White Paper

International Society of Psychiatric Mental Health Nurses

**The Educational Preparation of Advanced Practice Nurses to
Address the Mental Health Needs of Children and Adolescents**

Purpose

Based on historical trends and future projections, the mental health needs of children and adolescents will continue to be underserved and the workforce crisis will continue to increase unless changes are made in the provision of mental health services for youth. Providing mental health care for children in non-traditional settings closer to home with known providers has emerged as a potential solution to the problem, but concerns have been raised about the preparation of non-traditional providers to deliver these services. Among advanced practice nursing specialties, there are two levels of care for children and adolescents with mental health problems; primary care delivered by pediatric nurse practitioners (PNPs) and family nurse practitioners (FNPs), and specialty care delivered by psychiatric mental health advanced practice registered nurses (PMH-APRNs). Nursing organizations have suggested ways to address the mental health needs of children and adolescents; one way is to better prepare primary care practitioners to meet the mental health needs of children, and another is to expand the psychiatric nursing workforce by basing advanced levels of education on lifespan knowledge and skills so that PMH-APRNs are prepared to deliver care to all age groups. The pros and cons of these approaches are currently under consideration by national groups and professional organizations.

As a leader in advocating for the mental health needs of vulnerable populations, the International Society of Psychiatric Mental Health Nurses (ISPN) convened a taskforce to develop a position statement to inform this national discussion. Task force members included representatives from the American Psychiatric Nurses Association (APNA). The purpose of this white paper is to: 1) illuminate the current state of children's mental health and gaps in mental health service delivery, and 2) set forth a vision for the future and recommendations for the educational preparation of advanced practice registered nurses (APRNs) to address the mental health needs of children and adolescents. For purposes of this document, children and adolescents will hereafter be referred to collectively as *children* or *youth*.

Current State of Children's Mental Health

Demographics and Need

In 2008, there were approximately 73.9 million children ages 18 and younger in the United States, comprising 24.3% of the population (U.S. Census Bureau, 2009). The prevalence of mental, emotional, and behavioral disorders in this age group is estimated to be between 17% and 20%, with 14 million youth suffering from one or more of these disorders (National Research Council and Institute of Medicine [NRC&IOM], 2009).

Results from the replication of the NIMH National Comorbidity Survey (NCS-R) identified the lifetime prevalence of mental disorders as 46.6%, with half of these disorders emerging by age 14 and 75% by age 21. Rates of mental disorders in preschool children ages 2

to 5 are approximately the same as those in older children and adolescents, illuminating the early foothold these disorders take during formative years. Longitudinal studies identify the cumulative prevalence of mental disorders to be 40% by age 21 – thus accounting for 93% of the lifetime prevalence of these disorders. Mental disorders are now recognized as the chronic conditions of youth rather than disorders that primarily afflict adults (NRC&IOM, 2009; Jaffee, Harrington, Cohen & Moffitt, 2005; Kessler et al., 2005).

As many as 7% of children (from one-third to one-half of those with mental health problems) experience significant functional impairments that compromise their cognitive, social, and emotional development and contribute to a lifetime of disability (NRC&IOM, 2009). Mental disorders are the leading cause of disability in individuals ages 15 to 44; these are the years associated with identity formation, occupational productivity, child bearing and the parenting of children (NIMH, 2000). In anticipation of continuing trends, the demand for child mental health services is projected to increase 100% between 1995 and 2020 (NRC&IOM, 2009; US DHHS BHPr, 2000; USDHHS, 1999).

Attachment disorders, autism spectrum disorders and disruptive behavior disorders have the earliest onset, with symptoms emerging during infancy and the preschool years. The median age of onset for anxiety disorders is age 11, affecting 8% of children and adolescents. The lifetime prevalence of anxiety disorders is 28.8%, with a delay of 10 to 20 years between first symptoms and treatment (Kessler et al., 2005; NRC&IOM, 2009). Mood disorders increase at puberty, affecting 5% to 8% of youth ages 12 and older (NRC&IOM, 2009). Suicide is the 3rd leading cause of death in young people ages 10 to 24. Suicide attempts peak during adolescence; 15% of high school students contemplate suicide and 7% make a suicide attempt (CDC, Youth Risk Behavior Surveillance, 2008).

Untreated mental disorders compromise developmental achievement and place youth at risk for school failure, substance use, teenage pregnancy, violence, suicide, and the development of co-morbid psychiatric and substance use disorders (Center for Mental Health in Schools, 2005). Approximately 9% of youth ages 12 to 17 use illicit drugs. In 2008, inhalant use was surpassed by abuse of prescription drugs in the youngest group of 12- to 13-year olds (SAMHSA, 2008). Alcohol use increases with age; 3% of 12 year olds, 26% of 16 year olds, and over 48% of 18 year olds drink alcohol. Underage drinking is associated with tobacco use and illicit drug use (CASA, 2009). By age 25, substance use disorders affect 10% of the population, compromising multiple aspects of health and creating a significant burden for society (NRC&IOM, 2009).

Substance use disorders and drug addiction are neurobiological diseases with genetic and learned behavior components, thus children born to substance-abusing parents are more likely to develop substance use disorders, even if they are raised in a drug- and alcohol-free environment (National Association for Children of Alcoholics, 2009). Problems associated with parental substance abuse include poor intergenerational boundaries, inconsistent parenting, and demands that children become independent before they are developmentally ready to do so (Nastasi & DeZolt, 1994). Children living with caregivers who abuse substances are more likely to perform poorly in school, become victims of physical and/or sexual abuse, and suffer from anxiety and depression. The majority of teens who are homeless, runaways or in foster care attribute their circumstances to parental substance abuse (Booth & Zhang, 1996). The physiological and psychological struggle for children in substance-using families begins at conception. Children born to addicted mothers are more likely to be low weight and experience failure to thrive. Cocaine, marijuana, methamphetamine, and oxycodone all cross the placenta. Babies born

addicted to the substances their mothers abused can experience a lifetime of physical and developmental impairments that result in significant personal and societal cost. The annual cost associated with fetal alcohol spectrum disorders alone is estimated to be $3.6 billion, but the costs associated with subtle neurodevelopmental impairments from fetal alcohol exposure are impossible to determine (National Task Force on Fetal Alcohol Syndrome & Fetal Alcohol Effect, 2009). Pregnant women who abuse substances are also more likely to smoke cigarettes. The effects of prenatal nicotine exposure include low birth weight, respiratory disorders (asthma, specifically) and congenital cardiac abnormalities (Law et al., 2003).

Children with mental and substance use disorders are more likely to drop out or be expelled from school and to engage in activities that result in juvenile justice system involvement (National Center for Children in Poverty [NCCP], 2006). In the past five years, researchers in a variety of juvenile justice settings have consistently reported that 65-70% of incarcerated youth have diagnosable psychiatric disorders (Shufelt, & Cocozza, 2006; Wasserman, McReynolds, Lucas, Fisher & Santos, 2002; Teplin, Abram, McClelland, Dulcan, & Merical, 2002). In a study with over 1800 arrested and detained youth, nearly two-thirds of males and three-quarters of females met diagnostic criteria for one or more psychiatric disorders. The occurrence of two or more diagnoses and the frequency of co-existing substance abuse were significantly higher in this population than in a community sample (Teplin et al, 2006).

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) recently supported a multi-state, multi-site study which indicated that the percentage of youth in juvenile justice settings who were experiencing severe mental health disorders is actually higher than previous estimates. Youth who meet criteria for severe mental disorders or who had been hospitalized for psychiatric reasons made up approximately 27% of the population (Skowyra & Cocozza, 2006). Prompted by earlier work and supported by these recent studies, Healthy People 2010 set forth a goal (18.8) to promote psychiatric mental health assessment for the over 100,000 youth annually arrested and held in juvenile justice settings. Mental health assessment and screening in juvenile justice settings is being promoted as a vital first step in a process focused on meeting the needs of this vulnerable population.

Youth who have been separated from their families of origin, either through out-of-home placement or adoption, represent another segment of the population at greater risk for mental health problems. The International Society of Psychiatric Mental Health Nurses issued a position paper on children in foster care, which is summarized below:

> "Mental health problems are particularly widespread for foster children. There are approximately 700,000 youth in foster care and non-family settings in the United States (Sadock & Sadock, 2009 p. 214). The mean entry age is 3 years. The average stay is 2 years (Yearwood, 2007). Experts estimate that between 30 and 85 percent of youngsters in out-of-home care have significant emotional disturbances (Child Welfare League of America [CWLA], 2009a). Foster care children represent 5% of Medicaid enrollees but use approximately 40% of Medicaid funds (Yearwood, 2007). A substantial number of these children have psychological problems so serious that they require residential placement. Adolescents living with foster parents or in group homes have about four times the rate of serious psychiatric disorders compared with those living with their

own families (CWLA, 2009b). Despite this level of need, less than one-third of children in the child protective system are receiving mental health services (CWLA, 2006). Areas that need to be addressed include: 1) lack of consistent and comprehensive service planning; 2) communications across agencies and with the youth, their foster parents and key stakeholders; 3) use of evidence based interventions to prevent and reduce the incidence of disability, 4) education of child welfare case workers about mental health and emotional therapeutic management; and, 5) education of foster parents and youth about mental health issues and appropriate treatments." (pg. 2, 2009)

Children who are adopted may also have unique mental health needs. Adoption provides families for approximately 2% of U.S. children. Adoption may be a risk factor for mental health problems or a protective factor for children whose quality of life improves through adoption. Recent studies indicate that adopted youth score moderately higher on measures of mental health problems and are at greater risk for externalizing disorders compared to youth who remain in their families of origin. Adopted youth are twice as likely as their non-adopted peers to receive mental health services, even after controlling for family demographic characteristics and types of problems (Keyes, Harma, Elkins, Iconic & McGue, 2008; Miller et al, 2000).

Child Mental Health Services: Current Access and Utilization

Only approximately 20% of children with mental health problems receive mental health services (US DHHS, 1999). Unmet needs for mental health services are greatest among the uninsured (87%), and only slightly better (79%) for children with private health insurance (NCCP, 2006). Rates of mental disorders are higher and access to services is lowest for children in low-income families and those living in rural communities (Moore et al., 2005; NCCP, 2006). The negative effects of mental health problems and barriers to appropriate mental health services are disproportionately experienced by children of diverse racial and ethnic backgrounds (NCCP, 2006; American Academy of Pediatrics [AAP], 2009).

Children present with symptoms of mental health problems in a variety of settings from primary care, to school systems, to emergency departments, and in the juvenile justice system (New Freedom Commission on Mental Health, 2003). Children who receive help for their mental health problems often get these services from non-traditional settings and providers, such as schools or churches. Schools are identified as a primary source of mental health services for children and 50% of youth with severe emotional disorders identify school as their sole provider of these services (US DHHS, 1999).

Children with mental health problems are frequent utilizers of primary care visits. One-quarter (24%) of pediatric primary care appointments involve psychosocial concerns (National Center for Mental Health Checkups [NCMHC], 2009). Among privately insured children, 1/3 of mental health visits are to their primary care providers and the majority of antidepressants and medications for ADHD are currently prescribed in primary care (RAND, 2001).

In a joint statement, the American Academy of Pediatrics (AAP) and American Academy of Child and Adolescent Psychiatry (AACAP) promote the primary care setting as "ideal for initiating services to children with emerging developmental and behavioral problems and common mental health disorders such as attention-deficit/hyperactivity disorder (ADHD), depression, anxiety disorders, and substance use" (2009, p. 1248). Unfortunately, this ideal is not currently realized. Primary care providers under-identify anxiety and mood disorders in

children and fail to identify two out of three depressed adolescents (NCMHC, 2009). In a national poll of children's health, 56% of parents reported their primary care providers never ask about their child's mental health and 66% said they never talk with their primary care provider about their child's mental health concerns (Child Health Evaluation & Research Unit, 2008). Lack of appropriate screening practices, stigma associated with mental health problems, and the brevity of primary care encounters (average 16.3 minutes) have been identified as barriers to addressing mental health problems in primary care (AAP, 2009; NAPNAP, 2007).

Only a small proportion of children with mental disorders (2-10%) currently receive specialized mental health services (NCCP, 2006; NCMHC, 2009). Two key factors related to access problems are the shortage of child/adolescent psychiatric providers and an inequitable distribution of these providers to large metropolitan areas (Thomas & Holzer, 2006). In addition to lack of providers, a barrier to mental health services access is discriminatory insurance policies which create financial burdens for families and personify the "stigma" associated with mental illness (AACAP, 2003).

The Child Mental Health Workforce: A Growing Crisis

From a traditional perspective, the child mental health workforce has included child psychiatrists, psychiatric nurses, child/adolescent and family PMH-APRNs, and professional colleagues in psychology, social work, and allied health professionals such as art therapists. The 2004 National Sample Survey of Registered Nurses identified 19,693 practicing PMH-APRNs, but of these, a small number are actually prepared for practice with children.

In its entirety, the PMH- Advanced Practice Nursing workforce is comprised of Child/Adolescent Psychiatric Clinical Nurse Specialists (CNS) (who may or may not have prescriptive authority depending on the state in which they practice), Adult Psychiatric Clinical Nurse Specialists, Family Psychiatric Mental Health Nurse Practitioners (NPs), and Adult Psychiatric Mental Health Nurse Practitioners who practice with adults and older adults. A collective term that encompasses both the CNS and NP levels of psychiatric nursing preparation is Psychiatric Mental Health Advanced Practice Nurse (PMH-APRN). Most PMH-APRNs are educated to provide a full range of therapeutic services, including psychiatric assessment and diagnosis, medication management, and psychological therapies. PMH-APRNs practice in a variety of settings such as clinics and hospitals (including clinical research trials), school-based health centers, state mental health facilities, correctional facilities, substance abuse centers and community mental health facilities.

PMH-APRNs who have educational preparation to practice with children may pursue board certification from the American Nurses Credentialing Center (ANCC) as Child Adolescent Psychiatric Mental Health Clinical Nurse Specialists (PMHCNS-BC) or Family Psychiatric Mental Health Nurse Practitioners (PMHNP-BC). By 2005, the ANCC had certified 387 Family Psychiatric Mental Health Nurse Practitioners and 991 Child Adolescent Psychiatric Mental Health Clinical Nurse Specialists (ANCC, 2005). Recent data (Delaney, 2009) shows the number of nationally certified Child Adolescent Clinical Nurse Specialists is declining. Factors influencing this decline include the lack of financial incentives for this practice specialty and loss of the federally funded training programs previously available during the 1960s and 1970s.

Individual State Boards of Nursing dictate prescriptive authority for PMH-APRNs. Some states do not recognize and allow the PMH-CNS to have the authority to prescribe psychotropic medications. As a result, a PMH-CNS may provide psychotherapy but not have authority to prescribe and manage psychotropic medications. In states that do allow prescriptive

authority, some PMH-APRNs choose not to prescribe psychotropic medications. There is currently no formal report that discerns how many PMH-APRNs are providing psychotherapy only versus those who both prescribe medications and provide psychotherapy services (US DHHS BHPr, 2004).

A limited number of graduate programs currently exist to prepare PMH-APRNs for specialty practice in child psychiatric mental health. In 2007, there were only 16 graduate programs preparing Child Adolescent Psychiatric Mental Health Clinical Nurse Specialists and 23 graduate programs preparing Child Adolescent Psychiatric Mental Health Nurse Practitioners (US DHHS BHPr Workforce Report). In the future, changes outlined in the Consensus Model for APRN Regulation will likely influence the structure and framework of advanced practice nursing education and how PMH-APRNs will be prepared for practice with children and adolescents (APRN Joint Dialogue Group Report, 2008).

Workforce shortages affect all levels of nursing, including the availability of registered psychiatric nurses. According to the National Center for Health Workforce Analysis (NCHWA), the US had a shortage of approximately 168,000 RN FTEs in 2001. By 2020, the national RN shortage is projected to increase to more than one million RN FTEs. This alone will mean that only 64% of the demand for registered nurses will be met.

Compounding these projected shortages is the aging of the child psychiatry workforce. Medical students are not entering the child psychiatry specialty in numbers sufficient to reverse the aging-out of child psychiatrists. There are currently only 7,400 child psychiatrists actively practicing in the United States and only 300 child psychiatrists complete formal education and training annually (AACAP, 2009; Wilk, 2004; Thomas & Holzer, 2006). The inadequacy of these numbers is astounding in relationship to the projected 14 million youth in need of mental health services, thus contributing to the declaration of a national child mental health workforce crisis (NRC&IOM, 2009; US DHHS BHPr, 2000; US DHHS, 1999).

The scarcity of child psychiatric providers is contributing to a greater burden of caring for children with mental health problems experienced in primary care by pediatricians, pediatric nurse practitioners, primary care physicians and family nurse practitioners. The lack of coordination between primary care and specialized psychiatric care for children has been an ongoing concern. The need to bridge this gap has been described in the literature for the past 20 years. New models are needed to address the workforce limitations and fragmentation of care in the existing system for provision of mental health services to children.

A Vision for the Future of Children's Mental Health

A Stronger Emphasis on Primary Prevention

Risk factors associated with mental disorders can be identified early in a child's life, and first symptoms precede the development of a diagnosable mental disorder by 2 to 4 years (NRC&IOM, 2009; NCCP, 2006). Early identification and targeted interventions within this 2 to 4 year window might avert the course of symptom development and reduce the disabling impact of these disorders. Key to the goals of primary prevention and early intervention is the importance of parent education and support. The needs of children living in families experiencing substance abuse require APRNs to have an expert understanding of individual and family development across the lifespan and to address the interconnectedness of generational care.

Parenting education and support

Since developing children learn to understand and negotiate their worlds through the context of their parents, families and communities, the parent-child relationship is a key factor in mental health promotion, mental illness prevention, and restoration of mental health in children. Therapists use several systems-based theories to understand this process, such as the Barnard Model of Parent/Caregiver-Child Interaction (Barnard, 1997). This model is based on systems theory (Wojnar, 2009) and adapts the ecologic model of Bronfenbrenner to describe the child's behavior in the context of interactions with the parent. The ecologic model views the child's environment as a series of concentric circles, each one interacting with the others, and the transactional actions and cognitions that occur influence the child's development. The inner circle of this transactional process of development consists of the child, the child's parents, and the community they live in (Bronfenbrenner and Morris, 1998).

Within this context, then, best practices for providing child/adolescent therapy also include assessing parental needs, and supporting the parenting role of the parent (Karasu, Gerenberg, Merriam & Wang, 2000). Supporting the parenting role is particularly important for the families of children with mental illnesses such as bipolar disorder and pervasive developmental disorder, which have genetic components that are still poorly understood and managed (Lambert & Kinsley, 2005).

Supporting the parenting role can be done through several strategies, which are adapted to the family's needs and implemented through their culture. These strategies include: strengthening children, advocating for the family, strengthening the community, and providing parenting education, psychoeducation, counseling, and family therapy. Strengthening children is done by increasing emotional resilience through interventions designed to promote self-esteem, life and coping skills, through teaching good communication within families, and teaching and demonstrating good parenting skills. Advocating for the family can be done by promoting health in their community, and identifying and/or reducing structural barriers to mental health. One of the worst and most pervasive structural barriers to mental health is the lack of accessible mental health care for uninsured families, with low-income residents in the U.S. reporting finances as the greatest structural barrier to mental health treatment (Sareen et al., 2007). Strengthening the community involves increasing the family's social inclusion and participation in the community, improving neighborhood environments, offering health and social services such as culturally and linguistically congruent parenting education programs, teaching anti-bullying strategies at school, and providing workplace health, community safety, childcare programs and self-help networks.

Currently, parenting education programs are offered for either a small fee or no fee at community health centers, schools and/or places of worship. Parenting education is provided online and in newsletters by child development and professional psychology organizations, such as the American Academy of Pediatrics' Bright Futures program (Bright Futures a, 2008). The National Alliance on Mental Illness has also developed and offers a parenting education program, the NAMI Basics Education Program, which provides peer support, crisis management, workshops in problem-solving and strategies for handling challenges (NAMI, 2009). Parenting education on such areas as control of impulsive behavior, successful time-out, and managing defiant or non-compliant behavior can assist parents who are struggling with responding to the characteristic clinical behaviors of children with ADHD, bipolar disorders, or pervasive developmental disorders.

Parenting education for parents of children with mental /emotional/behavioral disorders includes psychoeducation. Psychoeducation on the child's strengths, risks, difficulties and specific needs includes information and counseling about effective parenting responses, medication indications, scheduling and side effects, how the child can self-monitor for return of symptoms, the need for rest, relaxation, exercise, and maintaining a consistent schedule. The child and parents can learn how to express themselves in family interactions, and meet challenges more effectively. Psychoeducation can assist parents in resolving feelings of loss, communicate their cultural, social and practical needs, and support the well-being of their child. Parents should also be guided to develop proactive responses and resources in case of an emergency. Psychoeducation is considered an evidence-based practice that reduces relapse while it promotes more positive outcomes. Like parenting education, psychoeducation can be provided in multiple-family groups, individual families, mixed groups, in regularly scheduled sessions, in brief sessions or episodically, for relapse or crisis management.

Parenting support and psychoeducation are key components of a public health approach that provides comprehensive, integrated care for children and families. Future models of care that meet the health needs of children will be those that engage parents and families in a collaborative, community-centered approach and address the unique cultural values and linguistic needs of children and families (Bright Futures b, 2008; Murray-Swank & Dixon, 2004).

A Coordinated and Integrated Model of Care

The boundaries of the child mental health workforce are rapidly expanding, driven by market forces favoring treatment in primary care, consumer preference, workforce shortages, and the federal ideology of how child mental health services should be prioritized. Recently, key government reports converged on the idea of a prevention-driven system organized along the lines of a Public Health Model. Such a model for children's mental health would involve the coordinated efforts of consumers and providers at all levels of prevention and treatment: pediatric primary care providers, generalists in mental health, and specialists in child mental health care. A public health model would involve non-traditional service sites, particularly school-based services and juvenile justice. Finally, a public health model would require coordination across service levels as well as coordination between traditional and non-traditional services sites. Indeed, in a public health model a coordinated network of providers in traditional and non-traditional settings would work in concert to prevent emotional problems in children, identify children at risk for disorders, intervene early in the emergence of these disorders, and help families of children with severe emotional disorders (SED) move toward optimal health.

This vision of a coordinated public health model for children's physical and mental health will require all segments of the primary care and child psychiatry work force to come under a broad umbrella with scope of practice matched to level of child symptom severity and need. Many primary care pediatric groups have expressed an eagerness to address children's mental health needs; but it is not yet clear what will guide the match between a clinician's scope of practice and a child's severity of need. Child psychiatrists and pediatricians are among the first groups to propose a map for how levels of symptom severity will determine who delivers child mental health services and what knowledge, skills and training will be necessary (Committee on Psychosocial Aspects of Child and Family Health and Task Force on Mental Health, 2009). Clearly, for quality of care and safety, the health professions will need to address

how outcomes will be monitored, e.g. if care delivered matches practice guidelines, if children receive the appropriate level of care, and whether or not treatment yields positive outcomes.

Essential to realizing positive clinical outcomes for children is creating integrated models of care that enable and promote close interdisciplinary collaboration. Several models of integrated care currently exist and serve as exemplars for this vision. Settings that integrate primary care and child mental health services under the same roof are well-positioned to achieve the national goal of "Medical Homes" for children and families. In such settings, mental health providers are involved in providing primary care and collaborate with primary care practitioners in treatment planning, team meetings and providing consultation services to nontraditional settings such as schools. How these integrated practices grow and evolve will depend on changes in billing and reimbursement, as well as overcoming other challenges. In spite of these challenges, opportunities for APRNs in systems with various configurations of integrated care are exciting. To support this vision, formal education will be necessary to prepare advanced practice nurses in primary care and psychiatry to function well in integrated interdisciplinary environments. The fact that several models currently exist will support the development of educational models to prepare graduates to practice within an expanded interdisciplinary philosophy of care. Locating existing programs willing to be training sites that can provide supervision in therapy, medication management and consultation may be difficult, especially in rural parts of the country.

An APRN Workforce Prepared for Integrated Practice with Children.

What competencies will be needed by the future APRN workforce in order to provide integrated mental health care to children? At the foundation, advanced practice nurses in primary care and psychiatry will need a strong knowledge base in child development. The signs and symptoms of mental disorders in children are age-dependent and a child's expression of symptoms and modes of communicating emotional distress are influenced by psychosocial and cognitive development (Nardi, 2007). Thus for primary care practitioners and PMH-APRNs, assessment and intervention with children will require a foundation of developmental knowledge and skills, and the ability to engage and collaborate with parents, school professionals, and others in the child's environment.

Beyond this grounding in child development, the PMH-APRN will need to master the expanding knowledge base of scientific advances in child psychiatry that have occurred over the past 20 years, including evidence-based treatment modalities specific to children and families and pediatric psychopharmacology. As more children are treated for mental illness in primary care settings, PMH-APRNs who specialize in the care of children with serious emotional disorders will be relied on to treat a cohort of children with serious and complex mental disorders. Thus competencies for Family Psychiatric Mental Health Nurse Practitioners must be established at a level sufficient to address the needs of children and families who carry a more significant disease severity and illness burden.

Perhaps the greatest challenge in crafting APRN educational programs to prepare practitioners for an integrated public health model is how fit this future vision within existing models and guidelines for advanced practice nursing education. *The National Taskforce Criteria for Nurse Practitioner Programs* provides accreditation standards and guidelines for the education of nurse practitioners. This document informs programs to provide supervised clinical hours in the population focus in the following way: *The NP program/track has a minimum of 500 supervised clinical hours overall. Clinical hours must be distributed in a way*

that represents the population needs served by the graduate (Criterion III. E)**.** Clinical practice *hours* refer to hours in which direct clinical care is provided to individuals, families, and populations in *population-focused* areas of NP practice; *clinical hours* do not include skill lab hours, physical assessment practice sessions, or a community project. Clinical experiences and time spent in each experience should be varied and distributed in a way that prepares the student to provide care to the populations served. For example, a PMH-NP (family) student should receive experiences with individuals/families across the life span. In addition, whereas 500 *clinical hours* is regarded as a minimum, it is expected that programs preparing NPs to provide *direct care* to multiple age groups, e.g. Family PMH-NP (or lifespan), will exceed this minimum requirement" (NTF, pg.9). This statement has been endorsed by the following organizations:

American Academy of Nurse Practitioners Certification Program
American Association of Colleges of Nursing
American Association of Critical Care Nurses Certification Program
American Nurses Credentialing Center
Association of Faculties of Pediatric Nurse Practitioners
Commission on Collegiate Nursing Education
National Association of Nurse Practitioners in Women's Health
National Certification Corporation for Obstetric, Gynecologic & Neonatal Nursing Specialties
National League for Nursing Accrediting Commission
National Organization of Nurse Practitioner Faculties
Pediatric Nursing Certification Board

Currently advanced practice programs are considerably varied in how clinical hours are distributed across age groups. Some programs are very specific in designating the number of clinical hours a student will have in caring for each age group in particular practice settings. Other programs allow students to select the ages and practice settings they are interested in; a practice that has come under greater scrutiny by State Boards of Nursing and AACN. By definition, pediatric nurse practitioner (PNP) programs confine the 500 supervised clinical hours to children ages 0-21, while family nurse practitioner (FNP) programs must distribute these clinical hours across the life span. FNP programs aim to prepare life span generalists to deliver competent care to well and ill children and adolescents, as well as adults and older adults. Existing FNP programs often require 600 or more total clinical hours and divide these clinical hours into quarters; one-quarter of clinical hours with children ages 0 to 13, one-quarter with individuals ages 14-55, one-quarter with adults age 55 and over, and one-quarter in women's health (which may include females ages 9-13). Currently there does not appear to be an overt statement about PNP versus FNP scope of practice and the overlap regarding the care of children and adolescents.

Primary care practitioners Educators of primary care practitioners recognize the need for greater emphasis in mental health but few primary care programs currently provide an adequate foundation of knowledge and skills to prepare graduates for mental health assessment and interventions with children (Hawkins-Walsh & Stone, 2004). Additionally, options are needed for post-graduate education of primary care practitioners who desire expanded preparation in children's mental health (Delaney, 2008).

The American Academy of Pediatrics in collaboration with the American Academy of Child and Adolescent Psychiatry detailed the mental health competencies for primary care providers (AAP, 2009). Among these competencies are ones that would be required to assess, screen, and initiate treatment for non-co-morbid mental health conditions that may first appear during childhood and adolescence. In a related document, the AAP and AACAP noted the need for collaboration between primary care and child psychiatry when a child's mental health problems do not improve with initial intervention, or when a child or adolescent presents with a severe degree of impairment and/or complex coexisting conditions (AAP & AACAP, 2009). This differentiation between mental health competencies for primary care and psychiatric care serves as a relevant model for the preparation of advanced practice nurses.

Recommendations

For Primary Care Programs preparing Advanced Practice Nurses. In anticipation of their greater involvement in future mental health service delivery for children, the ISPN task force recommends the following competencies for graduates of primary care practitioner programs:
1. Implement parent psycho-education and anticipatory guidance for mental health promotion and prevention of substance use and common mental health problems in children.
2. Screen for and assess common childhood mental disorders, e.g. autistic spectrum disorders, disruptive behavior disorders, anxiety disorders, depression, suicidality, and substance use.
3. Implement practice guidelines and evidence-based preventive interventions for common, non-co-morbid childhood mental disorders.
4. Educate parents in basic behavior management skills.
5. Consult with psychiatric mental health providers to determine the appropriate level of care for children and adolescents who do not improve with initial mental health interventions.
6. Identify and refer children and adolescents with severe emotional impairments and/or complex mental health needs and co-morbid conditions to appropriate psychiatric mental health providers.
7. Engage in collaborative communication and integrated practice with providers of child psychiatric mental health services.

For programs preparing Psychiatric Mental Health Advanced Practice Nurses.
In addition to the primary care competencies listed above, the ISPN task force recommends the following competencies for the preparation of PMH-ARNPs and PMH-CNSs who provide specialty mental health services to children. Minimum entry-level preparation of the Family PMHNP for psychiatric mental health practice across the lifespan should include, but not be limited to, the following competencies:
1. Assess and diagnose complex and co-morbid psychiatric and substance use disorders in youth.
2. Initiate and manage psychopharmacological interventions for children and adolescents based on existing practice standards for pediatric psychopharmacology and the evolving evidence-based literature in this field.
3. Implement developmentally informed psychotherapeutic interventions and therapy modalities for children, adolescents, and families, including:
   - Play therapy and narrative therapy modalities for young children.

- Cognitive behavior therapy with children and adolescents.
- Parent behavior management training and parent-child interactive therapies.
- Family therapy

4. Implement a family-centered approach to psychiatric mental health practice with children and their families.
5. Exercise leadership and advocacy for the integration of mental health care within systems that provide services for children and families, e.g. the health care system, educational system, juvenile justice system, child welfare and adoption services.
6. Coordinate the delivery of mental health services when multiple systems are involved in providing care and services for individual children and their families.

Questions remain about how many clinical hours are necessary and how they will be distributed across age groups in Family Psychiatric Mental Health Nurse Practitioner programs. FNP programs might serve as an example. Here it is common for programs to require more than 500 supervised clinical hours to prepare graduates for practice across the lifespan. A bold approach might be to use the NIMH National Comorbidity Survey (NCS-R) data as a guide for determining clinical hour distribution in programs preparing practitioners in psychiatry. For example, based on national prevalence data, Family PMHNP programs would distribute half of students' clinical practicum hours with children up to age 14 (when 50% of mental disorders emerge), 25% with youth ages 15 to 21, and the remaining clinical hours with adults and older adults.

Family PMHNP programs should assure that a representative proportion of supervised clinical practicum hours are completed with children from birth through young adulthood when the majority of mental disorders arise. After completing basic advanced practice education, graduates of Family PMHNP programs should be encouraged to continue their educational preparation for specialty practice with children and adolescents through post masters and doctoral education. National certification examinations should be developed to recognize an advanced practice nursing specialization in children's psychiatric mental health care for psychiatric nurse practitioners and for those educated across the life span in Doctor in Nursing Practice (DNP) programs in psychiatric mental health nursing.

Conclusions

The boundaries within which child mental health care will be delivered are rapidly expanding with national trends pointing toward needs-based, patient and family-centered services delivered through an integrated public health model. Advanced practice nurses in primary care and psychiatry are well-positioned to exercise leadership in creating exemplary models of collaborative practice that address the mental health needs of children. In order to meet this challenge, educational programs for advanced practice nurses will need to provide the necessary foundation in curriculum content and clinical experiences for competent practice in child mental health.

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