Promoting Behavioral Health Equity through Implementation of the Incredible Years within Primary Care

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Abstract

Mental health disparities continue to be a concern for racial and ethnic minorities in the United States. Further, approximately 20% of children in the United States have a mental health disorder with less than half of these youth receiving mental health treatment (Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015; Stancin & Perrin, 2014; U.S. Surgeon General, 1999). Integrated primary care has been identified as an ideal place where youth and families can receive mental health services. There is evidence supporting that when psychologists are in primary care, behavioral health outcomes improve and the costs per patient are reduced (Chiles, Lambert, & Hatch, 1999). The objective of this paper is to describe the steps taken to co-locate The Incredible Years® Parenting Program (IY; Webster-Stratton, 2008) an evidence-based parenting group, in a pediatric primary care setting at a major metropolitan children's hospital. The parenting group was delivered as a prevention and early intervention program for an underserved population, specifically focused on parents of children ages 3-6 years, to reduce health disparities and improve access to needed behavioral health care. A case study illustrates the potential benefits to mental health and physical health outcomes through co-location, and ultimately integration, of behavioral health services in primary care. Policy implications for sustainability of group parenting interventions in primary care, the impact on decreasing health disparities, and future directions along this line of research are discussed.

Keywords: co-located mental health care, health disparities, Incredible Years® Parenting Program, evidence-based parenting group, prevention and early intervention

The current manuscript demonstrates The Incredible Years® Parenting Program (IY) can be implemented in a co-located manner within a primary care setting as prevention and early intervention with the goal of reducing stigma and increasing access to behavioral health care for underserved communities. The implementation process, barriers encountered, and strategies used

to reduce barriers are discussed. A case study highlights a family's experience with the co-located IY Program.

Promoting Behavioral Health Equity through Implementation of the Incredible Years within Primary Care

Currently, there is a dearth of psychological services offered within pediatric primary care, while unmet mental health needs among youth are high. Based on a meta-analysis of the prevalence of mental health disorders in children and adolescents worldwide, nearly 20% of children in the United States have a mental health disorder (Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015; U.S. Surgeon General, 1999). Further, less than half of children who have mental health needs receive treatment (Stancin & Perrin, 2014). Health care costs for youth with diagnosable mental health issues are estimated to be twice as high as costs for a child without mental health issues (U.S. Department of Health and Human Services, 2009), indicating a notable financial burden for the health care system. Given the significant number of youth with mental health disorders and the substantially higher cost of providing services to these youth as compared to peers without mental health concerns, early intervention in a primary care setting presents potential savings in terms of human suffering and expenditures while promoting health equity.

Early intervention refers to services provided for children and families at the time mental health concerns are initially presenting and functioning can improve with a short, low intensity intervention, and following early intervention, long-term mental health treatment is not necessary (County of Los Angeles Department of Mental Health, 2009). Early intervention is an avenue for addressing behaviors that might place a child at a higher risk of developing further emotional and behavioral problems in early childhood and preschool years. Early intervention targeting behavioral health concerns and co-located with primary care, as described in this paper and case study, is a relatively newer concept for addressing mental health disparities that continue to exist

for racial and ethnic minorities in the United States, with patient, provider, and systemic factors contributing to these inequalities (Kohn-Wood & Hooper, 2003). Additionally, minority populations are less likely to utilize mental health care services and have higher earlier termination rates than Caucasian Americans (Snell-Johns, Mendez, & Smith, 2004). This may be due to stigma associated with having a mental health condition and seeking treatment (Corrigan, 2004).

Another significant contributor to these disparities is low socioeconomic status (SES). African-American, Latino, and American Indian youth are more likely to live in poverty compared to their non-Latino and Asian peers (APA, 2017). Lower SES may result in systemic barriers to accessing services such as lack of insurance coverage, lack of services, and challenges with logistics such as transportation (APA, 2017). Research has also found that low SES is associated with higher risk for development of externalizing problems (Bradley & Corwyn, 2002). The relation between SES and child health outcomes may be moderated by parenting practices (Belsky, Bell, Bradly, Stallard, & Stewart-Brown, 2007; Hagan, Roubinov, Adler, Boyce, & Bush, 2016). For example, Hagan et al. found that low SES was associated with poorer health outcomes for those children whose parents reported more parent-child relationship negativity; such as those who endorsed having conflict with their child, thinking their child was disappointed in them, and feeling angry with their child. Conversely, Belsky et al. concluded that positive parenting partially mediated effects of SES on child health outcomes over time. These studies suggest that improving parenting practices may be a pathway to further address health disparities that are influenced by SES.

Biglan and colleagues underscored the importance of providing a nurturing environment and the critical role positive parenting (i.e., positive reinforcement, effective limit-setting, and

monitoring) has on children's healthy development including emotional, behavioral, and health outcomes (Biglan et al., 2012; Komro et al., 2011). The nurturing environment framework suggests that interventions promoting positive parenting might have effects on areas of child development beyond the intended outcomes (i.e., disruptive behavior). In line with the nurturing environment framework, studies have documented that parenting interventions had collateral benefits on children's health outcomes although these were not targeted by the interventions. Several studies found that children of parents who participated in a parenting intervention had lower rates of obesity at follow-up and less steep growth in obesity over time when compared to the control group (Brotman et al., 2012; Smith, Montano, Dishion, Shaw, & Wilson, 2014; Van Ryzin & Nowicka, 2013). These findings support developing mechanisms to include parenting programs within primary care settings, such as Federally Qualified Health Centers (FQHCs) that serve at-risk children from low SES backgrounds and have a mandate to provide high quality health care to underserved populations.

The pediatric "medical home" environment has been identified in a joint position paper by the American Academy of Pediatrics (AAP) and the American Academy of Child and Adolescent Psychiatry (AACAP) as an "ideal place" where children and families can receive mental health services without stigma (American Academy of Child and Adolescent Psychiatry, 2009). There is a growing body of research demonstrating the utility of integrating psychologists into primary care, termed integrated primary care. Integrated care is defined as, "the systematic coordination of general and behavioral health care," (SAMHSA-HRSA Center for Integrated Health Solution, n.d.). Integrated primary care can be the behavioral health provider conducting screening and brief intervention in the pediatric clinic alongside the pediatrician or integrating pediatricians into behavioral health practices. Within integrated care settings, medical and

behavioral health screenings are standard practice for all patients and one treatment plan exists for each patient developed by both the behavioral health and medical provider (Heath, Wise Romero, & Reynolds, 2013).

A recent meta-analysis demonstrated that integrated primary care interventions were more effective in improving behavioral health outcomes as compared to usual care for children and adolescents (Asarnow, Rozenman, Wiblin, & Zeltzer, 2015). Costs per patient were reduced in integrated primary care models, with savings estimated to be between $1,700-2,900 USD per patient (Chiles, Lambert, & Hatch, 1999). There is also evidence to suggest that having psychologists as part of primary care improves satisfaction among primary care providers and their patients (Chomienne et al., 2011). Given the utility and acceptability of integration, integrated primary care has the potential to be an economically feasible way to provide needed mental health care to youth and address mental health disparities.

The following components have been identified as necessary when integrating behavioral health care into primary care settings: defining the clinical team; identifying a specific patient population; using direct clinical interventions or protocols; and developing financial sustainability for behavioral health intervention (Mullin & Funderburk, 2013). However, barriers may exist to full integration resulting in co-location of behavioral health and primary care. Co-located care refers to behavioral health providers and primary care physicians having a basic level of collaboration in their care, located in the same facility, but not necessarily the same offices, and using separate medical records to monitor medical and behavioral health care (Heath, Wise Romero, & Reynolds, 2013).

This manuscript will provide an overview of the steps taken to implement a co-located Incredible Years® Parent Program (IY; Webster-Stratton, 2008), an evidence-based group

parenting intervention focused on early intervention for common behavioral problems among young children, for families referred by a FQHC. In a randomized control trial, Perrin and colleagues (2014) found that participation in IY in primary care improved parenting practices and child disruptive behaviors, providing initial evidence for the viability of delivering this group in primary care. The process of learning through observing video modeling of effective and less effective parenting is a naturalistic way to learn parenting skills that can be culturally adapted to different racial and ethnic groups. Parents learn how to include their own cultural values in the special time activities that promote healthy attachment while enhancing the relationship with their children.

The outpatient Mental Health Center of Children's Hospital Los Angeles (CHLA) participating in this implementation project has a long-standing history implementing IY that began in 2006. Through funding from the Los Angeles County Department of Mental Health (LAC DMH), IY was implemented on an agency-wide scale in the outpatient Mental Health Center. Agency-based IY trainings were open to clinicians from other disciplines including pediatricians, psychiatrists, occupational therapists, and speech language therapists, made possible by the fact that the outpatient Mental Health Center was housed within an interdisciplinary academic medical setting (Williams, Rogers, Carson, Sherer, & Hudson, 2012). There was a focus by LAC DMH on increasing evidence-based Prevention and Early Intervention (PEI) funding for services for children and adolescents participating in the Medicaid Program (California Department of Health Care Services, 2018). One of our aims was to provide prevention and early intervention services leveraging funding for LAC DMH PEI Programs that included IY.

Case studies have been utilized to demonstrate the implementation and adaptation of IY for novel settings (Aaron, Miller, Green, Perrot, & Bradway, 2012), as well as cultural adaptations to IY (Lau, Fung, & Yung, 2010). Therefore, a case study will be provided to demonstrate implementation of IY co-located with a pediatric primary care clinic and treatment outcomes for a family.

Our overall objective is to describe the steps taken to co-locate IY, an evidence-based parenting group to prevent childhood behavior and emotional problems, with a pediatric primary care setting managed by the AltaMed FQHC at CHLA, as a prevention and early intervention program for parents of children ages 3-6 years who are displaying behavioral and emotional problems. Our secondary aims are to: 1) illustrate the psychological and health outcomes after completion of the IY group through a case study; 2) highlight the potential impact of co-location of behavioral health services with primary care on health disparities; and 3) discuss the policy implications for sustainability of group parenting interventions in primary care.

Method

Participant Characteristic and Descriptive Statistics

AltaMed at CHLA manages the primary pediatric care for approximately 28,000 children who generate more than 90,000 outpatient visits per year. Ninety-three percent have Medicaid insurance and 76% are Latino. Parents of children, ages 3-6, who reported behavioral concerns or who wanted to learn parenting strategies to prevent behavior problems were referred by their AltaMed pediatricians. Seventeen families were referred, and all referrals were triaged for clinical eligibility. An intake assessment was completed to ensure that the children and families met criteria for LAC DMH PEI services and did not need a higher level of intervention.

The first co-located IY® Preschool Basic Program group consisted of seven families, totaling 10 participants, who were ethnically diverse with 57.14% Latino; 28.57% White, Non-Hispanic; and 14.29% Unknown/Not Reported. Most families identified Spanish as their primary language (85.71%). The mean age of the children at time of the IY group was 4 years.

Procedure

Defining the clinical team and implementation. Two of the authors had a history of collaboration on implementation of IY in community-based settings and presenting on IY parenting practices to CHLA staff and medical residents during the year prior to the start of this co-location initiative in 2014. Consultation with the developer of IY, Webster-Stratton, took place during the first two months of planning to consider implementation steps, review treatment protocols, and discuss referral processes. The next step toward co-location was to identify the clinical team from the agencies that would be involved, including CHLA, AltaMed, and the CHLA outpatient Mental Health Center.

Given that there were three agencies involved in this process, the clinical team was initially broadly defined to include administrators, physicians, and behavioral health providers. A series of strategic planning meetings, held over the course of eight months, brought together representatives of the three organizations. The initial meetings invited representatives from all relevant stakeholder groups, which included clinic administrators, the Division Head of General Pediatrics at CHLA, the Medical Director of AltaMed at CHLA, the medical social worker, pediatricians, and developmental behavioral pediatricians. Through these meetings, the representatives identified a target population, selected the model for group intervention, discussed the adaptations to the group model, defined the criteria and triage process for group referrals, identified funding sources, and addressed space issues.

When implementing a new behavioral health treatment program, psychologists within agencies can serve as "champions" of the practice (Gotham, 2006). However, when partnering with a primary care setting to implement a new behavioral health intervention, it is also important to identify a physician champion for both the model of intervention and the process of implementation. An example of an essential partnership and collaboration included the designation of a pediatrician as the physician partner and IY primary care champion for this implementation project. This physician champion was a physician in AltaMed and her work implementing IY in the Filipino community (Flores, Supan, Kreutzer, Samson, Coffey, & Javier, 2015; Javier et al., 2018, 2019) in collaboration with the psychologist IY champion was well-known by physician colleagues, which further added credibility to her role as the physician champion for this model. She was also trained in IY and co-led IY parent groups previously.

The IY champions presented information about IY to audiences of administrators, medical social workers, pediatricians, and developmental behavioral pediatricians from AltaMed. The goal was to garner support for IY and illustrate the application of the IY program for patients referred from AltaMed by allowing the IY champions to share their knowledge, enthusiasm, and role in co-location of the IY group intervention on the same campus as the AltaMed clinic. The presenters provided an overview of the evidenced-based therapeutic model being implemented and the age range being targeted for early intervention. Written materials and talking points about IY were disseminated to physicians to provide to families at the time of referral. These presentations highlighted how IY would be adapted for a primary care setting, emphasizing the co-location and resulting coordination and collaboration of care the physicians would receive when referring to this specific IY group. Given the significant demand already placed on pediatricians in this clinic due to the high volume of patient appointments, the referral

process was streamlined. Referrals could be made directly by physicians or by the medical social worker, who had also trained in IY.

Reducing barriers to implementation. Financial barriers to the implementation of IY co-located with the primary care setting included parking, childcare, and space. During meetings with physicians in the planning stages, the pediatricians advised that parking and childcare should be provided to overcome these barriers to attendance. A review of the engagement literature identified that the providers who effectively engaged families in mental health treatment worked with the family during the engagement phase to develop a plan to address practical challenges, such as transportation or financial concerns (Ingoldsby, 2010). As such, it was important to address these barriers during program planning, prior to implementation. For the pilot phase of the project, the Division of General Pediatrics made a commitment to provide financial support for the initial implementation groups (i.e., parking, childcare, dinner).

An added challenge, common to many medical centers, was finding space to conduct the groups. Historically, our IY program had been held at the outpatient Mental Health Center, located three miles away from the pediatric clinic and main hospital campus. Co-location has been identified as a necessity for successful primary care integration (Blount, 2003). Therefore, we recognized it was important that the IY program meet on a weekly basis in close physical proximity to the primary care clinic. Two creative solutions were utilized to solve space issues during the initial implementation of the IY groups. Initially, space was identified at the CHLA Child Development Center across the street from AltaMed, which is used during the day and evenings for childcare for the children of hospital employees. As the project evolved, physical space within a staffed area for family support, health education, and resources closer to AltaMed within the same hospital building was identified for group use.

Incredible Years® Preschool Basic Program. IY is one of the most widely researched parenting interventions that has been proven effective as a treatment and prevention program. The goal of the program is to treat and prevent child emotional and behavioral problems and foster the development of social and emotional competence. It has demonstrated effectiveness in treatment of early onset conduct problem behaviors and Attention-Deficit/ Hyperactivity Disorder that are often precursors to behavioral health and substance abuse disorders (Jones, Daley, Hutchings, Bywater, & Eames, 2007). The IY Preschool Basic Parent Program (Webster-Stratton, 2008) is designed for parents and caregivers of children ages 3-6 years old. IY helps parents understand typical child development, learn about different types of temperament, and understand age-appropriate parenting responses. IY has been evaluated with ethnically diverse and low-income individuals and demonstrated no significant differences in effectiveness nor parent satisfaction (Reid, Webster-Stratton, & Beauchaine, 2001). Additionally, a recent study of IY implementation in the Netherlands demonstrated no differences in effectiveness of the program for individuals from different socioeconomic and ethnic backgrounds (Leijten, Raaijmakers, Orbio de Castro, van den Ban, & Matthys, 2017).

The IY Preschool Basic Parent Program is conducted in a group format, which consists of two accredited group leaders and ideally 8-12 parents, who meet for two hours per week for 18-20 weeks. Parents are treated as the experts in their child's behavior, and the group leaders utilize video vignettes of effective and less effective parenting skills to demonstrate child development and parenting principles, and stimulate discussion, self-reflection, and collaborative learning. Learning is further enhanced by practicing through role-plays in the group and assigned home activities with their own children. For many parents, practicing the skills in the role of a young

child gives them insight into how the child might think and feel in response to a technique implemented in a developmentally appropriate and inappropriate ways.

Through this multi-modal teaching which includes discussion, video models, and role-playing, parents learn about typical child development and understand age-appropriate parenting responses. Additionally, parents receive a book or audio-book in their preferred language, where they can review in more detail the concepts covered in the group. The program places a strong emphasis on child-directed play in which the parent models compliance with the ideas of the child as they follow the child's lead so that the child will have this example to follow in other situations. It also reinforces the development of prosocial and school readiness skills using positive parental attention through specific praise; low-cost and no-cost rewards; and academic, persistence, emotion, and social coaching (descriptive commenting). Parents learn to reduce the need for harsh discipline through development of routines, household rules, and clear commands. Selective ignoring of minor inappropriate behavior is modeled throughout. This first group was conducted in Spanish, and all video stimulus, learning, and evaluation materials were presented in Spanish.

The group leaders were two professionals with psychology doctoral degrees who had completed a three-day authorized IY training. An additional enhancement to the group was that prior to the first and last session of the group, each child had a clinic visit with the physician champion at AltaMed and health and behavioral outcomes were shared with each child's primary care physician by this pediatrician at AltaMed, who conducted the physical examinations.

Outcome Measures

Eyberg Child Behavior Checklist (ECBI). The Eyberg Child Behavior Checklist (ECBI; Robinson, Eyberg, & Ross, 1980) is a 36-item, parent report measure for children and

adolescents between the ages of 2 and 16. It consists of two scales that assess disruptive behavior issues: (1) the Problem Scale, which specifies which and how many behaviors are problematic for the parent and (2) the Intensity Scale, which assesses how often these problematic behaviors occur. The ECBI is widely used in research studies with high reliability coefficients ranging from .86 to .98 (Robinson, Eyberg, & Ross, 1980) and has excellent internal consistency (Eyberg & Pincus, 1999).

Pediatric Symptom Checklist (PSC). The Pediatric Symptom Checklist (PSC; Jellinek, Murphy, Robinson, Feins, Lamb, & Fenton, 1988) is a 35-item screener, completed by parents, that assesses difficulties with psychosocial functioning in school children. Parents rate each item as never (score 0), sometimes (score 1), or often (score 2) present. Scores are then summed and coded as above or below the cutoff for psychosocial impairment. The possible range of scores is from 0-70. The cutoff score of 24 or higher was used for the present sample. The test-retest reliability of the PSC ranges from r=.84-.91 (Jellinek et al., 1988; Murphy et al., 1992), and studies have found a strong internal consistency (Cronbach alpha = .91) (Murphy & Jellinek, 1988; Murphy et al., 1996). Parents completed the PSC for their child at the first and last group session.

Descriptive Health Variables. Weight (electronic scale) and height (stadiometer) were collected at AltaMed in the first and last sessions of the program and were used to assess the child's body mass index (BMI). BMI was calculated using the formula (weight (lb.)/[height (in)]2 x 703) provided by the Center for Disease Control (CDC) and the resulting BMI was compared against the CDC age-and gender-specific norms (Kuczmarski, Ogden, Guo, et al., 2000) to find the percentile in which each child fell under and thus the weight category to which each child belongs. The term "overweight" is used for children whose BMI is between the 85th

and 94th age-and gender-specific BMI percentile and "obese" for those children and adolescents whose BMI is at or above the 95th age- and gender-specific BMI percentile (Barlow & the Expert Committee, 2007).

A case study is presented to highlight the potential outcomes of the implementation of IY within primary care. The publication of three or fewer case studies did not require Institutional Review Board (IRB) approval. A signed Health Insurance Portability and Accountability Act consent to release protected health information was obtained from the child's parent.

This case was selected in part due to the history of unsuccessful parental attempts to engage in mental health services for their child when offered in a traditional community mental health setting apart from primary care. It reflects both the challenge of engaging minority families in community based mental health services, and the more natural engagement that is enabled through co-location of prevention services with primary care. This case highlights the application of IY for early intervention and is representative of a child who would be identified for early intervention due to the initial level of reported symptoms.

Results

Case Study: Ruben

To protect the family's confidentiality, identifying information was altered. Ruben was a 3 year- 9 month old Latino male whose parents were referred to participate in an IY group by his primary care physician to address externalizing behaviors. Prior to group participation, Ruben's mother and father reported that he did not respond to limits or commands, frequently cursed at his parents, and threw tantrums. Additionally, Ruben's mother reported that he was aggressive towards her several times a day and hit other family members when dysregulated. During intake, information was shared indicating Ruben had disrupted attachment from 6 months to 18 months

old, as he and his mother would sometimes not see one another for up to a week due to mother's work schedule.

Prior to participating in IY, when Ruben was 18 months old, he and his mother participated in an intake assessment at the outpatient Mental Health Center located at a satellite clinic three miles from the main hospital. However, his mother declined mental health services after completing the intake assessment. The reason for discontinuing services was that Ruben's mother expressed feeling overwhelmed with multiple medical appointments and could no longer commit to bringing Ruben to mental health treatment.

He was referred again when the co-located IY group was offered on the same campus as their pediatric clinic. Ruben and his parents completed another mental health intake prior to participation in the group at which time he received a diagnosis of Disruptive Behavior Disorder Not Otherwise Specified according to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000). Medical comorbidities at the time of referral included obesity and mild asthma. Ruben also had speech delays.

Ruben's parents attended 12 of 19 (63.16%) of the IY parent group sessions, which was typical of most of the other group members. In Ruben's case, parent attendance was impacted by the medical needs of Ruben's sibling. The ECBI Intensity Scale and the PSC both shifted from the clinical to non-clinical range at post-group. In addition to the psychosocial report measures, Ruben's BMI also reduced from the >99% range to the 90-95% range, representing a positive change in this health-related variable. It is important to note that BMI was measured as a descriptive variable for a larger study of pediatric health service utilization and not as an outcome variable. The change in BMI in this case cannot be construed as representing the experience of the entire group.

After completion of the group, Ruben's parents reported to their primary care provider that they witnessed a positive shift in Ruben's behavior. Ruben's parents noted that he was compliant with an earlier bedtime as well as more compliant with limit setting and would independently put away his things. Ruben's aggression had also substantially decreased, in both intensity and frequency, after the group. This child did not receive mental health services at the outpatient Mental Health Center following completion of the group.

Ruben's mother rated her satisfaction at the conclusion of the group in the positive range on every item of the IY parent satisfaction measure. She wrote that she felt trust and a sense of family within the group, and noted the only thing she did not like about the group was that it was ending. On the parent satisfaction measure, she identified the most helpful parts of the program as follows, "*Aprender a dejar que el niño dirija el juego y a ignorar los berrinches"* [Learn to let the child direct the play and to ignore the tantrums]. Ruben's mother also commented that everything that was discussed in group applied to what was actually happening in their lives with their children.

Discussion

Early intervention to reduce common child behavior problems before they rise to the level of more serious diagnoses is a cost-effective way to reduce the need for mental health intervention later in life. Limited access to these services results in continued health disparities for minority populations with low SES and multiple systemic barriers to care. Children with diagnosable mental health disorders have estimated health service utilization that is twice as high as typically developing children without such disorders. Co-location of both types of service within FQHC settings offers a remedy for health disparity through providing access to mental health services that is far less stigmatizing than visiting a mental health clinic.

The co-location of behavioral health services for children in pediatric primary care settings requires thoughtful, enthusiastic promotion through presentation and teaching opportunities in academic medical centers to move projects forward to implementation. Strong collaboration between psychology and pediatric leaders is necessary across planning and implementation to address anticipated barriers. In our experience, this required listening to pediatricians, social workers, and other care providers within the setting of co-location and incorporating their input during the implementation process. The support of hospital leaders and administrators was essential in preparing budgets and securing space.

The case study of Ruben and his family illustrates how offering an evidenced-based parenting intervention co-located with a primary care clinic resulted in improved child behavior, as reported by parents qualitatively and on standardized measures, and prevented further need for mental health services following the group. Although BMI was reported descriptively and was not a planned outcome variable of the intervention, the case study illustrates the potential benefit a parenting group can have on health outcomes, as other studies have found (Brotman et al., 2010; Smith, Montano, Dishion, Shaw, & Wilson, 2014; Van Ryzin & Nowicka, 2013).

Additionally, a notable consideration from the case study relates to potential increases in utilization of needed services when those services are co-located in primary care. Ruben's family was unable to engage in mental health services when offered through the satellite Mental Health Center due to feeling overwhelmed with the high levels of family medical care but was more able and willing to participate when offered through primary care where services were co-located. This supports the idea that mental health services offered through primary care may reach families that otherwise would not participate in these services for a variety of reasons, especially among diverse, minority populations that are at higher risk for mental health

disparities. This preliminary evidence indicates that partnering with primary care to offer evidence-based parenting interventions has the potential to address mental and physical health disparities among underserved, minority populations. Co-location of this service with a pediatric clinic increased access to parenting intervention for this FQHC population.

A limitation of the current manuscript is that data is presented from one participant as a case study and may not be generalizable to all families in the IY group. Additionally, all behavioral outcome measures were based upon self-report by the family, without additional confirmatory sources of data or observational methods, with the exception of the descriptive health variables.

Ultimately, evidence-based parenting interventions in primary care require sustainable funding mechanisms to continue long-term. State limits on FQHC health services to one service per day do not allow for multiple providers to bill on the same day for seeing a patient. In California, the state legislature passed Senate Bill 1125 that would allow a mental health provider to bill Medicaid for services on the same day as a physician (Espinoza, 2018). This groundbreaking bill was vetoed by the governor who noted the need to address the increase in FQHC services through the annual budget process, since there would be a significant ongoing commitment of funds required to pay for these additional services. If this or subsequent legislative efforts eventually receive budget approval, then California could potentially have a mechanism through which patients can receive mental health care together with their physical health care on the same day within FQHCs. Policy shifts that also allow for interdisciplinary collaboration and delivery of group interventions within every primary care setting, regardless of type of insurance coverage or geographic location, would then make these changes more feasible and sustainable.

Certainly, this is an opportunity for innovation and further research to demonstrate the feasibility and cost effectiveness of co-location and integration of behavioral health services in medical settings. The studies cited in this paper describe the health benefits that are possible with co-located services. More translational research is needed on the impact of evidence-based interventions that target pediatric behavior problems in integrated primary care settings, examining the impact on health markers, behavioral health outcomes, and overall pediatric health care utilization. Arguably, with more research that supports the effectiveness of integrated systems of care in improving behavioral health outcomes, policymakers will be increasingly incentivized to introduce legislation that supports the integration of behavioral health services within the health care system. Co-located and integrated behavioral health and primary care services provide opportunities for future translational research that examines the relationship between evidence-based behavioral health interventions and physical health outcomes.

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