each intervention area were derived.

Applying the business case to the caseload for a specific HS site demonstrated substantial opportunity to avert costs across the seven intervention areas and four ECBH domains. The estimated potential costs averted, between $274,641 and $411,253 ($641–$959 per child), exceed the site’s annual program costs of approximately $246,000 ($575 per child).

Discussion

In a changing health care landscape that is shifting away from volume-based, fee-for-service models to value-based, cost control models (National Academies of Sciences, Engineering, and Medicine, 2017), optimizing the potential of PPC for early childhood populations is vital to improving health outcomes and reducing health care costs across the life span. Pediatric psychologists play an essential role in ensuring that early childhood developmental and mental health needs are met in a family-centered culturally responsive way when collaborating with pediatric health professionals in primary care settings. ECBH integration activities span the continuum of prevention, health promotion, screening and early identification, triage, referral, and treatment and address individual child health, family factors, and environmental circumstances that directly impact health and well-being.

Primary care settings, with their focus on maintaining healthy developmental trajectories, are uniquely suited to deliver ECBH services and supports. However, because pediatric health care expenditures account for a small fraction of overall health care costs and the financial benefit of prevention is often realized years later and in sectors other than health care (Heckman, 2011;
Regalado & Halfon, 2001), identifying cost savings for PPC interventions is difficult, particularly for preventative services (McGrady, 2014). In order to maximize the potential for decreasing total cost of care, interventions must take a two-generation approach, targeting both child and family level factors.

The current paper examines an evidence-based ECBH integration program in order to detail ECBH integration practices and evaluate their financial potential in a hospital-based PPC setting. Zero To Three developed the HS business case model in partnership with Mannatt and HS sites across Colorado. The business case identified seven maternal and child interventions spanning all four ECBH integration domains and estimated the Medicaid costs that could be averted when HSSs employed these interventions. In the current study, financial analyses using the business case model estimated the potential costs averted based on reported engagement in intervention efforts. The business case model is inherently two-generational, identifying both maternal and child-level interventions that have potential to avert costs and reduce the total cost of care (Modern Medicaid Alliance, 2017).

This financial analysis suggests that the potential for cost aversion exceeds the cost of delivering the HS program in this clinic on an annual basis. Start-up costs, not including training fees to the HS National Office, require an additional $10,000–$15,000 for equipment, data collection, and tracking, and ongoing support during the first year when the caseload is typically smallest. The potential to avert additional costs, improve health care quality and utilization, and expend resources more efficiently is expected to grow as HS caseloads increase.

The HS program enhances well-child visits by infusing ECBH activities into PPC practice. HSS have training and expertise in interventions targeting postpartum mood and anxiety, family stress, parent–child relationships, early childhood and maternal well-being, breastfeeding, child development, and family planning. These specialists are well-versed in strategies that facilitate client capacity, skill development, and connection to necessary community-based resources and supports.

Despite the demonstrated positive outcomes of HS for both children and caregivers, the program is not currently sustainable under a fee-for-service structure that excludes additional reimbursement for services rendered by a HSS from being added onto a WCC. In the current managed care landscape, fee-for-service reimbursement of WCC services does not adequately cover the cost of the HSS provider because contracted rates are reimbursed per episode regardless of the extent or quality of the services provided during the visit. Although many of the HS interventions fall into the prevention and health promotion ECBH domain, significant payment reform is necessary to transform costs averted into health care system investment in comprehensive, high quality, preventive care.

Notably, several challenges and limitations emerged in the context of engaging in these efforts. First, the business case model was developed in collaboration with experts in financial analyses and the pediatric health care literature. Typically, such work requires securing funding to engage consultants. Fortunately, in this case, the partnership with ZTT, the HS National Office, provided funding for the business case model development.

Second, data recording, collection, tracking, and reporting is a significant challenge for PPC practices. For the HS business case, the practice had to develop ways to record and abstract information about ECBH activities and visits. In order to understand the potential for cost savings and cost aversion with implementation of ECBH activities, practices need to be able to capture and quantify demographic data, behavioral health activities, topics addressed during visits, and health care utilization (e.g., adherence to WCC schedule, urgent and emergency care utilization), among other variables. In our own work, we employ EMR flowsheets, clinical informatics strategies for pulling data, qualitative methods, and databases with additional information to aggregate and analyze our data, all of which consume staff time and effort.

Lastly, engaging in innovative practices and implementing ECBH activities required significant technical assistance and support for practice transformation from experienced providers and the State Intermediary office. Considerable investments were made in site cultivation, initial trainings, intensive shadowing experiences, fidelity monitoring, data integrity checks and reporting, weekly to monthly supervision meetings, monthly tech-
nical assistance calls, and cohort development. Financial support through grants and contracts for the State Intermediary Office and for supervising faculty FTE made these investments possible.

This particular HS business case was developed for PPC practices in Colorado to estimate the potential for cost savings/aversion when HSS engage in specific interventions. To date, the business case has been presented to state Medicaid leadership, the office of the governor and State Innovation Model (SIM; Colorado Department of Public Health & Environment, 2018) leadership, the philanthropic community, and the Department of Human Services. The findings from the business case have been leveraged to secure funding from the state and the philanthropic community for continued expansion of HS in the current site and in others across the state. The findings around potential costs averted will continue to be used to engage Medicaid and other private payors in discussions around alternative payment methods for prevention and health promotion services. Future efforts involve conducting economic analyses using billing and reimbursement data to determine the cost effectiveness of HS interventions and the actual cost savings/aversion when pediatric psychologists engage in ECBH integration activities.

Importantly, funding for behavioral health integration efforts, and especially ECBH activities, varies from state to state. It is critical for pediatric psychologists to work across disciplines and with key stakeholders to understand, interpret, and define current CMS (Centers for Medicare & Medicaid Services) policies that enable the practice of ECBH activities. Additionally, pediatric psychologists can provide data and engage in advocacy efforts to promote the uptake of new ECBH practices that better serve children and families within their medical homes. Pediatric psychologists’ participation on multidisciplinary teams to support policy and advocacy for early childhood mental health is an important use of time and expertise. Practice transformation to integrate behavioral health services and implement true change cannot operate in a vacuum. Policy, advocacy, and systems change work at the local, state and federal level is key for lasting and sustainable changes in clinical practice.

The importance of supporting a two-generation approach for both the health of the family and as a cost-saving strategy is consistent with the findings of this study that demonstrated potential for cost aversion in prevention and health promotion activities at the maternal and child levels. Pediatric psychologists’ clinical and evaluation expertise can provide tangible and practical information to engage communities, systems, and policymakers in changing integrated behavioral health practice.

Pediatric psychologists working in concert with PPC settings serving children and families can advocate for the provision of comprehensive, sustainable services using innovative, evidence-based strategies designed to achieve wellness outcomes and reduce the total cost of care. As the health care system shifts from traditional fee-for-service billing to alternative payment methodologies, investigating the demonstrated cost aversion of ECBH integration activities described in this paper will be an important method of identifying a cost-effective care strategy to achieve value-based population health outcomes. Delivering ECBH integration services enables PPC settings to identify, assess, and mitigate the impact of social determinants of health associated early in life, thereby promoting optimal development and well-being at both the child and family levels.

References


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