CITATION
Postdoctoral Fellows’ Developmental Trajectories in Becoming Pediatric Primary Care Psychologists

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Pediatric primary care (PPC) settings provide optimal contexts for pediatric psychologists to deliver behavioral health services, including health promotion, prevention, early identification, and intervention. Policy statements and recommendations detail mental health competencies for PPC and delineate competencies for primary care psychology, providing a roadmap for training and preparing pediatric psychologists to work in primary care settings. This article focuses on the developmental progression of professionalism in postdoctoral fellowship training in PPC psychology. Using the Professionalism Cluster of the training competencies in pediatric psychology (Palermo et al., 2014), we apply the competencies to fellowship activities and provide examples of behavioral anchors that demonstrate readiness for independent practice. Project CLIMB (Consultation Liaison In Mental Health and Behavior) is an integrated behavioral health services program embedded in an urban, pediatric residency teaching clinic located at a regional children’s hospital within a large university system. Postdoctoral fellows train in 1 of 2 tracks, general PPC or early childhood mental health in PPC. Fellows engage in clinical care, scholarly activities, training and education, and professional development efforts under the supervision of pediatric psychologists. Goal setting, continuous evaluation, and reflection facilitate fellows’ preparation for independent practice. The Project CLIMB fellowship model illustrates the potential of training within PPC settings to cultivate competent and skilled pediatric psychologists.

Keywords: integrated behavioral health, primary care, postdoctoral training, professional development, training competencies

Pediatric primary care (PPC) settings provide optimal contexts for pediatric psychologists to deliver behavioral health services. Integrated clinicians can work closely with primary care providers (e.g., doctors, residents, nurses) to provide the comprehensive care expected...
within a child’s medical home (American Academy of Pediatrics, 2002). Pediatric psychologists providing integrated care focus on behavioral and emotional problems, health promotion, disease prevention, chronic disease management, and developmental issues in promoting the health and well-being of children and families (Stancin & Perrin, 2014).

As a field, pediatric psychology is charged with preparing psychologists for professional practice within an evolving health care system to equip them to become leaders in clinical, research, training, and advocacy efforts. Additionally, targeted training for PPC practice addresses workforce capacity issues by improving quality and reducing costs, while establishing psychology’s role in preventative health care and making a strong case for specific education and training in this environment (Rozensky & Janicke, 2012). Successful practice in PPC settings depends on training that is grounded in competencies for professional practice in pediatric psychology (Palermo et al., 2014), primary care (McDaniel et al., 2014), and interprofessional collaborative practice. These interprofessional competencies highlight the unique importance of team-based care for all providers who practice in PPC settings (Interprofessional Education Collaborative Expert Panel, 2011). In 2012, the American Psychological Association created an initiative to delineate competencies for primary care psychology, outlining six clusters: science, systems, professionalism, relationships, application, and education (McDaniel et al., 2014). This model promotes the requisite knowledge, skills, and attitudes for high performance (McClelland, 1973; McDaniel et al., 2014) and emphasizes the importance of training pediatric psychologists to successfully integrate into PPC settings. Furthermore, the competencies and training recommendations in pediatric psychology developed by Palermo and colleagues (2014) provide a framework for creating and measuring the success of training programs for psychologists.

This study focuses on our postdoctoral fellowship training program in pediatric primary care psychology, highlighting the ways in which pediatric psychology competencies (Palermo et al., 2014) are exemplified within our training activities. Professionalism is a foundational competency that guides the transition from trainee to independent, practicing pediatric psychologist. Additionally, professionalism demonstrated across the other competency clusters can serve as an indicator of readiness for independent practice. Using a developmental framework, we describe how fellows establish their professional identities over the course of a training year by engaging in activities that ultimately result in readiness for independent practice. Recognizing that developmental trajectories and fellowship outcomes differ based on both individual trainees and the training environment (Kaslow, McCarthy, Rogers, & Summerville, 1992), we first describe our program and then focus on the Professionalism Cluster, highlighting behavioral examples that illustrate professional identity development. Training competencies within the Professionalism Cluster, referenced by number throughout the article, appear in Table 1 along with the corresponding description of the competency (Palermo et al., 2014) and behavioral anchors that demonstrate the competencies.

Project CLIMB: A Practice and Training Setting for Pediatric Primary Care Psychology

Project CLIMB (Consultation Liaison In Mental Health and Behavior) is an integrated behavioral health services program that has been embedded in an urban, pediatric residency-training clinic since 2005. The clinic, located at a regional children’s hospital within a large university system, provides approximately 29,000 visits annually and serves a primarily publicly insured (85%) and diverse population, with nearly 40% Spanish-speaking families. Project CLIMB’s primary goals include (a) increasing access to mental health, behavioral, and developmental services in PPC and (b) training PPC health professionals and pediatric mental health professionals to address mental health and behavioral issues that emerge in the context of the medical home. CLIMB clinicians (psychologists, child psychiatrists, a licensed professional counselor, and mental health trainees) provide case consultation, developmental and pregnancy-related depression screening, brief assessment, and treatment of infants, children, adolescents, and their families. Project CLIMB was initially staffed by a pediatric psychologist and a child and adolescent psychiatrist. With grant funding, postdoctoral fellows...
and psychology interns joined the team within the first year. The program grew through foundation, state, and federal grants, allowing the fellowship to expand. Currently, institutional funding supports a psychology intern and a portion of faculty time while a local mental health center funds a full-time master’s level clinician. To date, fellowship slots have been funded through grants. The clinic serves as a primary training and practice site for the more than 120 pediatric health professionals (e.g., pediatric and family medicine residents, physician’s assistant trainees, allied health professionals) rotating through each year.

**Pediatric Primary Care Postdoctoral Fellowship Training**

Postdoctoral Fellows are recruited from a national pool of applicants for 1-year positions in one of two programs: (a) Primary Care Fellowship through the Pediatric Mental Health Institute at Children’s Hospital Colorado and (b) Harris Fellowship through the University of

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<tr>
<th>Cluster/Domain</th>
<th>Applied competencies</th>
<th>Sample behavioral anchors for entry to practice</th>
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<tr>
<td>Professional values and attitudes</td>
<td>3.3.A Works effectively with colleagues from other disciplines to maintain a climate of mutual respect and shared values</td>
<td>Fellow easily tailors clinical information for diverse audiences and has a positive reputation as a leader among the interprofessional team</td>
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<td>3.4.A Utilizes ongoing educational opportunities to gain greater knowledge regarding the professional practice of pediatric psychology, and the areas of medicine relevant to pediatric psychology</td>
<td>Fellow participates in continuing education by attending grand rounds, hospital lectures, local conferences (e.g., Rocky Mountain Early Childhood Conference), and national conferences (e.g., American Psychological Association, Society for Pediatric Psychology)</td>
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<td>Individual and cultural diversity</td>
<td>3.1.B Works effectively with diverse patients and families, as well as diverse professionals in providing and coordinating care</td>
<td>Fellow provides culturally responsive care to diverse populations; develops relevant treatment plans; identifies and documents cultural factors in clinical notes; provides training for residents on diversity issues in behavioral health; develops and facilitates monthly diversity dialogues for all levels of health professionals in clinic</td>
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<td>Reflective practice/self-assessment/self-care</td>
<td>3.1.D Engages in reflective practice with personal and professional self-awareness, including attention to one’s health behaviors and reactions to working with children and families under stress</td>
<td>Fellow demonstrates self-reflection through clinical service, scholarship, teaching, and advocacy; demonstrates increased self-awareness and ability to care for own emotional health</td>
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<td>3.2.D Conducts self-assessments to continuously improve services offered</td>
<td>Fellow implements ethical guidelines in practice (e.g., boundaries between professionals, comfort with decision-making for mandatory reporting in different practice settings); monitors the effectiveness of services and clinical outcomes; continually engages in quality improvement efforts, initiating projects that improve the quality of care</td>
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Colorado School of Medicine. Primary Care Fellows divide their clinical time (60%) between the residency-training clinic and a community-based primary care clinic, spending the remaining 40% on scholarly activities including training and didactics, teaching, research, quality improvement, program development, and systems work. Harris Fellows specialize in early childhood mental health through intensive didactics, practice, and supervision, spending 60% clinical time in PPC and focusing their scholarly activities on early childhood issues (Buchholz & Talmi, 2012; Dunn & Talmi, 2012; Talmi, Stafford, & Buchholz, 2009). They serve as primary clinicians delivering the evidence-based Healthy Steps for Young Children program (Kaplan-Sanoff, 2001).

Fellows from both programs have substantial experience in the crosscutting knowledge competencies in pediatric psychology (see Palermo et al., 2014). Fellows are typically recruited from predoctoral internships at children’s hospitals or academic medical centers, and bring experience in (a) applying child clinical skills to the medical setting, (b) collaborating with multidisciplinary teams, (c) conducting consultation/liaison services, and (d) working with children with acute and chronic medical conditions. Optimal candidates have interests in pediatric psychology that extend beyond clinical practice and goals that include commitment to diverse, community-based, and underserved populations. Interest in scholarship and systems advocacy is particularly important because of challenges in funding prevention, health promotion, early identification, and pediatric integrated services. Licensed Psychologists with extensive experience in developing, implementing, and evaluating integrated behavioral health programs supervise the fellows and teach fellowship didactics. Supervisors also mentor fellows in developing areas of scholarly interest and engaging in teaching, evaluation, research, quality improvement, advocacy and policy, and dissemination activities that align with fellows’ particular interests. Fellows routinely interact with and are trained by experienced pediatric psychology supervisors working in other settings, which significantly enriches the training context.

**Professionalism Cluster**

Professionalism, a core component of fellowship training and identity development, is addressed throughout the training year. Fellowship training promotes developmental progression across clinical practice, scholarship, teaching, and both intra- and interpersonal collaboration through direct service, supervision and mentorship, engagement with peers and colleagues, and formal didactics. Providing culturally responsive, high-quality services to diverse populations and appropriately engaging with transdisciplinary health professionals around providing such services is essential to successful pediatric psychology practice in primary care. At the start of the year, fellows identify specific clinical, teaching, scholarly, and professional development goals. Consistent with the other fellowship tracks in the Pediatric Mental Health Institute at Children’s Hospital Colorado, supervisors in the Primary Care Fellowship track formally evaluate fellows’ behaviors across the following competency benchmarks adapted from Fouad and colleagues (2009): professionalism, relational, science, application, education, and systems. Additionally, fellows work closely with their supervisors to engage in self-reflective assessment and monitor progress on defined goals. Fellow outcomes are tracked across productivity, scholarship, and bidirectional assessment of compliance with programmatic, institutional, and professional standards.

**Diversity and Professional Values**

Practicing pediatric psychology in primary care settings requires that fellows be competent in providing a broad range of clinical services to diverse populations (3.1.B) while simultaneously developing an understanding of research and policy/advocacy issues related to mental health in PPC. Developmentally, fellows begin their training year shadowing and then being shadowed as they provide clinical services. Fellows learn how to provide culturally diverse families with anticipatory guidance around psychosocial and developmental expectations. Throughout the year, fellows become increasingly competent in prevention and health promotion through training, supervision, delivering evidence-based interventions like Healthy Steps...
for Young Children, and engaging in universal screening, identification, and referral (Lovell, Roemer, & Talmi, 2014). As they become more confident and competent, they require less guidance from supervisors and, in turn, are able to support less-experienced trainees and other health professionals by consulting about care plans, triage, and treatment recommendations (3.1.B) related to the impact of psychosocial factors on a child’s medical diagnosis and overall family functioning (3.3.A). Upon completing fellowship, fellows are adept at implementing screening protocols and demonstrate leadership in care management and coordination (3.3.A). Lessons learned include reducing fellows’ overlapping time in clinic and increasing their opportunities for peer supervisory time with psychology interns and externs. To provide fellows with experiences practicing independently and developing self-efficacy and professional competence in clinical leadership positions, we developed a dissemination pilot that placed Primary Care Fellows in community-based pediatric primary care settings where they were the only behavioral health providers and were responsible for developing and implementing services. While the dissemination effort is closely supervised, it allows for independent practice and program development capacity building.

Scholarship

Fellows enter the program with strong research skills, yet few have participated in translational primary care research. Consequently, fellows initially learn about PPC research, quality improvement, and health systems utilization through supervision, reviewing past projects, didactics, and literature review. Under supervision, fellows identify a scholarly project and learn to manage members of the research team assisting with their project (3.1.A). Fellows present scholarly projects at local and national conferences and some apply for external research funding. Finally, toward the end of the training year fellows have the opportunity to mentor undergraduate research students in projects aligned with fellows’ research interests. Lessons learned include the importance of identifying a scholarly project that can be completed during one training year. Using electronic health record data and building upon previous projects has helped fellows meet their goals (e.g., presentations, grants, publications) and facilitated professional development in scholarship.

Interprofessional Collaboration and Education

The importance of developing strong interprofessional relationships and engaging in team-based care is highlighted across the competencies. Project CLIMB encourages transdisciplinary collaboration (3.3.A) and education (3.4.A) through fellow involvement in teaching and systems-level engagement. At the start of the training year, fellows learn about the systems-building efforts and challenges related to program development and implementation in primary care. Throughout the year fellows gain a better understanding of these issues and are encouraged to engage in advocacy efforts.

Teaching. Although fellows typically have previous teaching experience, few have experience teaching transdisciplinary professionals in health and community settings. The academic medical setting provides opportunities for fellows to develop identities as interprofessional educators by gradually assuming greater leadership roles in teaching health professionals across disciplines and institutions (3.1.D). As mental health experts, fellows are expected to collaborate with and train pediatric health professionals. Initially, this may create anxiety as fellows are tasked with demonstrating expertise that distinguishes them from their peers/fellow trainees. To ease this transition, fellows begin the training year by attending and cofacilitating clinic didactics (3.4.A), followed by developing and presenting their own didactics to health trainees. Seminar topics include child development, cultural considerations, pregnancy-related depression, and trauma (3.1.B). With supervision, they learn to tailor their presentations to different audiences. Next, as “resident experts,” fellows develop trainings for community-based primary care professionals based on needs identified jointly with the practice. We recently added monthly multidisciplinary diversity dialogues in PPC that are facilitated by the CLIMB team. Fellows have been instrumental in developing content for the dialogues and through facilitation, have had the opportunity to transmit skills in addressing
issues of patient diversity with pediatric health colleagues (3.1.B). Finally, fellows present program evaluation findings from community-based dissemination efforts to academic colleagues, establishing themselves as experts in practice transformation in the area of integrated primary care. This area of professional growth prepares fellows for their roles as pediatric psychologists by allowing them to gain confidence and competence as content experts with valuable knowledge to share.

**Systems collaboration.** Community placements allow fellows to apply direct service, education, and training skills to pediatrics that have not previously had an integrated behavioral health clinician. Primary Care fellows have the unique opportunity to develop, implement, and evaluate an adaptation of the CLIMB model in community-based pediatric settings. Specifically, fellows collaborate with supervisors to design and employ tracking systems to capture utilization, service delivery, and financial data that promote greater understanding of health utilization and sustainability (3.1.C). The knowledge gained by examining health utilization and billing data is critical to developing sustainable pediatric psychology services within health settings. Using their data, fellows work collaboratively with community practices to establish the role of pediatric psychologists and facilitate appropriate access and utilization of services (3.1.C; 3.2.D). Competencies gained through the dissemination project, coupled with fellows’ participation in a hospital-based Advocacy Boot Camp (http://www.childrenscolorado.org/events-community/speak-up-for-kids/advocacy-boot-camp), prepare fellows for engagement in advocacy efforts around pediatric health care-related policy.

**Lessons learned** include the need for supervision in managing the tension between feeling like a trainee and being expected to function as an expert and leader around behavioral health integration. Fellows vary in their confidence and ability to teach, requiring individualized supervision and guidance around developing these skills and meeting program requirements. Combining clinical service delivery with program development requires fellows to manage multiple professional roles in the health care environment (3.1.A) and be continually self-aware of how they interact with other health professionals. Practicing at an off-site location, with supervision available as needed, instills a greater sense of autonomy in clinical and professional decision-making (3.1.D) and establishes a path toward independent practice.

**Reflective Practice**

Fellows receive reflective supervision on a weekly basis (3.1.D). The supervisory relationship addresses four areas: (a) clinical practice, (b) teaching and training, (c) scholarship, and (d) professional development. Fellows begin by observing interdisciplinary colleagues to understand the culture of the setting (3.1.B). Initially, supervision tends to focus on the fellow’s role in the PPC setting and ethical practice in pediatric care (3.1.A; 3.1.C). Supervision then transitions from focusing on clinical issues to a consultative clinical supervision model. As the year progresses, supervision shifts to professional development, including establishing a professional identity in health care settings (3.1.D), identifying long-term professional goals, and preparing for employment. Parallel supervision prepares fellows to supervise predoctoral psychology interns—orienting them to integrated primary care while promoting enhanced collaboration with medical colleagues (3.3.A) and on consultation/liaison methods—while being supervised on their supervision skills. **Lessons learned** include helping fellows address challenges in self-efficacy as a supervisor that arise from supervising trainees who are only a year behind in training. Additionally, explicit discussions in supervision, didactics, and brown bag sessions help fellows shift from following a preordained training trajectory to making decisions about professional next steps and selecting first work environments.

**Discussion**

Palermo et al. (2014) detailed competencies and recommendations for training in pediatric psychology to cultivate professional practice for the field. Pediatric psychologists help improve adherence, promote healthy behaviors, reduce behaviors that increase health risks, and improve communication between health care providers and the children and families they serve (Noll & Fischer, 2004). Pediatric psychologists in primary care must demonstrate competencies
in service delivery, program development, and evaluation, and be well versed in the health care landscape and political climate (McDaniel et al., 2014). Professional practice in pediatric psychology requires individuals to integrate all competencies to function effectively, competently, and confidently as an independent practitioner. Toward this goal, postdoctoral fellowships in PPC psychology set within academic medical centers provide a training environment in which fellows can cultivate skills and competencies to successfully engage in service delivery, research and evaluation, teaching and training, and systems-level work. Fellowship training is uniquely suited to cultivate competencies within the Professionalism cluster (Palermo et al., 2014) that prepare recent graduates as they transition from trainees to independent pediatric psychology practitioners.

Project CLIMB provides postdoctoral fellowship training experiences that align with the competency clusters and promote professional development in the practice of pediatric primary care psychology. The attention to advanced-level training in diversity and professional values, scholarship, interprofessional collaboration and education, and reflective practice that is embedded within the overarching focus on Professionalism allows for a developmental progression from trainee to independent practitioner. To achieve this goal, fellows and supervisors must work diligently to simultaneously address competencies across the six clusters, track professional development across multiple domains, and promote developmental progression within the clusters and domains. Over the course of the year, individualized training plans afford fellows opportunities to develop, evaluate and course-correct, and internalize the necessary confidence and skills to take on leadership roles within a pediatric primary care setting.

Fellowship training through Project CLIMB has evolved over a 9-year period in response to the changing health care landscape, funding opportunities, and contextual factors impacting the development and delivery of integrated behavioral health services. Early on, fellowship slots were limited to 2 to 4 half-day clinical slots and less than 10% effort dedicated to scholarly activities. With increased demand for a workforce comprised of well-trained, highly qualified integrated behavioral health clinicians to provide pediatric primary care services, we secured additional grant funding and created a more robust fellowship training experience. The addition of the CLIMB to Community dissemination project as well as increased participation in state-level legislative advocacy enhances fellows’ literacy around the challenges and opportunities of integrating behavioral health into health care settings, allowing them to emerge as leaders in their communities and in the field of pediatric primary care psychology. Future directions of the fellowship include helping fellows cultivate formal relationships with advocacy groups and legislators in order to refine their public policy and advocacy skills and ongoing work to address diversity-related health disparities within primary care settings. The high level of integration, collaboration, community-based opportunities, systems-level advocacy, and ability to engage in early health promotion and prevention inherent in pediatric primary care settings make them exceptional environments for training pediatric psychology fellows to master competencies within the Professionalism Cluster and emerge from fellowship as pediatric primary care psychologists.

References


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