INTEGRATING BEHAVIORAL HEALTH AND PRIMARY CARE:

Making it Work in Four Practices in Connecticut

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About the Child Health and Development Institute of Connecticut:

The Child Health and Development Institute of Connecticut (CHDI), a subsidiary of the Children's Fund of Connecticut, is a not-for-profit organization established to promote and maximize the healthy physical, behavioral, emotional, cognitive and social development of children throughout Connecticut. CHDI works to ensure that children in Connecticut, particularly those who are disadvantaged, will have access to and make use of a comprehensive, effective, community-based health and mental health care system.

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EXECUTIVE SUMMARY

Recent research suggests that more than 20% of children have identifiable mental disorders and that only one in five receives treatment.[1] Connecticut has taken significant steps to promote improved access to mental health services by developing a partnership (CT BHP) between the Departments of Social Services and Children and Families and ValueOptions, as the Medicaid Administrative Services Organization to manage behavioral health services. The partnership has designated several mental health agencies as Enhanced Care Clinics (ECCs) and required that they collaborate with primary care practices to improve integration between behavioral health and primary care services. The Child Health and Development Institute (CHDI) designed a Behavioral Health and Primary Care (BH&PC) Initiative to demonstrate the value of integrated care as well as the processes necessary for its success. CHDI selected four diverse sites and awarded two-year, $60,000 grants to each site. Sites proposed a wide range of objectives such as implementing behavioral health screening processes; developing medication management collaboratives; changing protocols between pediatric providers and behavioral health providers; and establishing reimbursement processes to sustain new models to integrate behavioral health services in pediatric primary care settings. Sites received technical assistance and benefitted from learning communities organized by CHDI. Evaluation findings revealed that the BH&PC Initiative supported advancement in the integration of behavioral health services across all four BH&PC Initiative sites. Two sites experienced transformative and sustainable changes to their practices as a result of implementing a highly disciplined approach to organizational change that resulted in improved identification of children with behavioral concerns and

connection to a variety of behavioral health interventions. Policymakers, funders, and health care organizations can benefit from lessons learned in the BH&PC Initiative and can, with small investments, support effective replication.

The BH&PC Initiative yielded the following findings:

1. Primary care child health practices can build infrastructure for addressing the behavioral health needs of their patients in collaboration with mental health agencies. Experience from the four funded sites yields a feasible model for producing organizational change.

2. Practices can implement screening as part of well-child services to better identify children with behavioral health needs. In private practices and hospital settings that are staffed by a faculty practice plan, reimbursement from screening offsets the costs of purchasing tools, training staff to administer and score them, and adding screening to the practice's ongoing services.

3. Solid relationships with mental health agencies yield opportunities for expanding practices' ability to manage psychotropic medication, securing evaluation and therapeutic services for children and families, and sharing of clinical information across the two settings.

4. Location of behavioral health specialists in pediatric settings facilitates immediate mid-level assessment of children identified through screening, connection of children to more intensive services, as well as a team approach to addressing behavioral concerns.

INTRODUCTION

The crisis in meeting children's behavioral health needs continues to beg for policy, system and practice reform. In 2005-2006, 15% of parents reported being concerned about their children's mental health, and 10% reported that their children received intervention services.[2] Other estimates suggest that these children represent only the tip of the iceberg and that more than 20% of children actually have identifiable mental disorders and only one out of five of them receive treatment.[1] When children's mental health needs are not addressed in the early phase when they are less acute, children are at risk for problems such as school failure, substance abuse, juvenile delinquency, and possibly suicide.

The reasons why children's mental health needs are not identified, and why when they are identified they are not treated, are interrelated. An undersupply of child mental health professionals has been documented[3] and certainly inhibits identification and referral. Professionals frequently in contact with families and children, such as health care providers, teachers,
and child care staff, are reluctant to identify children who need mental health interventions as they are at a loss in helping families find intervention services.
In 2006, Connecticut took action to address access to mental health services for children insured by HUSKY, the state's Medicaid program. The Departments of Social Services and Children and Families collaborated on a plan to pay for behavioral health services outside of the Medicaid managed care plans and through an administrative services organization (ASO). The resulting initiative, the CT Behavioral Health Partnership (CT BHP), developed a system to promote improved access to and quality of behavioral health services for the Medicaid population with ValueOptions serving as the ASO. A central element of the new system was the designation of 39 mental health agencies as Enhanced Care Clinics (ECCs).

To receive reimbursement that is 25% more than prevailing rates, ECCs are required to guarantee appointments for children according to the following rules: within two hours for emergency care, two days for urgent care, and two weeks for routine care. As of September 2009, ECCs are also required to have formal Memoranda of Understanding (MOU) with at least two primary care practices. The MOUs need to outline mutually acceptable means for integrating behavioral health and primary care including: seamless referral, ongoing communication and sharing of patient information, and education for primary care providers to increase capacity to address behavioral health needs. The required partnerships between mental health agencies and primary care practices are expected to result in increased access to mental health services through co-management of behavioral health conditions, including psychotropic medications.

The Child Health and Development Institute (CHDI) recognized the potential of pediatric

primary care to address children's behavioral health needs[4] as well as the barriers faced by child health providers in assisting families in gaining access to behavioral health services.[5] *A Framework for Child Health Services: Supporting the Healthy Development and School Readiness of Connecticut's Children*[6] published by CHDI in 2009, supports the integration of behavioral health and primary care as a promising strategy for building a comprehensive child health system. The *Framework* articulates the following themes, which directly relate to the integration of behavioral health and primary care:

- medical home, which encompasses family-centered service delivery, as the preferred model of pediatric primary health care
- care coordination processes to link families to services outside of the medical home as well as to non-medical services
- early identification of children with or at risk for behavioral/developmental concerns through screening as part of well-child services
- on-site mid-level assessment processes that can determine which children need to be referred on to scarce, high intensity evaluations and interventions and which directly to intervention

Given CHDI's commitment to service integration, and with the enhanced payment policy and the ECC system in place, CHDI undertook an initiative to help strengthen the integration of behavioral health into primary care. In 2007, with funding from the Children's Fund of Connecticut, CHDI funded four primary care sites to begin the process of integration with a partner ECC. This report reviews the experience of the four sites funded under the BH&PC initiative, including their strategies, processes and outcomes.

INITIATIVE STRUCTURE

The following four organizations each received a two-year, $60,000 grant to integrate their primary care services with behavioral health services:

- Bridgeport Hospital Primary Care Center[a] in partnership with other hospital departments, Child FIRST (an early identification and intervention program for young children at risk for developing socio-emotional problems), and Greater Bridgeport Child Guidance Center
- Fair Haven Community Health Center[a] in New Haven in partnership with Clifford Beers Guidance Clinic
- Pediatric Associates, LLC of Bristol in partnership with Wheeler Clinic
- Children's and Family Health Center in Waterbury in partnership with Wellpath

CHDI provided sites with a variety of supports, such as technical assistance via telephone, cross-site peer networking and professional development opportunities organized by topical area, and connection to other relevant resources available through CHDI (e.g., practice-based education) and other organizations. CHDI also retained the services of an external evaluator. Holt, Wexler & Farnam, LLP of New Haven conducted a program evaluation, and provided on-site technical assistance to support implementation of BH&PC projects as well as collection and maintenance of evaluation data. The primary questions guiding the evaluation included:

- Did the organizations participating in the BH&PC advance their behavioral health agendas as a result of CHDI funding?
- What outcomes and impact did the BH&PC Initiative produce for participating organizations and their patients?
- What can policymakers and health care organizations learn from the BH&PC Initiative?

Appendix 1 includes a complete discussion of the evaluation methods.

BH&PC INITIATIVE SITES

BH&PC Initiative sites serve children from areas that range from 108,000 to 164,000 residents. In three of the four sites, the proportion of children whose health care is insured by HUSKY, Connecticut's Medicaid program, is higher than the overall state population. These three communities also have greater racial and ethnic diversity than the state as a whole. With the exception of the Bristol community, BH&PC sites represent communities that are poorer than Connecticut as a whole. See Appendix 2 for a comparison of BH&PC Initiative sites across a set of community indicators and in reference to Connecticut in general.

[a] Bridgeport Hospital Primary Care Center and Fair Haven Community Health Center each received an additional grant to support the advancement of maternal depression screening as part of pediatric well-child services.

BH&PC INITIATIVE ORGANIZATIONS

In general, BH&PC Initiative organizations:

- represent longstanding and well-recognized pillars of the pediatric health care system in their service delivery areas. The recognition originates from a variety of factors such as organizational longevity, quality of care, and overall positioning within the health care infrastructure[b]
- deliver services annually to between 4,000 and 9,000 patients – representing 10% to 20% of the total pediatric population in their service delivery areas
- have had prior informal relationships with child behavioral health providers that maintain ECC status with the Department of Social Services– leading to more robust behavioral health services for children
- serve a significant number of patients insured by HUSKY

The BH&PC Initiative primary care sites differed with respect to:

- composition of their health care teams. Three sites utilized between 3.4 and 5.0 Full Time Equivalent pediatricians. The composition of the health teams varied appreciably across the type (i.e., physician assistants, nurses, nurse practitioners) and number of staff.
- experiences in working with behavioral health partners. The continuum ranged from one site proposing to build more systematic referral relationships with a child guidance clinic to another site already recognized as for its on-site assessment and intervention model.
- scale and breadth of integration with other services and organizations in the community. For example, one site served as a primary training ground for medical students and residents; another site operated school-based health clinics; and a third site held recognition as a statewide leader in areas such as developing effective regional Medical Home models for serving children with special health care needs and implementing state-of-the-art protocols for chronic disease management (e.g., asthma). See Appendix 3 for a comparison of organizational characteristics across BH&PC sites.

BH&PC INITIATIVE MODELS AND APPROACHES

Each BH&PC Initiative site proposed to implement a model designed uniquely to their circumstances.

- The Bridgeport site targeted children younger than six years of age in the context of an ongoing child and family intervention initiative (Child FIRST). Systematic screening of children for environmental risk and social-emotional problems was integrated into their well-child protocol. A Master's level child development and behavioral health specialist was embedded in the pediatric clinic to provide consultation to parents and training for pediatric residents. Maternal depression screening was added both prenatally and in the well-child clinic during the initiative. Care coordination was provided to connect families to needed services and supports.

[b] In one BH&PC Initiative site, nursing staff with over 35 years of tenure now see the children of their former pediatric patients. Another site operates as a Federally Qualified Health Center and operates school-based health clinics in underserved areas.

- The Bristol site targeted children between the ages of 4 and 16 for systematic behavioral health screening. Initially, the site proposed to implement standardized behavioral screening using an on-line approach. Mid-course corrections resulted in the site reverting to parent-completed written screening instruments. The site proposed to advance collaborative approaches to medication management and employ work flow redesign to capture reimbursement for services.
- The New Haven site proposed to develop a universal screening program to be supported by on-site child behavioral health services. The site focused on building a system that would provide sustainable on-site behavioral health services for pediatric patients and would meet the constraints of the primary care and partner behavioral health organization.
- The Waterbury site targeted children ages nine months to four years of age for systematic behavioral health screening with a subsequent expansion to include children ages six to eight. The site also proposed to increase their internal capacity to address behavioral health concerns by extensive staff training to provide direct services to children and families. Additionally, the site intended to improve collaborative medication management and adjust billing mechanisms to capture reimbursement for services.

Table 1 compares BH&PC Initiative sites across a set of common program elements. Across the board, all four BH&PC Initiative sites proposed to address: 1) behavioral health screening processes, with each site selecting a different validated instrument; 2) referral processes and relationships with behavioral health partner sites; 3) the development of some on-site behavioral health interventions; and 4) collaborative medication management.

Sites differed in their proposed program elements in the following ways:

- Sites pursued *different models of providing on-site behavioral health services*. Bristol and New Haven set out to place clinicians from partnering ECCs in their primary care setting. Bridgeport proposed to hire behavioral health providers on-site to work with primary care and ECC staff. Waterbury set out to train primary care staff in taking on expanded roles in addressing the behavioral health needs in the clinic's children and working with the partner ECC.
- Sites also *varied in the target population* that they screened. All sites addressed very young children. Waterbury capped services at age eight, and Bristol extended through adolescence. Bridgeport remained focused on children six and younger. Bridgeport and New Haven also added a maternal depression screening element in the second year of their funding.
- *Screening instruments used ranged* from ones that addressed socio-emotional concerns only in Bridgeport and New Haven to general developmental screening tools incorporated into well-child services in Bristol and Waterbury.
- Notable *site specific innovations* included: testing of an on-line screening program and implementation of medication management case conferences in Bristol; development of billing procedures to sustain services in Bristol and Waterbury; and implementation of referral and follow-up protocols to partner ECC in New Haven.
- Sites earmarked between *65% and 95% of grant funds for personnel expenses*. Waterbury, which used the fewest dollars for staff salaries, paid for training and development of an electronic tracking system.

Table 1. Program Elements by BH&PC Initiative Site

Program Element	Bridgeport	Bristol
Project Objectives	• Behavioral health and risk screening • On-site behavioral health consultation • Expanded capacity for hospital-based psychotherapeutic services • Psychotropic medication management services • Early identification of and connection to services for maternal depression • Care coordination for children with behavioral health needs • Expanded training for pediatric residents and APRN	• Behavioral health screening • On-site behavioral health intervention • Collaborative medication management program • Initiation of billing to ensure sustainability
Model[c]	• Embedded specialist and collaborative care	• Co-location and collaborative care
Target Population for Screening	• Children younger than age 6 and pregnant women	• Children ages 4 to 16 years, with expansion to younger children
Screening Instrument	• BITSEA (Brief Infant-Toddler Social-Emotional Assessment)/PSC (Pediatric Symptom Checklist)/PQ (Parent Questionnaire) • Edinburgh and PHQ-3 (Personal Health Questionnaire) for maternal depression	• CHADIS (Child Health and Development Interactive System) • PSC (Pediatric Symptom Checklist) • ASQ (Ages and Stages Questionnaire) • M-CHAT (Modified Checklist for Autism in Toddlers) • CRAFFT for substance use in adolescents
New Components	• Screening for behavioral health, maternal depression, and risk as routine practice • Training of pediatric residents in behavioral health and risk screening and consultation • Hospital-based therapeutic services • Increased access to and use of community resources facilitated by care coordination • Addition of an APRN with specialty training in behavioral health to consult with pediatric providers	• CHADIS on-line system for completion of screening tools and identification of patient needs and resource materials • Consultation system for medication management collaborative with ECC partner • Medical billing and reimbursement to sustain services
Primary Use of CHDI Grant Funds	• 97% Personnel (e.g., APRN, coordinator)	• 80% Personnel (e.g., nurse, billing, psychiatric consult, program oversight)

[c] Model categories based on: Ford J, Steinberg K, Pidano A, Honigfeld L, & Meyers, J. (2006). Behavioral Health Services in Pediatric Primary Care: Meeting the Needs in Connecticut. Farmington, CT: Child Health and Development Institute of Connecticut.

New Haven	Waterbury
• Development of referral tracking system with behavioral health partner • Change in work process flow (e.g., request for medical records goes to care coordinator; behavior health partner letter to confirm treatment initiation; document changes via creation of a manual) • On-site behavioral health consultations	• Implementation of universal developmental and behavioral screening • Improved care coordination model • Training on psychotropic medication management; brief interventions; and referral to community resources • Improved coding process to ensure reimbursement and sustainability
• Co-location and collaborative care	• Embedded specialists and collaborative care
• Mothers post partum	• Children 9 months to 4 years with expansion to ages 6 to 8 years in year 2
• PHQ (Personal Health Questionnaire) for maternal depression	• PEDS (Parent Evaluation of Developmental Status)
• Shared referral protocol with child behavioral health services • Expanded on-site behavioral health consultation to children	• Standardized behavioral health screening • Expansion of professional development / training content to address behavioral health areas • Development of medication management protocols and knowledge • Medical billing and reimbursement to sustain services
• 77% Personnel (e.g., coordinator, clinical assistant)	• 65% - Personnel (e.g., secretarial, care coordination, oversight), remaining funds for training and education of clinic providers and support of electronic tracking system

BH&PC INITIATIVE OUTCOMES

The BH&PC Initiative put in place valuable services for children and families in each practice. Three short case studies highlight the impact of the BH&PC initiative for children and families.

Case Studies from the BH&PC Initiative

A mother became concerned about her 13 year old daughter's mood swings. The daughter refused to see a counselor when the mother suggested it. However, when the pediatrician offered the services of the psychologist on-site at the practice, the girl did agree to talk with her. After a few sessions the mother and the daughter were able to talk more openly about stress at home due to a grandparent's illness.

Sally was a personable and active sixth grader. When Sally complained of severe chest pains while playing soccer, her parents immediately took her to the emergency room. They were reassured when x-rays and other diagnostic tools revealed no physical ailments - particularly no heart problems. The chest pains subsided, but Sally began experiencing tingling in her arms, legs and throat. Sally's pediatrician could not find any physical problems. However, the pediatrician noticed that Sally appeared more anxious than normally would be seen in a child her age and referred Sally to the practice's on-site behavioral health clinician. The clinician found that the sixth grader expressed worries about dying and going to school, beyond what would normally be expected. The clinician was able to help Sally verbalize her feelings and taught her a set of relaxation techniques designed to ease the tension and anxiety response. As a result, Sally no longer experiences physical symptoms and continues to be involved in a variety of activities. She is able to cope with low level anxiety without need of further intervention or treatment.

David is a fourth grader who had been admitted to a psychiatric unit after a series of incidents involving truancy and abusive behavior toward his sister and mother. The hospital discharge plan was for weekly treatment at an outpatient clinic in David's home community but that clinic offered no psychiatric services. David's pediatrician was surprised when David came into the practice to refill his prescriptions for the medications prescribed to control his behavior. Recognizing that she was "out of the loop" regarding David's treatment plan, she involved the practice's on-site behavioral clinician. The clinician secured the hospital records, coordinated a comprehensive evaluation plan with school district personnel and connected David to required behavioral health services.

In addition to direct services for children and families, the BH&PC Initiative also led to measurable and observable outcomes for each site. The shaded boxes (pgs. 17-20) describe outcomes in each site for five elements: 1) screening; 2) work flow changes; 3) collaboration with behavioral health services; 4) training and professional development; and 5) reimbursement and sustainability.

Across all sites, *screening* was a large component of BH&PC work, with some mental health and/or developmental screening implemented. The two sites that were able to capture reimbursement for screening, Bristol and Waterbury, developed self-sustaining screening programs. The BH&PC Initiative grant funds allowed sites to undertake initial implementation costs, particularly during the early stages prior to reimbursement for behavioral screening, which was approved for the HUSKY program in October 2007. Current reimbursement for "developmental testing limited" (CPT code 96110) yields $18 from HUSKY managed care plans and other insurance plans. Two sites were not eligible for reimbursement for developmental/behavioral screening. Bridgeport is reimbursed by HUSKY as a hospital clinic with billing done outside of a faculty practice plan, unlike the Franklin Medical Group that operates out of the Waterbury site. As a federally qualified community health center, the New Haven site also could not be reimbursed for screening. Despite lack of reimbursement for screening, both sites did institute a maternal depression screening program, and Bridgeport continues to screen young children with new grant funding. The future of these screening efforts is uncertain.

All sites also adjusted their internal *work flow* as a result of the BH&PC Initiative. Changes in practice systems were necessary to accommodate screening and referral to behavioral health services. Practices adopted referral templates, community resource lists, and database software to track referrals and better coordinate care with behavioral health services. Work flow changes often took practices several iterations before a feasible process was put in place.

Most notable of all BH&PC outcomes was the building of *relationships with behavioral health specialists*. Even in sites where relationships were already established (Bristol), new co-management strategies were developed, particularly for addressing medication issues. All four practices expanded staff capacity to offer new and/or more behavioral health services on-site. Waterbury expanded roles of existing on-site staff, and New Haven and Bristol benefitted from co-location of staff from their partner ECCs. Bridgeport hired new staff and solidified relationships with hospital departments that provide mental health services.

Some *training and professional development* was required for sites to change the way they addressed behavioral health concerns. Provider staff attended educational courses (Bristol and Waterbury) and office staff learned about billing and data management systems (Bristol and Waterbury). Bristol and New Haven also took advantage of in-service opportunities at their practices to expand their internal capacity to identify children with mental health needs, connect them to services and participate in co-management with their behavioral health partners.

Reimbursement proved key to *sustainability* for screening. Bristol and Waterbury realized their ability to support part of a staff person's time as a result of reimbursement for screening activities. All sites, however, developed relationships with behavioral health services that can exist into the future without grant support or reimbursement. The requirement for ECCs to develop MOUs with primary care practices will ensure the sustainability of many of the collaborative services, such as referral mechanisms, medication co-management and communication between providers. Since behavioral health services provided in primary care settings are reimbursable regardless of the type of setting, it is expected that practices will continue to operate under a co-location or embedded specialist model and provide on-site behavioral health services.

Outcomes for Bridgeport Hospital Primary Care Center

Screening:

- In year two, 144 of 269 (54%) of children screened positive either for emotional/behavioral concerns (BITSEA) or for environmental and psycho-social risk (site-specific Parent Questionnaire)
- 79 of 196 (40%) of mothers screened positive for depression with the Edinburgh Postnatal Depression Scale or Personal Health Questionnaire-3, (53% prenatal and 32% postnatal)

Work flow changes:

- Addition of a pediatric care coordinator into the staffing pattern
- Addition of depression screening and follow-up in both obstetrics and pediatrics, with engagement of Bridgeport Hospital social work staff
- Expansion of on-site behavioral health consultation to include mental health services for both children and caregivers

Collaboration with behavioral health services:

- Development of relationship with hospital REACH program to ensure treatment services for children
- Development of relationship with hospital obstetrical services for mothers who screened positive for depression

Training and professional development:

- Medication management training for staff of Child FIRST and REACH
- Training curriculum for screening, scoring and interpretation of BITSEA, Ages and Stages, and Edinburg for pediatric residents and APRN
- Extensive behavioral and development materials for sharing with parents provided to pediatric residents and APRN

Reimbursement and sustainability:

- Behavioral health, risk, and depression screening now part of pediatric protocol
- Reimbursement not applicable as hospital could not be reimbursed for screening due to state policies regarding hospital reimbursement

Outcomes for Pediatric Associates, LLC in Bristol

Screening:

- 2,546 patients screened over two years
- Overall screening results of 10.8% screening positive across all ages and instruments
  - 11.6% screening positive on PSC parent and 1.3% on PSC youth
  - 1.3% screening positive on CRAFFT
  - 0.3% screening positive on M-CHAT
  - 0 screening positive on Ages and Stages
  - 30% of patients with positive screens received on-site services

Work flow changes:

- Incorporation of multiple screening instruments for well-child exams into the work flow
- Ongoing refinement to on-site and off-site referral protocols
- Implementation of public and commercial insurance billing to capture reimbursement that sustains screening activities
- Establishment of Developmental/Behavioral Health Team and enhanced on-site assessment and intervention services
- Maintenance of behavioral health resource directory for providers to use for triage

Collaboration with behavioral health services:

- Routine incorporation of physician reports of screening results in medical records
- On-site developmental and psychological services
- On-site periodic consultation from ECC psychiatrist to enhance collaborative medication management
- Protocols for bi-directional communication
- Monthly meetings with ECC Medical Director for children's mental health services

Training and professional development:

- Medication management training from ECC for providers
- Trial run of on-line Ages and Stages completion and scoring system for practice staff
- Fine tuned billing procedures for billing staff
- In-service training on community resources for entire staff

Reimbursement and sustainability:

- Collected revenues of $40,263 with anticipated increase to $50,337 when screening is fully operational, which will ensure continued screening beyond grant supported period

Impact on services for children and families:

- 92% of parents sampled (n=27) rated screening program as extremely or somewhat helpful
- 96% of parents sampled (n=27) agreed or strongly agreed that screening tools reflected their pediatrician's interest in their child's development and mental health

Outcomes for Fair Haven Community Health Center in New Haven

Screening:

- 58 mothers screened for depression with 21 (36%) screening positive

Work flow changes:

- Referral protocol with child guidance clinic, including consent/information release forms

Collaboration with behavioral health services:

- Weekly on-site case review of shared patients with the social worker
- Periodic on-site consultation with the medical director (psychiatrist)
- Urgent consultation by phone with the medical director (psychiatrist)
- Monthly team consultation with the social worker
- Meetings with the crisis team
- Liaison identified in each site for clinicians to address: intake needs of families, co-management needs, medication and evaluation needs

Training and professional development:

- In-service training to discuss behavioral health screening (including peer-to-peer support from Bristol)
- Case conferences for provider staff addressing medication management

Reimbursement and sustainability:

- FQHC rate is already enhanced and screening cannot be reimbursed as an additional service

Impact on services for children and families:

- 103 referrals made to behavioral health partner
- 21 mothers connected to on-site adult behavioral health services

Outcomes for Children's and Family Health Center in Waterbury

Screening:

- 3,331 patients screened (ages nine months to eight years) over two years with 27% screening positive with predictive concerns
- 66% and 69% of parents with six year olds and eight year olds expressed concerns, many of which could be addressed by trained primary care staff

Work flow changes:

- Primary care clinic electronic database to track screening results and analyze findings
- Screening tool now incorporated as permanent part of medical record
- Community resource list available in each exam room
- Medical billing captures behavioral screening
- Improved charting about developmental/behavioral concerns

Collaboration with behavioral health services:

- Monthly interagency meetings with Wellpath behavioral health services clinical leadership
- Improved referral relationships
- Emerging collaborative medication management program

Training and professional development:

- Education for office staff on Medicaid billing and reimbursement
- Pediatric mental health and psychopharmacology training course (Massachusetts General Hospital) for providers
- Brazelton Touchpoints training (program designed to empower clinic professionals to engage in developmental topics with parents/children) for all clinic staff
- Increased time talking with parents about developmental/behavioral concerns

Reimbursement and sustainability:

- Collected revenue from screening reimbursements of $55,222 (from May 07 to April 09) to sustain screening activities

Impact on services for children and families:

- 67% of children for whom concerns were identified were connected to behavioral health services

Site specific *strategies* for changing the way they addressed children's mental health issues differed and can inform replication of the BH&PC initiative in other sites.

- Bristol proposed an ambitious, large scale, and complex approach, implemented mid-course adjustments, and produced meaningful practice change and results. The adoption of the Plan-Do-Study-Act cycle allowed CHDI grant support to create high and sustained value.
- Bridgeport proposed to augment an existing model (Child FIRST) in a complex environment, and experienced ongoing barriers to implementation. Despite inability to permanently fill a critical staff position, which was to be leveraged with Medicaid reimbursements but not supported with CHDI funds, the site was successful in implementing a universal screening program including screening mothers for depression symptoms in both pediatrics and obstetrics, and enhancing hospital-based therapeutic services.
- Fair Haven proposed an ambitious implementation of universal screening and on-site delivery of behavioral health services. They modified their approach and succeeded in developing a solid response to behavioral health needs in collaboration with their ECC partner organization. The CHDI investment led to changes in the relationship between the primary care setting and the behavioral health partner as well as the development of new protocols. Much work remains, however, with respect to integrating behavioral health screening into the practice. CHDI grant support created value in moving the site toward a higher level of "readiness" for subsequent change.

DISCUSSION

Site specific outcomes confirm that participation in the BH&PC Initiative created value at each of the four implementation sites. Table 2 provides salient factors that accelerated or limited implementation at BH&PC Initiative sites. In general, the following factors facilitated sustained success in meeting patients' behavioral health needs:

- Organizational leadership that was committed to making practice-wide changes in order to develop and support a sustainable practice system for identifying children with behavioral health concerns and connecting them to intervention services;
- Co-location or embedding of behavioral health specialists and/or social workers on-site to support family members with positive behavioral health screens and the establishment of a behavioral health team;
- Development of resource tools and other supports such as: compilation of referral resources for providers, development of referral protocols and forms, and forums for in-service training of primary care staff;

- Internal work flow process re-design that addressed the changes in behavior required across all staff as well as staff training sessions to clarify roles and responsibilities;
- Research on scientifically validated screening instruments for goodness of fit in the practice (e.g., target population, ease of use, reimbursement potential) resulting in identification of and agreement upon (by practice providers) a particular behavioral health screening instrument. This resulted in nearly 5,000 behavioral health screens during the grant period and early identification of more than 700 children with behavioral health concerns;
- Engagement and support by administrators, receptionist, and billing staff motivated to capture reimbursement and demonstrate the sustainability of screening initiatives;
- A small group of core team members that worked together over an extended period of time;
- A commitment to continuous improvement and data collection and sharing within the practice team to guide mid-course adjustments;
- Application of a Plan-Do-Study-Act strategy, in which innovations are developed, implemented, monitored and refined within a short period of time, was used to modify practice processes and ensure progress toward a sustainable system of addressing patients' mental health needs;

- Participation by team members in external training or knowledge-building activities (e.g., Massachusetts General Hospital; BH&PC Initiative round table discussions; national conferences).

The inter-relationships among these individual factors suggest that the experiences in the four sites can be generalized into a feasible model for the organizational change necessary for addressing children's behavioral health issues in a primary care setting. Figure 1 contains the resulting model.

Figure 1. Model for Sustainable Integration of Behavioral Health and Primary Care

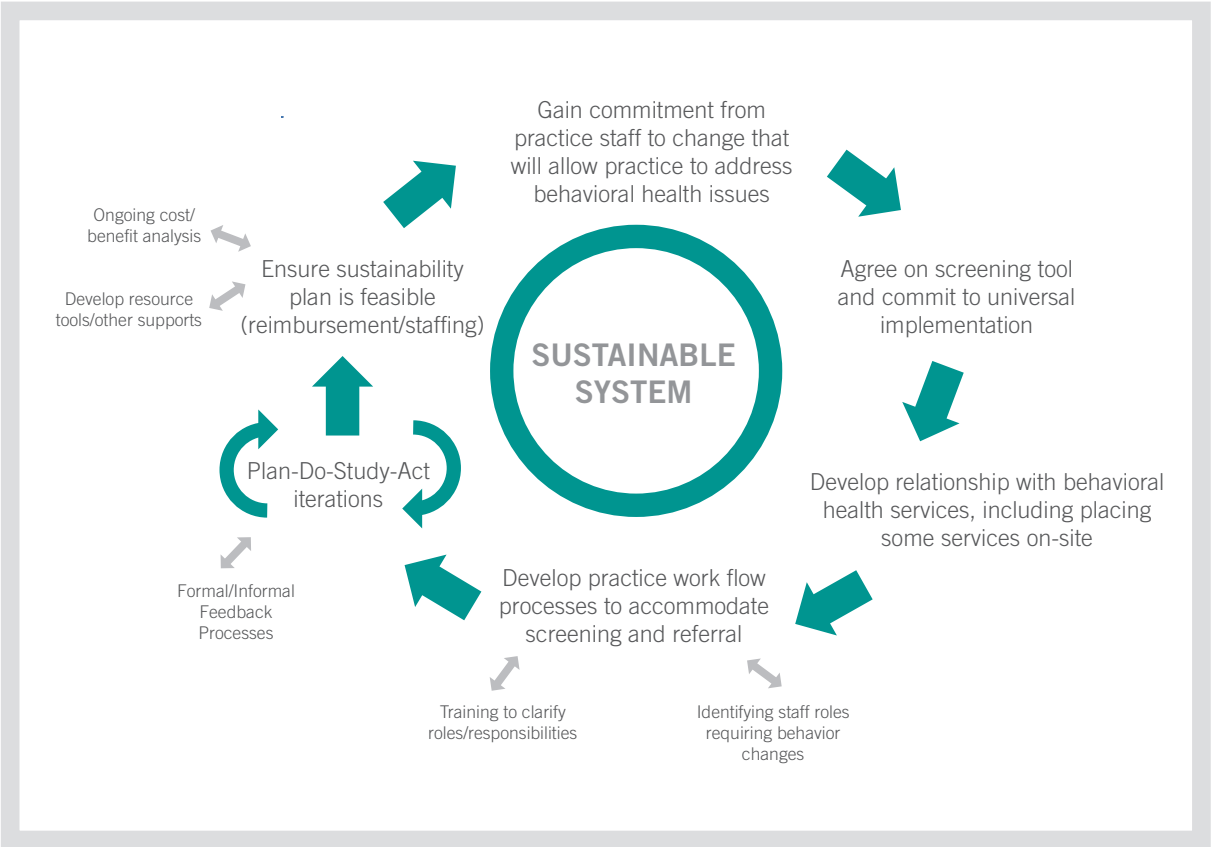

Table 2. Factors Accelerating or Limiting Implementation at BH&PC Initiative Sites

Program Element	Bridgeport	Bristol
Accelerators	• Champion leader driving success of project • Child FIRST program well established within hospital and community • Behavioral health and risk screening established • Behavioral health specialist embedded in primary care clinic • Collaboration among all levels of clinic personnel • Collaboration across medical departments • Commitment of staff to training of medical residents, students, and APRNs	• Presence of multiple "champions" driving project implementation • Site leaders committed to "family-centered care" defined as parents participating fully in services • On-site presence of behavioral health experts (prior to grant project) and expansion of on-site capacity to address developmental and behavioral issues and extend linkage to community resources • Presence of learning culture – including clinical training site for nurses, medical students, and psychology students • Willingness to make mid-course adjustments in response to feedback and data
Limiting Factors	• Unavoidable staffing issues particularly affected advancements in medication management • Positioning of program in hospital setting increased complexity of financial and administrative staffing processes • Lack of reimbursement in hospital settings for screening and care coordination services • Complexity of community collaboration among early childhood mental health providers	• Lack of readiness among practice, staff and families to use on-line screening approach, which led to mid-project adjustment in screening procedures • Complexity of implementing multiple screening instruments across multiple age groups

New Haven	Waterbury
• Champion leader with credibility within organization • Organization committed to developing behavioral health services	• Site leaders committed to "family-centered care" defined as parents participating fully in services • Previous experience in implementing screening process (asthma) • Core team (including social workers) with credibility due to tenure (team members with 10+ years of experience) • Spatial layout of practice facilitated interactions among / between staff • Administrative staff fully on-board in support of effort • Financial staff open to revenue-generating potential • Health providers open to learning opportunities • Commitment to comprehensive health services under medical home model of care
• No incorporation of a screening instrument • On-site social worker limited to five hours per week and inundated with requests • Physical space limitations	• Attempted "rapid" start-up process which affected early implementation • Relationships with behavioral health partners evolved at a slower pace than anticipated

OTHER KEY FINDINGS

Positive feedback from parents confirmed the value of integrating standardized behavioral health screening into the pediatric visit(s). One site conducted a small parent survey (n = 27) in which 92% of parents rated the screening program as extremely or somewhat helpful and 96% agreed or strongly agreed that screening tools reflected their pediatrician's interest in their child's development and mental health. A quote from a BH&PC Initiative site leader captured well the positive benefits for parents: "Not one parent declined to participate in the behavioral health screen … numerous parents commented how the screening instrument caused them to remember specific issues or concerns which otherwise would remain unaddressed."

BH&PC Initiative site teams reported initial resistance from health care providers with respect to implementing a standardized screening instrument. Even though many providers acknowledged the increasing rate of behavioral health and developmental concerns among children, they often felt that their current training and practice was sufficient to positively identify children with concerns and services for them. Interviews with health care providers and survey results confirm that once implemented, providers thought that the screen created an opportunity to re-focus their dialogue with parents (providing resource information and anticipatory guidance). BH&PC Initiative leaders noted a change in the charting behavior – with more comments about developmental and behavioral concerns. The consensus among the health care providers at two sites confirmed that providers would continue using the standardized screening instruments even in the absence of ongoing financial support.

A number of other factors warrant brief comment:

- Formal implementation of the ECC/Primary Care partnership model offers promise for more robust relationships between primary care settings and behavioral health specialists. Primary care settings can focus on internal organizational changes and rely upon their existing relationships with behavioral health resources in the community for building seamless referral of patients and patient consultation systems.
- Financial incentives are very important in supporting practice change. One site provider captured the dynamic in a simple and compelling statement: "We will change our behavior when you pay us to change our behavior." The evaluation findings confirm that small, prudent investments in practice change can produce meaningful results. With Medicaid and commercial insurance reimbursement for screening services in place, practice redesign to support screening and referral was well spent in two sites. Medicaid policy changes that guaranteed payment to all primary care sites for developmental and behavioral health screening would result in improved identification of children with concerns.

- BH&PC Initiative sites can screen only the children who visit. Older children attend well-child visits less frequently than younger children, particularly among those insured by HUSKY. To fully realize the benefits of primary care screening programs, access to primary health care services needs to be improved. In addition, other service sectors, such as schools, need to be connected with behavioral health services to promote opportunities for identification and treatment, especially for older children.

- Opportunity exists to better leverage other available resources (e.g., Child Development Infoline, Help Me Grow, CHDI Educating Practices in the Community (EPIC) training) to support future BH&PC replication or expansion efforts. CHDI's EPIC program addresses topics such as 'brief office interventions' and connecting kids to behavioral health services. Child Development Infoline and Help Me Grow identify community-based resources for young children and families and serve as universal access points to needed services.

BEHAVIORAL HEALTH AND PRIMARY CARE PARTNERSHIPS GOING FORWARD

As of October 2009, all 39 ECCs in Connecticut are expected to have memoranda of understanding with at least two primary care practices. Although several of the requirements for these partnerships are outlined in the Department of Social Services guidance,[d] the BH&PC Initiative has produced additional important lessons for informing the success of such partnerships. Experience in the four practice sites confirms that primary care child health practices can build infrastructure for addressing the behavioral health needs of their patients in collaboration with mental health agencies with training and technical assistance, increased availability of mental health services, and some financial support.

Screening is a critical component of early identification. Primary care sites that can take advantage of reimbursement policies for screening with formal tools are able to begin discussions with parents/caretakers about behavioral concerns as well as identify children in need of further evaluation and intervention. In addition to reimbursement for ongoing screening, practices benefit from dollars for start-up and refinement of practice systems that can support sustained screening efforts. For more specific information about screening, see pg. 28.

[d] The ECC requirements for partnerships with primary care practices are outlined in PB 2008 – 06 released by the Department of Social Services on March 1, 2008.

Ensuring Reimbursement for Developmental/Behavioral Screening

Only screening done with a **standardized tool** is eligible for reimbursement in Connecticut. Tools used in the BH&PC Initiative that captured reimbursement include:

- Ages and Stages Questionnaire (ASQ)
- Brief Infant-Toddler Social-Emotional Assessment (BITSEA)
- CRAFFT (Car, Relax, Alone, Forget, Friends, Trouble)
- Modified Checklist for Autism in Toddlers (M-CHAT)
- Parent Evaluation of Developmental Status (PEDS)
- Pediatric Symptom Checklist (PSC)

At a minimum, screen children at 9, 18 and 24 (or 30) months of age and at other ages if a parent/caretaker or you have concerns.

Use **CPT code 96110** for screening. Medicaid and commercial will pay for this in addition to the reimbursement for the well-child exam.

Add CPT code 96110 to your superbill.

Maintain a copy of the completed screen or the scored sheet in the medical record. If you have electronic medical records, scan the completed screen or score sheet and include it with other clinical information.

Incorporate screening tools into the practice work flow to ensure that the appropriate (age and topic) tool is given to the patient and that scoring is completed in time for the provider to talk with the parent/caregiver/patient about the results.

Maximize efficiency by having parents complete tools during "down" time (in the waiting room, in the exam room before the provider begins the visit).

Don't substitute screening for surveillance: always verbally elicit parental concerns about growth, development and behavior.

Always follow-up on positive screening results. Discuss results with parents during the visit, connect families to more extensive assessment services, and support parents in supporting their children's socio-emotional development.

Practices are more likely to commit to behavioral health screening programs when they have solid relationships with mental health agencies that allow for easy referral of patients as well as ongoing communication about assessments and therapeutic interventions. Such relationships also yield opportunities for expanding practices' ability to understand and manage psychotropic medication, which is often an unaddressed need in the ongoing care of children with behavioral health disorders.

Co-location of behavioral health specialists in pediatric settings, an additional by-product of ECC/primary care partnerships, has been shown to allow immediate mid-level assessment of children identified through screening. Co-location enhances the likelihood that children will be successfully connected to more intensive services when they need them, and it also facilitates a team approach to addressing behavioral concerns within pediatric practices.

The integration of behavioral health and primary care benefits children and families. Four primary sites have demonstrated how practice systems can be modified to ensure early identification, seamless referral and ongoing collaborative care between mental health and pediatric providers. The CT BHP ECC initiative provides great opportunities for mental health agencies and primary care providers to partner to improve services and outcomes for Connecticut's children. The BH&PC Initiative offered an opportunity for primary care settings to change their practice behavior, to develop more productive partnerships with a behavioral health partner (and other community resources), and to increase their capacity to address children's behavioral health issues. As the policy and system environments in Connecticut create opportunities to advance the pediatric behavioral health agenda statewide to ensure the integration of health and mental health, lessons learned from four practices can be helpful in creating significant and lasting change.

APPENDIX 1. EVALUATION METHODS

The evaluators worked individually with each BH&PC site to develop and confirm an approach to data collection and analysis that provided meaningful feedback within the context of the systems in place within the pediatric primary care organization. Evaluator involvement ranged from intensive on-site technical assistance during the work flow (and data collection) re-design process to support for a peer-driven approach in which sites consulted with one another to design protocols. Evaluators provided assistance to sites in terms of survey design, data entry, and data analysis as requested by BH&PC Initiative site liaisons.

The data used to develop the evaluation findings rely upon a variety of sources customized by and for each BH&PC Initiative site. The sources include but are not limited to: individual interviews (face-to-face and via telephone) with providers; structured surveys with providers; analysis of data from behavioral screens; reflections by site liaisons about changes in the quality of record keeping regarding behavioral health issues; informal interviews with parents (of pediatric clients) in waiting rooms; observations at BH&PC Initiative sites; participation at CHDI led peer networking and professional development sessions; and document review (e.g., CHDI progress and final reports; internal data reports generated by BH&PC Initiative sites).

Evaluators met with BH&PC Initiative teams at three sites and developed work flow process diagrams. The diagrams clarified the scope and magnitude of the proposed model (and organizational change) as well as how the BH&PC Initiative sites applied CHDI grant funds to advance the process. Equally important, the process facilitated the development of a productive working relationship between evaluators and BH&PC Initiative site teams.

APPENDIX 2. COMMUNITY PROFILES OF BH&PC INITIATIVE SITES

Indicator	Connecticut	Bridgeport	Bristol (7 towns)	New Haven	Waterbury
Population	3,405,565	139,910	163,830	124,829	108,429
# population under age 19	925,702	43,461	42,844	37,424	31,019
% population under age 19	27%	31%	26%	30%	29%
% population Black or African American	9.1%	30.4%	1.6%	36.9%	16.0%
% population Latino (of any race)	9.4%	31.9%	3.1%	21.4%	21.8%
Median household income	$53,935	$34,658	$53,935[e]	$29,604	$34,285
% child population (under age 18) insured through HUSKY A	29%	58%	21%	64%	70%

[e] The median household income across the seven-town region ranges from $47,422 in Bristol to $82,711 in Burlington. The seven-town region includes: Bristol, Burlington, Farmington, Plymouth, Terryville, Southington, and Wolcott.

APPENDIX 3. COMPARISON OF ORGANIZATIONAL CHARACTERISTICS ACROSS BH&PC INITIATIVE SITES

Organizational Characteristics	Bridgeport	Bristol
Primary Care Lead	Bridgeport Hospital Pediatric Primary Care Center	Pediatric Associates, LLC (Private Pediatric Practice)
Behavioral Health Partner	Child FIRST	Wheeler Clinic
Behavioral Health Partner with Enhanced Care Clinic Status	No (original proposal included services from an ECC, but project circumstances called for modification of behavioral health partner)	Yes
Primary Care Provider Team	45 Medicine/Pediatric Residents with 7 on duty each clinical session 4.0 FTE Physicians, APRNs, PAs 4.5 FTE Registered Nurses 1.0 FTE Nurses Aide 1. 0 FTE Supervisor 1.0 FTE Scheduler 1.0 FTE Referral Coordinator 2.6 FTE Business Associates	4.5 FTE Pediatricians 4.8 FTE Nurses 3.5 FTE Receptionists 2.5 FTE Billing Professionals 1.0 FTE Practice Manager
Patient Volume	8,636 pediatric patients (20% of total pediatric population in Bridgeport)	7,500 pediatric patients (17.5% of the region's 7-town total pediatric population)
Patient Composition	93% insured by HUSKY	35% insured by HUSKY
Other Factors	• Major teaching hospital in Fairfield County providing training to Bridgeport Hospital's pediatric residents and Yale University School of Medicine's Pediatric residents • Operates Child FIRST (Child and Family Interagency Resource, Support, and Training) Initiative	• Provides on-site training to medical students from University of Connecticut School of Medicine, nursing students from Bristol Hospital, and students from the University of Hartford Graduate Institute of Professional Psychology

New Haven	Waterbury
Fair Haven Community Health Center	Children's Health Center at the Children's and Family Health Center
Clifford Beers Guidance Clinic	Children's Health Center (internal referrals)/ Wellpath Waterbury/Emergency Psychiatric Services (urgent triage)
Yes	Yes
5.0 FTE Pediatricians 4.5 FTE Pediatric APRNs 4.0 FTE Family Practice APRNs 5.0 FTE Certified Nurse Midwives 8.5 FTE RNs 22.0 FTE Medical Assistants 1.5 FTE Behavioral Health Clinicians Multiple Administrative Staff	3.4 FTE Pediatricians 2.0 FTE Pediatric APRNs 1.0 FTE Physician Assistant 3.45 FTE RNs 3.0 FTE Medical Assistants 1.75 FTE LCSWs 8.0 FTE Administrative Staff 0.5 FTE Office Manager
4,000 pediatric patients (10.7% of total pediatric population in New Haven)	6,200 pediatric patients (20% of total pediatric population in Waterbury)
80% insured by HUSKY	86% insured by HUSKY
• Federally Qualified Community Health Center • Operates five school-based health clinics • Operates an internal Department of Behavioral Health for adults • On-site partnership with Connecticut Parent Advocacy Center	• Medical Home for Children and Youth with Special Health Care Needs • Contract with Department of Public Health to serve as Northwest Regional Medical Home Support Center • Only pediatric practice in Connecticut to complete Brazelton Touchpoints training

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