Refining training opportunities for pediatric and psychiatric residents and fellows within an integrated healthcare model

Lidija Petrovic-Dovat, MD*; Maanvi G Kumar, MD; Pevitr S Bansal, MS

1Department of Psychiatry, Penn State College of Medicine, Hershey, PA, USA.  
2Department of Psychology, University of Kentucky, Lexington, KY, USA.

*Corresponding Author(s): Lidija Petrovic-Dovat,

Department of Psychiatry, Penn State College of Medicine, 22-B Northeast Drive, Rm 24B, Hershey, PA, 17033, USA.
Phone: (717) 531-8338, Fax: (717) 531-6250, 
Email: lpetrovicdovat@pennstatehealth.psu.edu

Background

It is estimated that 11–20% of children in the United States meet the criteria for a mental health disorder, and 50 % of children with mental illness will have their first symptom by the age of 14 years [1] and 75% before age 24. However, due shortage of child and adolescent psychiatrists, and possibly stigma that still exists related to seeking help for mental illness only a quarter of the children with mental or behavior health problems are seen by a child and adolescent psychiatrist [2]. Family and school often seek help when mental illness is more severe and symptoms start affecting child in many areas of child life; including school, family and social life. Many children with mental health disorders also have signs symptoms of the comorbid psychiatric disorder and meet the diagnostic criteria for more than one mental illness and it is very important that they are evaluated diagnosed and treated by a psychiatrist. Some children and adolescents with behavioral health disorder receive services that do not include prescribing medications, such as counseling in different settings, including school, special programs, home programs or the clinic and those services can be a very important part of treatment. When those services are combined with the medical treatment for children with more severe mental illness, it can be effective in treating mental health disorders. Pediatricians and adult psychiatrists who treat adolescents are often the first line of care for youth with mild to moderate mental health disorders and the most common diag-

Cite this article: Petrovic-Dovat L, Kumar MG, Bansal PS. Refining training opportunities for pediatric and psychiatric residents and fellows within an integrated healthcare model. J Psychiatry Behav Sci. 2018; 2: 1006.
nosis include; Anxiety disorders, Depression and Attention defici
ty hyperactivity disorder. Thus, it is important to strengthen the training that pediatricians and adult psychiatrists receive within the realm of Child and Adolescent Psychiatry. This notion has led to the creation of integrative services which have been im-
plemented nationwide. This is a necessary advancement within healthcare. Another major concern in the hospitals and outpa-
tient medical setting is that children with chronic illnesses are at an increased risk for depression [3] and other mental health problems later in life [4]. Thus, monitoring mental health symp-
toms during hospitalization and after diagnosis of the chronic physical illness is very important and the addition of a child and 
adolescent psychiatrist to the medical treatment team not only during inpatient stay as a consultant but also in the outpatient 
setting is pivotal in providing integrated care for these patients with complex physical and mental health issues. Consequently, 
improving the training for child and adolescent psychiatry fel-
los, adult psychiatry residents, and pediatric residents in Child and Adolescent Psychiatry and for them to adopt the role as a 
consultant to the treatment team in different settings caring for chronically ill children is of foremost importance.

Method

Many modifications were made at our Academic Institution where Department of Psychiatry and Pediatrics collaborate closely to enrich the educational and training opportunities that Child and Adolescent Psychiatry Fellows (CAFP), Adult Psychia-
try Residents (APR) and Pediatric Residents (PR) received, with the goal of giving them an immersive experience wherein they become confident in managing patients with co-existing mental and physical health illnesses, and in collaborating with different specialty providers. To assess their training experience, rota-
tion evaluations were collected quarterly from CAFP and over 18 months and APR between 2013 and 2017, using an on-line survey via New Innovations.

Child and adolescent psychiatry fellow rotation adjust-
ments

First, a psychiatric clinic for adolescents with chronic medi-
cal conditions was created. CAFP rotate through this clinic to acquire skills to better treat children with co-existing psychiatric and medical conditions. Under the supervision of board certi-
fied child and adolescent psychiatrists, CAFP work with various members of the medical team such as pediatricians, psycholo-
gists, and social workers; to learn how to effectively function within a multidisciplinary team environment. Our goal was to decrease wait time for the psychiatric assessment for severely physically ill children who need immediate follow up after dis-
charge or are going through outpatient treatment for chronic illness. Once the child is assessed and stabilized the primary medical team often takes over prescribing medication and con-
sults out team if adjustment is needed or follows up, decreasing number of appointment physically ill child needs to have. Be-
fore starting medications CAFP coordinate care with the medical team since we share the same electronic record system across our teaching clinics and hospital, teaching CAFP importance of the multidisciplinary approach. CAFP also co-lead the cognitive 
behavioral therapy group for children with depression, anxiety, and co-morbid medical illnesses under the supervision of a board-certified psychologist.

Next, in collaboration with the Department of Pediatrics our integrated mental health care services within pediatric ambula-
tory settings [5] such as the setting up an outpatient psychiatric consultation clinic within the pediatric clinic. This clinic provides CAFP the opportunity to provide formal outpatient consulta-
tion and informal on-site consultation (“curbside consultation”) to pediatricians. It also encourages CAFP to discuss cases and collaborate with the referring provider first-hand. Feedback re-
ceived about Outpatient experience from CAFP using an on-line survey via New Innovations as well as questionnaires regarding Consultation Pediatric Clinic was overwhelmingly positive on the educational component as well as the formal and informal consulting experience when collaborating with pediatricians.

Adult psychiatry resident experience

The outpatient Child and Adolescent Psychiatry curriculum was expanded to provide APR an opportunity to rotate be-
tween 2013 and 2017, through a variety of different outpatient psychiatric clinics specialized in treating various mental health disorders, including Attention Deficit-Hyperactivity Disorder (ADHD), mental illness with co-morbid chronic medical illness, mood and anxiety disorders as well as a general longitudinal clinic. The goal of this experience was to broaden APR training in Child and Adolescent Psychiatry and to better equip them to meet the psychiatric needs of children that they encounter during 
their training and older adolescents they might encounter in their practice. Feedback collected using an on-line survey via New Innovations from 21 APR showed that 89% positively rated the teaching quality and 86% found that the rotation meaning-
fully added to their overall Psychiatry training experience.

Pediatric residents and pediatricians experience

The final modification was to first assess how pediatricians and pediatric residents treat mental illness in their respective outpatient clinics in our Academic setting and propose changes to the education experience based on their feedback. To exami-
ne this, pediatric attending physicians and pediatric residents completed an anonymous and voluntary investigator-designed online survey hosted by RED Cap as previously reported by our group [6]. Results of the survey indicated that ADHD was identi-
ﬁed as the most commonly diagnosed and treated mental ill-
ness (Figure 1); and methylphenidate was the most commonly prescribed medication (Figure 2) among the pediatricians. The survey also suggested that children were most commonly re-
ferred to child and adolescent psychiatrists for mood disorder such as anxiety and depression, and for behavioral problems.

Results of this survey highlighted the need for: continued psychiatric services at the pediatric clinic; Additional training for pediatricians in managing behavioral health disorders other than ADHD; Additional training in the use of medications for treating ADHD other than methylphenidate; and training in the use of rating scales to screen for mental illness which was also found to be lacking. To address these needs, a 2 – 4 week long elective rotation in Child and Adolescent Psychiatry was adjust-
ed in the Collaboration between Departments of Psychiatry and Pediatrics to allow PR to rotate through the above mentioned different psychiatry specialty outpatient clinics under the su-
ervision of child and adolescent psychiatrists. A total of 18 PR requested and completed this elective rotation from 2013 to 2018. This was an overall increase in the number of requests for this rotation since its inception in 2013, suggesting that this was a positive learning experience for PR.

Conclusion

All the trainees; child and adolescent psychiatry fellows, adult psychiatry residents, and pediatric residents; found the
modified Child and Adolescent Psychiatry clinical curriculum to be positive and valuable. The model we had at our outpatient Child and Adolescent teaching Psychiatry clinic before these interventions that included providing additional educational opportunities for pediatricians, expanded elective rotation and consult support resulted in high retention rates of children treated for varying degrees of mental illnesses at our Psychiatric Clinic which resulted in increased wait times for new referrals. Our goal is that children with mild to moderate mental illness once treated and stabilized be transferred to primary care with our team available if additional consultation is needed. This new teaching model provides child and adolescent psychiatry fellows, adult psychiatry residents, and pediatric residents a varied training experience in Child and Adolescent Psychiatry. Subsequently, this training is aimed to better equip adult psychiatrists to provide psychiatric care for older adolescents, and to provide an opportunity for a child to be transferred to the primary provider after initial evaluation and stabilization for continuity of care. Our hope is that this approach will significantly reduce referral wait times and increase the intake of children with acute psychiatric symptomology, who otherwise may go untreated for certain duration of time. Our Child and Adolescent Psychiatry curriculum will continue to provide educational programs for rotating.

Figures

**Figure 1:** Most commonly Treated Mental Health Disorder

**Figure 2:** Most common Reason to Refer Child to External Services.
References


