



The role of psychiatric mental health nurse practitioners in improving mental and behavioral health care delivery for children and adolescents in multiple settings[☆]



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Introduction

In 2011 the Robert Wood Johnson Foundation (RWJF) and the Institute of Medicine (IOM) released their landmark report, *Future of Nursing 2020*, calling for nurses to serve as “full partners” in shaping the future of the healthcare system and laying out a series of goals for the profession to obtain by the year 2020 (Institute of Medicine (IOM), 2011). In a time of rising rates of childhood mental health disorders (O'Connell et al., 2009), including an increase in youth suicide (Hedegaard et al., 2018), the need for strong nursing leadership and innovation in healthcare is not only a professional obligation, but a moral one. In this paper, we reflect on the ways that psychiatric-mental health nursing has yet to achieve the *Future of Nursing 2020* goals as they apply to child and adolescent mental health, and offer a starting point for conversation about what goals need to be set for the decade ahead. Namely, we focus on recommendation 1 (remove scope of practice barriers), recommendation 2 (expanding opportunities for nurses to lead and diffuse collaborative improvement efforts), recommendation 3 (implement nurse residency programs), recommendation 7 (prepare and enable nurses to lead change to advance health), and recommendation 8 (build an infrastructure for the collection and analysis of inter-professional health care workforce data). We propose that Psychiatric-Mental Health Nurse Practitioners (PMHNPs) in particular should play a more active role in increasing access to more “advanced” level mental health care in pediatric primary care, and should align their professional, educational, and legislative goals towards that end.

Background and significance

The troubling state of mental health among youth in the United States demands attention. Recent data estimates that between 13 and

20% of children in the United States have been diagnosed with a mental, emotional, or behavioral disorder (Perou et al., 2013). Over the past two decades, it has also become clear that mental health disorders are on the rise among children and adolescents (O'Connell et al., 2009), and suicide is now the second leading cause of death for people from the ages of 10 to 34 (Hedegaard et al., 2018). Furthermore, emergency room visits for non-fatal self-inflicted injuries among adolescents has also increased, highlighting the increasing acuity of mental health concerns in the U.S. (Mercado et al., 2017).

The most basic definition of childhood mental health is “the achievement of development and emotional milestones, healthy social development, and effective coping skills, such that mentally healthy children have a positive quality of life and can function well at home, in school, and in their communities” (Perou et al., 2013, p. 2). When mental, emotional, and behavioral health disorders are not effectively treated, the impact on the individual, their families, and society more broadly can be devastating and long-lasting. The cost of mental disorders in youth under the age of 24 years is approximately \$247 billion annually, positioning them among the most costly health conditions in childhood (Perou et al., 2013).

The World Health Organization (WHO) estimates that 50% of mental health disorders start before the age of 14 (World Health Organization (WHO), 2013). Despite the prevalence and the serious functional impact of these disorders, they remain undertreated and underdiagnosed. Approximately only half of all children with a *diagnosed* mental, emotional, or behavioral health condition receive formal treatment from a mental health care provider each year (Child and Adolescent Health Measurement Initiative, 2016–2017), which does not account for the myriad children and adolescents who go undiagnosed and untreated. Appropriate diagnosis itself is predicated upon access to care, a significant structural barrier in our current health care delivery system (Cummings et al., 2013).

[☆] This research was supported by the T32 Research on Vulnerable Women, Children and Families (T32NR007100) through the National Institute for Nursing Research.

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Given the high prevalence of mental health disorders, significant impact, and unmet treatment needs, Psychiatric-Mental Health Nurse Practitioners (PMHNPs) have the opportunity, as well as the ethical and professional obligation, to play a leading role in improving child and adolescent mental health. As we will discuss later in this commentary, we face a shortage of mental health providers. The health care system's tendency to conceptualize advanced practice nurses as generalist “physician extenders” obfuscates the nursing model upon which advanced practice nurses (APNs) are trained and misrepresents APN scope of practice. Furthermore, predicating service delivery on medical models of care, which are traditionally disease- and illness-oriented, may compound structural limitations if social determinants remain unaddressed (American Association of Nurse Practitioners (AANP), 2015). The current mental health care delivery model – shaped by reimbursement demands and limited evidence-based interventions – is suboptimal for serving patients and families. (Kaye et al., 2009). Rather, the PMHNP role should not model that of traditional psychiatry. Instead, starting from the nursing framework, we must align with patient needs to design future systems and to position ourselves as providers of a distinct domain of mental health care, delivering what can be thought of as “primary mental health care”; that is, care based on the general mental health needs of the population.

Nearly 10 years after the landmark *Future of Nursing* report (Institute of Medicine (IOM), 2011) and as the profession prepares for the release of the Robert Wood Johnson/National Academy of Medicine *Future of Nursing 2020–2030* report, now is the time to consider the future of psychiatric-mental health nursing and the ways in which nurses can work to improve the delivery of mental health care for children and adolescents. This paper seeks to explore the current landscape of mental health care, how the nursing framework and current theoretical knowledge can broaden and expand the role of the PMHNP, and ultimately what resources may be needed to push forward lasting and dramatic change in the way we practice. It also aims to address the IOM recommendations as they apply to psychiatric mental health nurse practitioners in this current landscape of care.

Current state of the future of nursing recommendations

Experts have described the arena of children's mental health as a “labyrinth of systems” (Miles et al., 2010), reflecting its complex nature and characterized as multiple silos of influence where children receive care. These silos include public health systems, schools, communities, faith organizations, primary care and even informal care. In the last decade, there have been increasing calls to integrate mental, emotional, and behavioral wellness care into the provision of general health care of children, but significant barriers remain. Perhaps the most salient barrier is the lack of qualified, specialized mental health providers. However, while primary care providers can and should provide treatment for mental health disorders in childhood, the nature of mental health diagnosis and treatment, especially in children, means that patients are often most appropriately served by professionals with specific graduate-level preparation and board-level certification in psychiatric care. It should be noted that the Pediatric Nursing Certification Board (PNCB) offers a Pediatric Primary Care Mental Health Specialist Exam (PMHS) for Pediatric Nurse Practitioners (PNP). This is an addition to certification to validate knowledge of “primary care” level intervention, consistent with the Licensure Accreditation Certification and Education (LACE) model. It is not a certification that expands the scope of a Pediatric Nurse Practitioner's practice (Pediatric Nursing Certification Board, n.d.).

At the most basic level, primary care delivery in the United States is not optimally designed to support the effective delivery of mental health interventions due to challenges in coordination of universal screening of mental health conditions, lack of compensation for screening and treatment, limited availability for follow up, and lack of resources for referral (Wissow et al., 2013). Expanding the reach of

current and future mental health care providers, namely PMHNPs, is therefore of the utmost importance.

Role of the psychiatric-mental health nurse practitioner (PMHNP)

Relevance to IOM recommendations

Recommendation 1 of the IOM *Future of Nursing* report notes that it is imperative to remove scope of practice barriers in order for providers to practice to the full extent of their education and training (Institute of Medicine (IOM), 2011). The current role of the PMHNPs who treat children and adolescents is limited by current regulatory standards as well as state specific requirements for physician collaboration, resulting in an incomplete role in communities and systems. Recommendation 2 also applies to the role and scope as we envision and propose a role in which the PMHNP can lead and manage collaborations with providers, systems, and services (Institute of Medicine (IOM), 2011).

Current definition of the PMHNP role

The PMHNP role has the theoretical orientation, education, and scope to be an effective provider of child and adolescent mental health services. The American Psychiatric Nurses Association (APNA) takes the policy position that psychiatric nurses should be considered members of the primary care workforce; this is in contrast to the traditional medical model, which positions mental health care as a specialty discipline. The responsibilities of the PMHNP role are founded on the nursing process and therapeutic relationship and include: educating patients and families; diagnosing, treating, and managing acute illness; providing psychotherapy; prescribing medication for acute and chronic illness; diagnosing, treating, and managing acute illness; providing care coordination; making referrals; ordering, performing, and interpreting lab tests, diagnostic studies; and providing preventative care including screening (American Psychiatric Nurses Association (APNA), 2019). In the current delivery system, PMHNPs deliver consultative psychiatric services to primary care settings. These services can take the form of telephonic or video consultation, education for providers, resource coordination, collaboration with providers, and in person or virtual consultation (Kalieb, 2017). However, in both the general preventative as well as a consultative role of the PMHNP, there is potential to expand beyond these services to include basic interventions such as sleep hygiene, healthy nutrition, parental support, increasing quality of parent-child interaction, and relaxation and coping strategies. Simple and brief intervention as well as cognitive behavioral therapy (CBT) strategies may also be integrated into the role. Such competencies should be more explicitly defined as part of the PMHNP role.

While the skillsets of psychotherapy or medication management may overlap with colleagues from other disciplines (e.g., psychiatry, social work, psychology), all PMHNPs are registered nurses and the nursing framework is central to their role (American Psychiatric Nurses Association (APNA), 2019). Using a nursing framework to conceptualize childhood mental health care should be at the core of the skill set of the PMHNP. Collaboration and partnership; care in the community informed by the community; a focus on education, health promotion and screening; and ultimately a model focused on wellness and recovery versus cure would characterize a nursing-driven, bottom-up child mental health paradigm. By using the nursing framework, even within current legislative constraints, PMHNPs can better address the IOM's recommendation to practice to the full extent of scope (Institute of Medicine (IOM), 2011).

Collaboration and partnership

Nurses are educated, trained, and practice in multidisciplinary venues. Key to the nursing role is the ability to utilize and capitalize on collaboration with other disciplines, in the traditional health sphere

and outside of it. Mental health practitioners, to a greater extent than many health care practitioners, must effectively work with professionals in other disciplines, like neurology, endocrinology, nutrition, education, social work, psychology, and the justice system. An orientation towards partnership and collaboration should be seen as a strength. The nature of this collaborative ethos fits with the World Health Organization's (WHO) call to action. The WHO stated that “greater collaboration with ‘informal’ mental health care providers, including families, as well as religious leaders, faith healers, traditional healers, school teachers, police officers and local nongovernmental organizations, is also needed” (World Health Organization (WHO), 2013, p. 14).

Community based care

Nurses often provide care within communities. Visiting nurse services, nurse-family partnership initiatives, home care nursing, school nursing, and correctional nursing are just a few of the areas where nurses already practice in non-traditional clinical settings. As children most frequently receive mental health care in non-traditional clinical settings such as schools, community organizations, religious institutions, emergency departments, and the juvenile justice system (O'Connell et al., 2009), the field of psychiatric mental health nursing has the opportunity to capitalize on its history, experience, and knowledge of delivering community-based care. Since the mid-1990s, research has suggested that schools are a de facto mental health care system where both children with and without a mental health diagnosis receive services (Burns et al., 1995). Hence, school nursing, in particular, offers opportunities for increasing access to care for children and adolescents. Beyond increasing access to care, working in the community helps nurses provide care informed by the strengths and challenges unique to the community. For example, a common recommendation given in mental health is to increase exercise by “going for a walk outside;” The responsibility of the nurse is to recognize that not every patient lives in a safe neighborhood and to adapt the recommendation appropriately.

Nurses are also able to holistically screen for, manage, and coordinate care. The World Health Organization (WHO) (2013) states that “health workers must not limit intervention to improving mental health but also attend to the physical health care needs of children, adolescents and adults with mental disorders, and vice versa, because of the high rates of comorbid physical and mental health problems and associated risk factors, for example, high rates of tobacco consumption, that go unaddressed (p. 14)”. Attendance to both physical and mental care may be implemented at the individual, system, or structural level. For example, facilitated referral models offer quick referral when physical health concerns are screened; co-located models offer both mental and physical health services in the same physical setting; and in-house models offer an integrated evaluation of physical and mental health needs (Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Integrated Health Solutions, 2013). The defined role of the PMHNP is especially amenable to the core competencies of integrated care including: family and youth focus with coordination, individualized and coordinated care plans, use of evidence-based guidelines, established relationships with other entities, and data informed planning (Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Integrated Health Solutions, 2013). At the provider level the themes of coordination and individualized planning is akin to the nursing model.

The PMHNP should be an active member of the care team as noted in recommendation 2, continuously working to improve inefficient and harmful systems of care and as full partners in the design of health care in the United States (Institute of Medicine (IOM), 2011). This recommendation implies that nurses not only work with physicians and other health care professionals, but that they also actively provide input and implement change in their sphere of professional influence. This

recommendation is especially important to the area of child and adolescent mental health given the IOM's current calls for reform. In 2019, Skokauskas et al. outlined a vision for the future of child and adolescent psychiatry based on international consensus. Key goals involved increasing the workforce, reorienting child and adolescent mental health services with a public health orientation, increasing research and research training, and increasing advocacy. Restructuring the role of all mental health providers so that psychiatrists primarily focus on diagnostic evaluation, assessment and treatment of complex cases, as well as collaboration with other professionals providing mental health care is a central component of their vision (Skokauskas et al., 2019). This recommendation suggests the inherent value of PMHNPs' expertise. PMHNP practice includes the integration of multidisciplinary knowledge and the provision of holistic care. It is a starting point from which to envision the future potential role.

Child and adolescent mental health workforce

Relevance to IOM recommendation

Workforce demands are highly relevant to the IOM's recommendation 8 to build more sophisticated structures for gathering inter-professional data (Institute of Medicine (IOM), 2011). This directly relates to the current knowledge about PMHNPs as a member of the psychiatric mental health workforce, specifically as it relates to child and adolescent providers.

Current workforce estimates

National estimates suggest that the demand for mental health workers will exceed supply by 250,000 by 2025 with 96% of all counties in the United States facing a shortage of mental health prescribers (American Psychiatric Nurses Association (APNA), 2019). PMHNPs are considered to be a critical component of the mental health workforce, yet represent the smallest proportion of providers. At the same time, they are among only few groups of providers with prescriptive authority (Heisler & Bagalman, 2013). No state in the United States has enough prescribers, and 43 states have a severe shortage (Tyler et al., 2017). In addition, several sources note that there is a risk of supply not meeting demand in the projected mental health workforce over the next 20 years (Health Resources and Services Administration (HRSA), 2016; Beck et al., 2018; Chattopadhyay et al., 2015). According to the Health Resources and Services Administration (HRSA), supply will exceed demand for psychiatrists, but not PMHNPs, by 2030 (Health Resources and Services Administration (HRSA), 2016). This is based on estimations assuming that PMHNPs and psychiatrists provide inherently different services, with psychiatrists performing the bulk of prescribing medications. In a 2018 survey of the psychiatric mental health workforce, PMHNPs comprised approximately 26.3% ($n = 17,534$), psychiatrists 70.5% ($n = 47,046$), psychiatric physician assistants 1.7% ($n = 1164$), and psychiatric pharmacists 1.5% ($n = 996$) of the workforce (Beck et al., 2018). HRSA notes that there are 7670 nurse practitioners practicing in psychiatry (Health Resources and Services Administration (HRSA), 2016) and nurse practitioner workforce estimates in 2008 and 2012 approximate that there are 7500 nurse practitioners in psychiatry (Chattopadhyay et al., 2015); this discrepancy is likely related to the inclusion of clinical nurse specialists in the Beck et al. study. Geographically, PMHNPs are concentrated in the Northeastern United States as well as the Pacific Northwest and Alaska (Beck et al., 2018), reflecting preference for location based on scope of practice and likely collaborator or supervisor availability if needed. Interestingly, while physician training programs tend to retain students in their states, PMHNP programs do not, suggesting an overall wider geographic distribution of graduates and further potential for expanding the workforce in shortage areas (Beck et al., 2018).

Despite this data on the overall PMHNP workforce, little data exists

specifically tracking PMHNPs who provide services for children and adolescents. One study identified that interest in filling the gap in child and adolescent psychiatrists with PMHNPs has been present for at least a decade; however required collaborative or supervisory agreements, high PMHNP salary expectations, and PMHNP prescribing comfort are seen as barriers to expansion of services (Kaye et al., 2009). Additional data is needed to understand how shifting models of care may disproportionately shift care to PMHNPs. Based on current models, health services researchers anticipate that supply will meet demand by 2030, however this assumes that PMHNP geographical distribution is adequate, that other members of the workforce will need to increase to meet demand (such as child and adolescent psychiatrists), and that PMHNPs are practicing in roles of care that will remain stable over time (National Center for Health Workforce Data, 2018). Further data is needed, highlighting recommendation 8 for greater data on the child and adolescent PMHNP workforce.

Shifting landscape and theoretical framework

Given the current workforce, PMHNPs must continue to actively develop and shape their skillset and to aim to fill in the gaps in mental health care. Despite data that may suggest that the current workforce will meet demands, when examined in light of the gaps for child and adolescent psychiatrists, it is likely that there will be unmet need. Before discussing the potential role and scope of the PMHNP, we must critically reflect on the biopsychosocial model, which often informs care and treatment. In the biopsychosocial model three spheres of influence – biological factors such as genes, psychological factors such as stress, and social factors such as culture – interplay to impact health status (Borrell-Carrio et al., 2004). The model was proposed to counter the dehumanization of the patient by medical care. It posited three central concepts: 1) body and mind could not be seen separately; 2) a whole human could not be segmented into smaller unrelated parts; and 3) an observer undoubtedly influenced observation (Borrell-Carrio et al., 2004). While a useful framework, using a public health approach to guide the expanded role of the PMHNP can complement and expand the biopsychosocial model beyond individual aspects of treatment, as well as to re-imagine the PMHNP role. Given limitations in the child and adolescent mental health workforce, reshaping this role will allow for the greatest expansion of services.

A public health model for the child and adolescent PMHNP focuses on the population and improving its overall welfare (Stiffman et al., 2010). Adopting a public health approach of health promotion, prevention, and treatment aligns directly with nursing goals of holistic, person-centered care. The classic pyramid of a public health model starts with health promotion and optimization of mental health activities for all children and adolescents on the bottom (primary prevention), prevention activities targeted at children and adolescents with emerging symptoms in the middle portion (secondary prevention), and focused and individual based treatment on the top of the pyramid (tertiary prevention). Tertiary care may be defined as care provided by psychiatrists as well as PMHNPs for those experiencing acute onset of symptoms or symptom recurrence/relapse. This model parallels the proportion of children and adolescents served in each stage. The PMHNP can be engaged at every step and in fact integrate the care of each step rather than reducing the role to acute care for those experiencing acute onset of illness. While the role and function of the PMHNP may continue to involve medication management and therapy, taking a broader view of the treatment model can allow one to envision the role across various settings. This model emphasizes playing to the unique strengths of every member of the theoretical team to utilize their skills and resources in order to achieve the best outcomes of each individual as well as the population. This is supported by evidence that suggests that collaborative care and working in teams has the potential to eliminate duplicative care, encourage a team based model, and increase the ability of each person to work to the full extent of their scope and in

their area of expertise (The Institute (The National Council Medical Director's Institute), 2017). But, in order to build upon the nursing process with a public health approach, it is not only important to increase the actual number of PMHNPs but also to ensure adequate education, training opportunities, and career placement. A number of challenges exist in this process.

Preparing PMHNPs serving children and adolescents

Relevance to IOM recommendations

The education and preparation of PMHNPs directly relates to their transition to practice in addition to the educational preparation. Recommendation 3 on implementing nurse residency programs directly ties into this discussion (Institute of Medicine (IOM), 2011).

Reform in education

Based on the American Association of Nurse Practitioners (AANP) 2017 data, approximately 327 PMHNP training programs (including master's only, post-master's, BSN to DNP, and DNP) exist. All programs prepare students for lifespan certification, but each program may vary significantly in terms of child training hours, clinical training opportunities, and child-focused topics (e.g., psychopharmacology, development, physical assessment) (Vanderhoef & Delaney, 2017). Additional challenges include: training in specific psychotherapies as well as transitioning of many master's level programs to the DNP level, thus creating a need to balance between patient care and quality improvement hours as part of the 1000 hour curriculum (Vanderhoef & Delaney, 2017). In addition, the provision of pediatric pharmacological and therapeutic interventions is highly specialized and not always clearly delineated by current guidelines (such as through the American Association of Child and Adolescent Psychiatry), thus requiring more explicit didactic preparation and clinical training (American Association of Child and Adolescent Psychiatry (AACAP), 2019). Furthermore, the increase in distance or online programs may also impact the oversight of clinical training in child and adolescent hours.

For PMHNPs who have an interest in primarily serving child and adolescent populations, training in a program with significant connections to child and adolescent training opportunities (such as at academic training centers with child and adolescent psychiatry fellowships), as well as affiliation with child clinical sites, would be beneficial. In addition, given the comparison to child and adolescent psychiatrists who have either 1) completed a general psychiatry residency and a child psychiatry fellowship or 2) completed a pediatrics residency and a child psychiatry fellowship, the PMHNP interested in working with children and adolescents must engage in additional training opportunities, either informal or formal. Typically psychiatry fellows have the advantage of additional didactic and clinical training (Kaye et al., 2009). Few resources exist for nurse practitioner residencies to date. To the authors' knowledge, only one pediatric psychiatric nurse practitioner fellowship, Nationwide Children's Hospital, exists for post-graduate specialty training. Through this program, fellows receive didactic training in psychopharmacology, psychotherapies, quality improvement, evidence based practices, and comprehensive diagnostic assessment and diagnosis. Clinical rotations include: early childhood, inpatient and emergency, primary care, tele-psychiatry, home based care, and primary care (Nationwide Children's Hospital, 2019). Previously a pediatric psychiatric nurse practitioner fellowship existed at Children's Hospital of Philadelphia. This residency offered a model for training and included didactic content specific to advanced psychopharmacology, diagnosis of autism spectrum disorders, and family based treatment of eating disorders. Clinical rotations included: diagnosis and assessment clinics, young child clinic, eating disorders clinic, anxiety and mood disorders clinics, and inpatient rotations on consult liaison services and inpatient services.

Overall, the limited availability of training both during and after graduation and certification creates an increased barrier for PMHNPs choosing this specialty area. Universal standards in curriculum, synergy with child and adolescent psychiatry training programs (Kaye et al., 2009), and increased collaboration for the development of child and adolescent training programs, both in academic settings and in the community, are needed to fill this gap.

A proposed residency model for PMHNPs serving children and adolescents would include both didactic and clinical experience with residents expected to carry a reduced but significant patient caseload (approximately 60% to allow time for instruction). Didactic experiences may include: diagnosis and assessment across early childhood and young adulthood, psychopharmacologies, psychotherapies (including parent and family focused therapies), evidenced based practice, quality improvement, collaboration among sectors (such as justice system and schools), and interdisciplinary care. Clinical experiences should include: inpatient experiences (consult liaison, primary care or specialty embedded psychiatry, substance use, medical behavioral units or inpatient units, crisis management, and emergency services) and outpatient experiences (child and family therapy, diagnosis specific clinics, young child clinics, general psychiatry, and eating disorder clinic). Key to such a residency program would be adequate training resources, sites, and instructional support, particularly as it pertains to clinical supervision. In such a model approximately 24 hours per week would be dedicated to patient care and 16 hours per week to didactic instruction, allowing for the concrete development of competency areas over the course of 12 months. Those who complete the fellowship may then be recruited to practice areas in need of child and adolescent PMHNPs. Such a training model, while resource intensive has the potential to prepare new nurse practitioners across multiple specialty areas within child and adolescent psychiatry and mental health.

Role transition in clinical practice

Adopting the framework and approach described from a nursing and public health perspective, the authors recommend that PMHNPs be located in physical locations where children are served, such as schools, rather than in specialty care facilities. The primary goals of care would then be to promote mental health and well-being to all people, regardless of symptom presentation. The second level of care would be for those with emerging symptoms, for example, social anxiety in a school-based setting, requiring therapeutic intervention (e.g., cognitive behavioral therapy to reduce specific anxiety symptoms, like avoidance of the anxiety-provoking stimulus). Finally, the third level of care would be for those with acute symptoms such as suicidality or major depression requiring an intervention including medication, therapy, and/or hospitalization or other levels of care for stabilization.

Such a model would involve not only the PMHNP but also the school nurse, social workers, teachers, parents, and others involved or co-located in the school environment. The model could also be envisioned in a pediatric primary care practice, for example, where all children receive basic interventions; some children with mild symptoms receive additional intervention; and those with acute symptoms receive the traditional psychiatric model of care. Integrating mental health treatment into primary care may serve the dual purpose of supporting primary care providers as well as locating services in a manner that is accessible to patients (Skokauskas et al., 2019). Mental health integration also offers the promise of creating an environment in which children receive mental health, physical health, social support, and other specialty care under the same umbrella of care (Tyler et al., 2017). By segmenting the population in this way, the interventions provided by the PMHNP are team-oriented, service-driven, and non-duplicative of care that a child or adolescent may receive elsewhere. A key example of non-duplicative care is therapy, which may be provided by a social worker, marriage and family therapist, licensed professional counselor, clinical psychologist, psychiatric mental health clinical nurse

specialist (CNS), PMHNP, or psychiatrist. Given that therapeutic services may be more widely available than medication management services, medication management should be a primary role for the PMHNP when time and resources are limited. PMHNPs may also spearhead innovative solutions to care such as expanding digital interventions for teens. Creating a model of transition or residency to achieve this role may also be seen as a way to fill the gap in availability of additional child and adolescent nurse practitioner residency programs.

Recommendations for the 2020–2030 future of nursing panel

First and foremost, this paper posits that in the current context of the crisis of mental health care facing children and adolescents, the role of the PMHNP must change. Then, it calls for both theoretical and practical shifts to better service children and adolescents with mental health issues.

As the next *Future of Nursing* panel convenes, we recommend the following actions:

- 1) Changes to recommendation 1: Although we call for an expanded role of the PMHNP that works within the framework of many states, removing scope of practice barriers and addressing variable advanced practice state legislation will benefit PMHNPs serving children and adolescents (Institute of Medicine (IOM), 2011, p. 100). This recommendation should occur in conjunction with recommendation 3.
- 2) Changes to recommendations 2 and 7: We recommend that PMHNPs move beyond leading and diffusing collaborative efforts, instead leading to advance health. We call on the *Future of Nursing 2020–2030* panel to ask for a re-visioning of the role of the PMHNP in order to restructure services to best address the needs of children and adolescents (Institute of Medicine (IOM), 2011, p. 95).
- 3) Changes to recommendation 1: We strongly recommend strengthening graduate education of the PMHNP by supporting a nurse residency model and training in currently existing systems that moves towards primary mental healthcare delivery. Education, including nursing education at the graduate level, treats the diagnosis, care, and treatment of patients with mental health disorders as a separate body of knowledge, or “population foci” in the terminology of the Consensus Model for APRN Regulation (National Council of State Boards of Nursing, 2008). We note that the 2011 IOM report does not clarify where they believe mental health care falls on the specialty-primary paradigm, and also encourage that this be addressed in the next report (Institute of Medicine (IOM), 2011, p. 163).
- 4) Changes to recommendation 8: We call on the *Future of Nursing 2020–2030* panel to improve workforce data that provides population specific data on child and adolescent providers. Given that PMHNPs provide lifespan services, tracking may pose challenges, however in order to visualize the care provided, collaboration, and expansion of scope, further data is needed (Institute of Medicine (IOM), 2011, p. 259).

Conclusions

The future holds great promise and impact for child and adolescent psychiatric mental health nurse practitioners. We have the potential to improve the health and well-being of a future generation and improve public mental health. Yet, doing so requires a shift in ideology from the delivery of specialty based care to a primary care model - one based in nursing values and informed by the public health approach. Making this ideological shift does not require changes to the PMHNP standard of practice or scope, but does require the PMHNP to engage in collaborative relationships and to integrate many basic and advanced competencies. Expanded scope of practice can likely also encourage this re-visioning of the role. Educators, students, clinicians from other

disciplines, policy-makers, and even children and families must advocate for change. The first step for our profession is to obtain more and better data about the demand for services and the current and projected workforce, as well as population-specific data (i.e. geriatric, child and adolescent, carceral). The profession must also seriously review the level of training needed in specialty populations in order to provide appropriate care. Training models, including the master's and clinical doctorate level preparation and formalized post-graduation options, must seek to address this provider gap as well as make efforts towards increasing the number of nurse practitioners able to practice. By challenging the current status quo of child and adolescent mental health care delivery, PMHNPs can be true leaders in the field and deeply impact the state of mental health for children and adolescents.

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