Creating Medical Homes: Integrating Behavioral Health Services Into a Residency Training Pediatric Primary Care Clinic

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Description

Project CLIMB (Consultation Liaison in Mental Health and Behavior) provides fully integrated and co-located behavioral health services in a high-volume pediatric primary care training clinic. The program is unique in that it jointly trains both pediatric and mental health providers in an integrated care model, where children receive comprehensive services that include timely mental health care ‘right here, right now’. It increases trainees’ knowledge base, facilitates their competence in providing comprehensive and coordinated services to underserved populations, and models interprofessional interaction and community coordination. Project CLIMB is a paradigm of practice-based learning and system-based practice. It is multi-disciplinary in terms of both interprofessional education and collaborative practice. Trainees and participants include pediatric and family medicine residents, medical students, psychology and allied health trainees and both academic and community-based mental health professionals working with children and families. Training innovations involve utilization and follow-up of mental health and behavioral screening tools and the interface of electronic medical record templates. These combine with clinical informatics strategies to advance the quality of care and communication among providers. Specific examples of this include postpartum depression screening and follow-up for referrals made regarding delays found on developmental screening (manuscripts in progress).

Goals & Objectives

- Train pediatric and mental health providers in an integrated care model in which children receive comprehensive services that include timely mental health care i.e. ‘right here, right now’ in the context of a medical home,
- Teach mental and behavioral health screening, identification, and follow-up in the context of primary care practice,
- Increase trainees’ knowledge base, and facilitate competence in providing comprehensive and coordinated services to underserved populations who have limited access to community mental health resources.

Implementation

How we began:

We began with grant funding for psychologist and psychiatrist team as administrative support. Because of relationships that they had fostered we were quickly able to engage community partnership and Harris Postdoctoral
Psychologist Fellows to be part of the clinical staffing and transformation efforts in clinic. Postpartum depression screening was the first step in engaging providers. We determined that we would screen at all visits in the first 4 months of life. Quickly the co-located team began to work together and it quickly expanded to consultation on other mental health issues e.g. suspected co-morbidities with ADHD.

Required Resources or Guidelines:
Our collaboration efforts systems-wide address the continuum of mental health integration from direct services, to training, to sustainability. Our model emphasizes training in, and provision of, continuity of care between pediatric practice and the community following the Family-Centered Medical Home model. As such, we pulled from personnel resources from pediatric and behavioral health faculty from the University of Colorado School of Medicine Departments of Pediatrics and Psychiatry (UCSOM) as well as the Aurora Mental Health Center (AuMHC), our local community mental health agency. Long-standing collegial clinical and academic relationships between psychology, psychiatry, and pediatrics at UCSOM and AuMHC enabled the partnership conceptually, and funding initially from state foundations and later from clinical service reimbursement enabled it logistically. Staffing of Project CLIMB included a 0.5 FTE psychologist and a 0.5 FTE psychiatrist, pediatric faculty in their primary care precepting roles, an a full-time mental health counselor clinician from AuMHC to provide services and coordinate community referrals, and psychiatry and psychology fellows and residents. As noted earlier, pediatric and family medicine residents and students at many levels were involved as trainees.

Required Skills or Processes:
Skills needed among faculty and mental health professionals were mainly attitudinal: the desire to teach, learn, and collaborate with one another in the care of children and families with behavioral and mental health needs. These skills were enhanced over time as they became more experienced in training the wide spectrum of child health trainees as well as one another. Processes developed were those related to screening, identification and management of behavioral and mental health conditions in the primary care setting. Additional processes included strategic use of electronic medical records and clinical informatics to engage in quality improvement efforts, program evaluation, and continuous performance improvement.

Internal/External Collaboration:
Internal to our system, we established a leadership team spanning pediatrics, psychology, psychiatry, and hospital administration. At the same time, we worked closely with various training programs in our respective departments to build in-depth training experiences in providing integrated behavioral health services. At the same time, we worked closely with our clinical informatics colleagues to optimize electronic medical record documentation and allow us to capture screening and mental health services without adding undue burden to pediatric providers’ already heavy workload. External collaborations include the above mentioned relationship with our community mental health partners and with numerous statewide organizations working to advance medical homes and comprehensive care for underserved children and families. Working closely with Colorado’s Assuring Better Child Health and Development (ABCD) State Team, and with the Colorado Children’s Health Care Access Program (CCHAP) and Family Voices Colorado allowed us to contribute to the conversation and provide consultation and assistance in ongoing statewide efforts around screening and mental health integration. In each of these efforts, we continue to advocate for access to high-quality integrated mental health services in pediatric primary care and to advance the messages around training and systems efforts that will be necessary to ensure that a sustainable, comprehensive service model exists.
Nationally, we collaborate closely with other residency training programs that provide integrated mental health training and services and regularly present together at the Pediatric Academic Societies meetings. We have also engaged in research through Continuity Clinic Research Network (CORNET) research efforts seek to better understand the impact of an integrated training environment on pediatric residents’ knowledge, attitudes, and skills in mental health, behavior, and development. This work is being done with colleagues from across the country and under the auspices of the American Academy of Pediatrics residency training research network.

Sponsorship/Funding
Our work has been generously funded by two large Colorado foundations – Rose Community Foundation and The Colorado Health Foundation. Additional funding for research has been provided by the American Academy of Child and Adolescent Psychiatry. For the first 5 years we were funded by the Colorado Health Foundation which enabled us to develop sustainability models and secure hospital and departmental support for faculty time. Most recently, we moved to a fully sustainable model through billing of Ages and Stages Questionnaire developmental screening.

Source: https://www.mededportal.org/icollaborative/resource/553
reimbursement designated to support mental health professional salary support. Post-doctoral psychology fellows provide much of the direct service with supervision and support of supervisory psychologist and psychiatrist. Our community mental health center supports the full time salary of the on-site licensed on-site counselor.

Patient/Clinician Engagement

Patient engagement strategies were not needed, as the mere availability of mental health services delivered at the same time, place, and care process as primary care was embraced very positively by patients and families. Similarly, though the involvement of project CLIMB did increase patient visit time substantially at times, clinicians learned easily to fit the other work of their clinical day around the project’s efforts. The availability of non-medical clinicians for both teaching and care provision in the clinic setting was incentive enough.

Evaluation & Measurement

Our measures of success are:

1) The success in creating access to integrated mental health services for large numbers of families who have received CLIMB services,
2) Both faculty and trainee satisfaction (informal and formal program surveys),
3) The national recognition we have received by invited workshop and invited science presentations mainly at Pediatric Academic Societies and other local conferences e.g. Annual American Academy Pediatrics chapter meeting, Pediatric Challenges for Colorado Community providers, and
4) Research abstracts and manuscripts that have resulted as part of this work (see files with abstracts).

Results

We have developed a fully integrated mental health model of care in a large outpatient teaching system that is now sustainable. Abstracts presented at Pediatric Academic Societies meeting 2012 best elaborate our results:

1) USING CLINICAL INFORMATICS TO CHARACTERIZE INTEGRATED BEHAVIORAL HEALTH SERVICES IN PEDIATRIC PRIMARY CARE (Appendix A)

Data were collected using clinical informatics flowsheets for behavioral health visits (Nov 2008 to Aug 2011) in a large urban teaching clinic serving high-risk children. Electronic medical record reports yielded behavioral health visit data, demographics, and medical information. Results: 1,984 patients (birth to 22-years) received integrated mental health services (total visits = 4,270). Ethnic distribution was: Caucasian (25%), African American (24%), Multiracial (8%), Asian (1%), and “other” (38%). Medicaid comprised 71% of insurance. Consultation types included: mental health (62%), developmental (17%), postpartum depression (17%), and psychopharmacology (7%). The birth to 3 group (48%) most frequently received mental health (37%) and postpartum depression (34%) consultations; children 3-6 (18%) received primarily mental health consults (84%); and children 6 and up (33%) most often received mental health consults (85%) with 16% psychopharmacology. Regarding presenting problems, postpartum depression consultations significantly predicted resource issues (p<.05) and family circumstances (p<.001); developmental consultations significantly predicted developmental delays (p<.001); and psychopharmacology consultations significantly predicted ADHD (p<.001). Referral for parent mental health services were 12 times more likely in postpartum depression consults (OR = 12.6, 95% CI = 6.2, 25.8) while referral to community developmental services was 4 times more likely for developmental consultations (OR = 4.08, 95% CI = 2.4, 7.0). Developmental and mental health consults both significantly predicted referral to external mental health services (p<.001). Developmental consultations were almost 9 times more likely to yield a Head Start recommendation (OR = 8.7, 95% CI = 2.4, 31.5). Psychopharmacology consultations typically resulted in ongoing clinic follow up (92%) and with increased specialty medical care referral (OR = 4.7, 95% CI = 1.7, 12.9). Our conclusions were that integrated behavioral health consultations were characterized by differences in frequency, presenting problems, and recommendations. Such services address mental health, behavior, and development and facilitate referrals to community resources.
2) PEDIATRIC RESIDENT TRAINING SURVEY IN DEVELOPMENTAL, BEHAVIORAL AND MENTAL HEALTH DOMAINS IN PRIMARY CARE (Appendix B)

Sixty residents in an urban primary care training clinic for high-risk, low-income families completed a modified Periodic Survey of Fellows #46. Resident participants were 32% males, 68% females, and identified as 93% White, non-Hispanic, 5% Asian/Pacific Islander, and 2% Other. Questions about services provided to children birth to 35 months focused on residents’ perceptions of their training, confidence, attitudes, and time to address issues related to the four domains above. Results: Across all domains, resident reports of adequate training were positively related to resident confidence in ability to advise parents: developmental (r² = 0.75, p<.001), psychosocial (r² = 0.62, p<.001), socio-emotional (r² = 0.71, p<.001), and caregivers well-being (r² = 0.75, p<.001). Resident reports of adequate training in developmental (r² = 0.26, p<.01), psychosocial (r² = 0.35, p<.01), and social-emotional (r² = 0.33, p<.05) domains were positively related to residents’ attitudes about the extent to which they were responsible for addressing these domains. Across all domains, resident training was positively related to resident reports of having sufficient time to address these concerns during visits: developmental (r² = 0.36, p<.001), psychosocial (r² = 0.32, p<.001), socio-emotional (r² = 0.40, p<.001) and caregivers (r² = 0.42, p<.001). Our conclusions were that pediatric primary care residents report that the degree of training they receive is directly related to confidence, attitudes about care, and the amount of time they spend discussing topics related to mental health, behavior, and development. Given the prevalence of behavioral health issues in pediatric primary care, training designed specifically to provide education and experience addressing these important topics is indicated.

Lessons Learned:

1. Integrated mental health care decreases the burden on the primary care provider and at the same time ‘introduces’ the family to mental health care when there may be predisposed barriers to access.
2. Building an integrated mental health services program facilitated interprofessional training and education and collaborative practice that promoted care for ‘our patients’ and decreased the propensity for practice in discipline silos. Initially had CLIMB providers in separate charting/consultation area in clinic. Better to have everyone mixed up and sharing a common space.
3. Screening processes were much more readily adopted by the pediatric primary care setting when providers knew they had on-site mental health resources and with ongoing training and continuous improvement processes. Starting with postpartum depression screening as the initial screening mechanism was a good place to start and we would recommend that to others beginning this process.
4. CLIMB providers were an additional team of teachers for short didactics, noon conferences and practice-based in a busy teaching clinic. The therapeutic nature of their interactions was helpful with our very high risk families—in terms of debriefing for trainees on difficult cases. We also found that identification and treatment increased tremendously after didactics, trainings, and clinical informatics strategies were implemented.
5. Frequent communication on roles of the clinic social worker and CLIMB team were important as the social worker traditionally fulfills this role in traditional non-integrated clinic settings.

Integration of research and education

The main advantage of this innovation in an academic setting is that we are training a variety of trainees that collaboration and integration of care is feasible, best practice. As described above we also have had the opportunity to share this with others. Presented workshop both in 2011 and 2012 and also have participated invited science presentations at national meetings 2011.
Objectives: 1) Learn about and practice using mental health and behavior screening tools as well as materials for teaching trainees. Objective: Gain skills in using brief, practical techniques to address behavioral and mental health problems in primary care. 2) Plan an effective strategy for implementing integrated mental health services in participants' own institution including recruiting local champions and identifying potential funding sources.

Program leaders and interdisciplinary faculty from three academic medical centers with integrated models of behavioral and mental health services within primary care residency training practices will lead this interactive workshop. Research results from the CORNET Pediatric Residency Integrated Survey in Mental Health in Primary Care (PRISM-PC) will provide the context of current mental health integration across U.S. residency programs.

Through rotating small group round table sessions using role play and video reviews, participants will: 1) Learn about and practice using mental health and behavior screening tools as well as materials for teaching trainees; 2) Gain skills to provide a variety of brief, practical techniques in aiding children with behavioral and mental health problems in the primary care setting, and 3) Develop an action plan for implementing integrated mental health services in participants' own institutions including recruiting local champions and identifying potential funding sources.

Pediatric Residency Integrated Survey of Mental Health in Primary Care: A National CORNET Study (Manuscript in progress)(Appendix D)

Cross-sectional web-based survey of continuity clinic directors participating in a national network of pediatric continuity clinics (CORNET). Types of mental health services were defined (divided) into enhanced care and traditional care. Definitions for enhanced care included: 1) Enhanced Care--pediatric MH specialist with onsite office allowing for easy referral but separate, return visit to see specialist; 2) Integrated/Collaborative Care--co-location of MH consultants/providers available at the time of identification without need for a return visit; and 3) traditional MH models 3) Phone Consultation Model--pediatric MH specialist available by phone for guidance/triage during the visit. Traditional Care included 1) MH care provided by pediatrician and 2); Exclusive Referral--MH care is referred out to local resources. 82% (n=60/73) of CORNET members responded, representing 30% of U.S. pediatric residency programs. Overall, 37% (n=22) reported an enhanced MH model (22% Enhanced Care; 13% Integrated/Collaborative and 2% Phone consultation Model) while 63% (n=38) reported a traditional MH model (53% Traditional Care and 10% Exclusive Referral). Overall 44% (n=25/57) of all programs screened for post-partum depression, 79% (n=45/57) used formal tools for assessing ADHD symptoms (Vanderbilt). Only 19% (n=11/57) screened for pediatric depression. Programs reported no differences in terms of screening or tools used based on the level of MH integration. Those with enhanced programs were more likely to have access to an on-site psychologist (p=0.002) or psychiatrist (p=0.004). Traditional programs reported more dissatisfaction with access to counseling for 6-18 year old school children (p=.03). Our conclusions were that one-third of training programs surveyed reported some level of MH integration in their primary care teaching clinics and these programs reported higher satisfaction with access to mental health counseling of school aged children. Future studies are needed to compare patient satisfaction and resident education outcomes between integrated and traditional models of care.