

SUBSTANCE USE DISORDER CURRICULA IN MEDICAL, NURSING, AND PHYSICIAN ASSISTANT SCHOOLS

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Purpose

The National Center for Health Workforce Analysis (NCHWA) and the Substance Abuse and Mental Health Services Administration (SAMHSA) requested the Behavioral Health Workforce Research Center (BHWRC) respond to a rapid request to better understand substance use disorder (SUD) curriculum in medical, nursing, and physician assistant (PA) schools. The BHWRC responded to the following questions:

1. How is SUD curriculum integrated into existing content in medical, nursing, and PA schools? Please include course format (e.g., hybrid, in-person) and education hours.
2. What are the barriers to incorporating SUD curriculum into existing content?
3. What are the facilitators to incorporating SUD curriculum into existing content?

A literature review was conducted and included peer reviewed literature, gray literature, and educational accrediting bodies and curricula for medical, graduate-level nursing, and PA schools. The search strategy is presented in Appendix I.

Introduction and Need

The rate of SUDs continues to rise across the U.S., currently matching the prevalence of diabetes and heart disease at 8% to 12% percent of the general population (Lowe et al., 2022). While the prevalence of SUDs increases, less than 10% of those who experience SUD receive treatment (Substance Abuse and Mental Health Services Administration, 2021). Lack of SUD treatment is connected to a shortage of specialty behavioral health clinicians. Given the shortage in the addiction specialist workforce, enhanced training is needed across medical, nursing, and PA professions to detect and treat patients with SUDs. As such, the medical (Muzyk et al., 2019), nursing (Smothers et al., 2018), and PA (Mattingly, 2019) professions have called for increased efforts to prepare and train current and future health care professionals to respond to SUDs (Finnell et al., 2022).

Inclusion of SUD Curriculum Integrated into Existing Content in Medical, Nursing, and Physician Assistant Schools

Curriculum Requirements

Educational accrediting bodies specify the education requirements and learning outcomes required for each profession. These requirements provide education programs with a framework for developing their curriculum standards and learning competencies. Though the standards and competencies are not synonymous terms, they are interrelated in what students learn within required curricula content and courses. In conducting a literature review of the SUD

curriculum in medical, graduate nursing, and PA programs, we examined each profession's curriculum requirements and learning competencies based on the following definitions:

Curriculum requirements: There are *specific* statements and learning outcomes describing the content that must be included in didactic and/or clinical training.

Learning competencies: These are *general* statements that describe the knowledge, skills, and behaviors that students must demonstrate in didactic and clinical settings.

Among the three professions, only the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) requires the inclusion of SUD in their curriculum. ARC-PA introduced required SUD content into their didactic curriculums starting in 2020 (ARC-PA, 2023). However, clinical curriculum requirements are still not required across the three professions.

Due to the Medications Access and Training Expansion Act (MATE) as part of the Consolidated Appropriations Act of 2023 there is no longer the Drug Enforcement (DEA) waiver training. Yet, in order to gain new or renew DEA registration to deliver buprenorphine and other medications for SUDs, providers will continue to need training. As of June 27, 2023, eight hours of training is the minimum requirement on the topics of opioid or other SUDs. SAMHSA, in collaboration with accrediting bodies and key stakeholders, developed a set of recommended core curricular training elements (Substance Abuse and Mental Health Services Administration, 2023). These elements are included in Appendix II.

Given the lack of SUD curriculum requirements, this rapid response is largely informed by peer-reviewed studies that examined SUD-related trainings for medical, graduate nursing, and PA students, as well as organizations and state-based working groups that have recommended SUD curriculum guides and learning competencies for students in these professions.

SUD Curricula in Medical Schools

Despite expectations for the next generation of medical providers to provide treatment for individuals with SUDs, there are currently no required curriculum standards within medical schools for SUD/addiction (Ayu et al., 2017; Servis et al., 2021; Welsh et al., 2020). The Liaison Committee on Medical Education (LCME), which accredits all U.S. medical schools, currently only requires that each school include "behavioral subjects" in its medical curricula, but there is no specific mention of requirements for SUD training (Ram & Chisolm, 2016). Further, key words in SUD training such as "addiction," "substance," and "drug," are absent from the 2023- 2024 LCME standards (Liaison Committee on Medical Education, 2022).

Although there are no specific SUD curriculum requirements in medical school training, the majority of medical school programs are including SUD training content in their curricula. For

example, the Association of American Medical Colleges (AAMC) surveyed medical schools and colleges in the U.S. in 2022 and reported 148 schools out of 157 cover opioid addiction and pain management during required pre-clerkship course experiences, 143 during required clerkships, 85 during required didactic sections in Years 3 and 4 of the curriculum, and 46 during clinical experiences in the pre-clerkship period (Association of American Medical Colleges, 2021, 2022). Notably, training methods used to deliver this SUD curricula varies across medical programs. As such, SUD content is not consistently taught, nor is it delivered at the same time of one's training (e.g., first-year course versus a fourth-year clinical rotation) (Singh & Pushkin, 2019; Sun et al., 2022). SUD curricula often include didactic components which include small group learning and case-based learning (Cooper et al., 2020). In an older study conducted in 2000, a survey of n=1183 directors of a variety of medical residency programs found that approximately 56% of programs offered training in SUDs, with a median number of seven hours of training devoted to the curriculum throughout the length of residency (Isaacson et al., 2000). Further, a 2019 study indicated that only 15 of 180 medical schools had a formal addiction teaching curriculum (Hoffman, 2018).

To increase medical school graduates' competence in SUDs and addiction, several states have enacted state legislation and established work groups to ensure medical student trainees receive SUD education. For example, in 2014 the Pennsylvania Physician General created a task force in response to increasing drug overdose deaths from 2013-2015 to develop learning competencies on education in addiction and opioids for all Pennsylvania medical schools (Ashburn & Levine, 2017). Additionally, the six medical schools of the University of California (UC) System appointed an opioid crisis workgroup to develop educational strategies and competencies for adoption across all UC medical schools that address pain, SUDs, and public health issues stemming from the opioid crisis (Servis et al., 2021). In another example, the Warren Alpert Medical School of Brown University hosted a national, multidisciplinary, interprofessional symposium on curriculum development in opioid management in medical schools attended by geographically diverse health professional experts in pain, addiction, and medical education (Wallace et al., 2020). The symposium identified a need for learning competencies to include a focus on pain management, opioid use disorder (OUD), and patient-centeredness (Wallace et al., 2020). The resulting curriculum guides can serve as a framework or blueprint for integration of SUD content into medical training curricula. More details on these curriculum guides are described in Appendix II.

SUD Curricula in Graduate-Nursing Schools

The Accreditation Commission for Education in Nursing (ACEN) and the Commission on Collegiate Nursing Education (CCNE) are the two professional organizations that establish quality standards for nursing education, assist schools in implementing educational standards, influence the nursing profession to improve health care, and promote public support for professional nursing education, research, and practice (Accreditation Commission for Education

in Nursing, 2023a; American Association of Colleges of Nursing, 2023b). The ACEN provides specialized accreditations for all levels of nursing education and transition-to-practice programs in the U.S., including clinical doctorate/DNP specialist certificate, master's/post-master's certificate, baccalaureate, associate, diploma, and practical nursing programs (Accreditation Commission for Education in Nursing, 2023b). The CCNE is an autonomous arm of the American Association of Colleges of Nursing (AACN), the latter of which represents more than 865 member schools of nursing housed at public and private universities across the U.S. and maintains eight Leadership Networks for nursing school faculty and staff involved in research, instructional development, faculty practice, organizational leadership, business operations, graduate student recruitment, and development and communications (American Association of Colleges of Nursing, 2023a).

The degree to which SUD curriculum is embedded within graduate nursing programs remains unknown given a dearth of research on how many nursing programs in the U.S. include SUDs in their curricula. The AACN led the national consensus-based development of the Core Competencies for Professional Nursing Education which outline competency expectations for graduates of baccalaureate, master's, and Doctor of Nursing Practice (DNP) training programs (American Association of Colleges of Nursing, 2023); however, these competencies do not mention the terms "substance use", "SUD", "OUD", or "addiction" specifically (American Association of Colleges of Nursing, 2023). In 2002, the addition of SUD education in graduate nursing education programs was accelerated in response to emerging specified competencies, initially published by the Association for Multidisciplinary Education and Research in Substance Use and Addiction (Rutkowski, 2019; Tierney et al., 2020). These competencies, later updated and expanded in 2018, continue to define minimal standards of SUD care at the graduate level and promote the infusion of nursing knowledge and skills into all clinical practice settings (Tierney et al., 2020). Yet, these are voluntary competencies and not uniformly included in graduate nursing education.

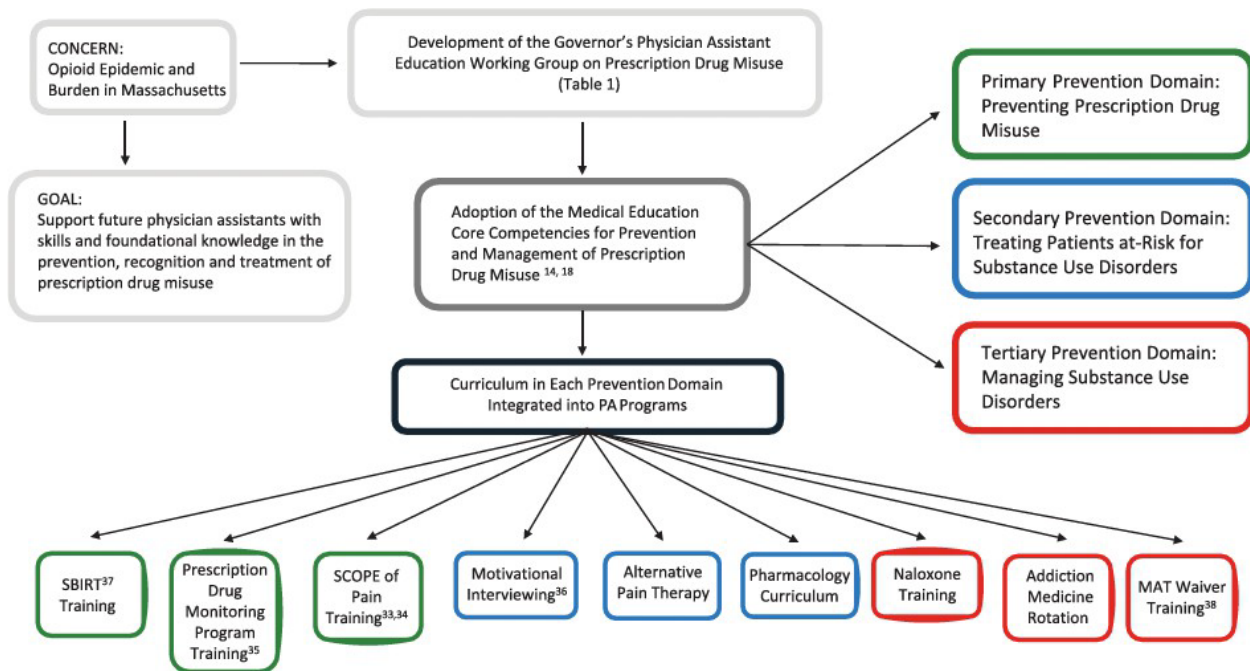
Although there are no SUD requirements in graduate level nursing education, there are existing SUD-related competencies that align with national nursing specialty certifications at and include the Psychiatric-Mental Health Nursing Scope and Standards of Practice (American Psychiatric Nurses Association, 2014), and the Addictions Nursing Scope and Standards of Practice (American Nurses Association, 2013), which align respectively with the American Nurses Credentialing Center's certifications of Psychiatric Mental Health Nurse Practitioner (PMHNP) and Psychiatric Mental Health Registered Nurse (PMHRN), and with the Addictions Nursing Certification Board's designations of Certified Addictions Registered Nurse (CARN) and Certified Addictions Registered Nurse, Advanced Practice (CARN-AP) (Tierney et al., 2020). Increased endorsement and implementation of these competencies during graduate nursing education programs could be used to guide future development of SUD content and immersion into training curricula (Tierney et al., 2020).

SUD Curricula in Physician Assistant Schools

The American Academy of Physician Assistants (AAPA) is the professional society for PAs which advocates and educates on behalf of the PA profession and the patients PAs serve (AAPA, 2023). In 2019, the AAPA surveyed PAs to understand their level of competency in diagnosing, treating, and managing SUDs. Results of this national survey (N=532) indicated that PAs skills and abilities to competently treat SUDs were lower than what they desired and felt necessary for clinical practice (AAPA, 2020). As such, the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA, 2023) included SUDs within the standard requirements of didactic education. The SUD education requirement is a subcategory of the social and behavioral sciences didactic requirements (e.g., death, dying, and loss, human sexuality, and violence identification and prevention) (ARC-PA, 2023). While the PA profession has made SUD education a requirement, the decision of how this is incorporated into the schools' curricula is left at the discretion of each training program. Specifically, the ARC-PA (2019) accreditation standards state: *"The Standards allow programs to remain creative and innovative in program design and the methods of curriculum delivery and evaluation that are used to enable students to achieve program goals and student competencies. Mastery of program defined competencies is key to preparing students for entry into clinical practice"* (p.4).

As it relates to the PAs education, *curriculum requirements* are connected to didactic learning outcomes, whereas *program competencies* are connected to the clinical education outcomes. While there are curriculum requirements related to SUDs, the PA profession has yet to create adapted learning competencies related to SUD education and training. The extent to which SUD curriculum is embedded within PA programs is unknown, as to date, no current study has examined how many PA programs include SUDs in their curricula. However, a study by Yealy and colleagues (2019) found that 180 out of 209 PA programs included pain education into their curriculum, which typically involves content related to reducing prescription pain medication use/misuse, prevention of overdose, and recognizing signs of SUDs. In searching publicly available curriculums among PA schools across the U.S., three schools described the components of their required SUD education on their program websites (see Table 1). Further, the Massachusetts Academy of PAs came together with all nine PA programs in the state to develop learning competencies (White et al., 2019) and a web-based Screening Brief Intervention Referral to Treatment (SBIRT) training module has been created throughout five PA programs in the midwestern US (Tenkku Lepper et al., 2019) (See Appendix 1; additionally, a MA specific model was created to adopt and implement the education learning competencies for the prevention of prescription drug misuse (see Figure 1) (White et al., 2019).

Figure 1. Workflow for adoption and implementation of education learning competencies for the prevention and management of prescription drug misuse (White et al., 2019).



Peer-Reviewed Substance Use Related Trainings and Studies

In attempt to further educational opportunities for medical, graduate nursing, and PA students related to SUDs, various studies across the fields have been conducted to educate and train students in SUD diagnosis and treatment modalities. A summary of the studies' findings is presented in Table 2, including the topical area, method, duration, and description of training.

Medical school training: Eighty-nine peer-reviewed publications investigating the presence of SUD training in medical school program curricula, including clerkships, were identified through a literature search between the years 2008 and 2023. Of these publications, 34 focused specifically on SUD education during residency, 15 on curriculum and competency development, 14 on training program content, 13 on barriers and facilitators to SUD education in four-year medical school curricula, 7 on supplemental SUD training curricula, 4 on SBIRT training, and 3 on Drug Addiction Treatment Act of 2000 (DATA 2000) Waiver training. Given the wealth of studies assessing SUD training in medical school curricula, 11 examples are outlined in Table 2.

Nursing school training: In the last 11 years (2012 - 2023), twenty-nine peer-reviewed studies investigating the presence of SUD education in nursing program curricula were located during a review of relevant literature. Of these, 10 focused on facilitators and barriers to integrating SUD content into training program curricula, 7 on competency and curriculum development, 7 on SUD content broadly, and 5 on SBIRT training. Five exemplary studies examining SUD education

in nursing programs are highlighted in Table 2: three on SBIRT training, one on MOUD, one on motivational interviewing.

PA school training: Seven peer-reviewed publications were found (2013-2022) that examined the results of substance related training for PAs. Two of the PA studies looked at Medication for Opioid Use Disorders (MOUD), one of the studies addressed SBIRT, one study focused on waiver training, one study looked specifically at OUD, one looked at pain management, and one study looked broadly at SUDs. All seven studies are described in Table 2.

Interprofessional SUD Training Studies: Some of the literature discussing trainee exposure to specialized SUD-focused content is primarily focused on interprofessional courses in clerkships and fellowships, such as lectures and team-based learning courses. One example of an interdisciplinary course is a 2021-2022 pre-clerkship course offered through the Duke University School of Medicine (Muzyk et al., 2023). This pre-clerkship course was embedded within a 21-week Foundations of Patient Care class intended to bridge biomedical sciences and clinical education to prepare students for the clinical learning environment (Muzyk et al., 2023). Enrolled students engaged in learning through a mixture of synchronous and asynchronous activities including live lectures (approximately 50 minutes in length), lecture recordings (50 minutes), person-centered workshops, team case-based learning (2.5 hours), motivational interviewing of a standardized patient (20 minutes per session), and an opioid overdose simulation exercise (15 minutes). The design of the course involved community advocates, interdisciplinary faculty, and persons with an SUD. A 2020 scoping review of n=14 studies of interprofessional SUD education in health professions education programs found that educational interventions improved students' SUD-related educational outcomes, with nine of those studies reporting on educational outcomes related to SUDs and three exploring educational outcomes beyond satisfaction and attitudes (Muzyk et al., 2020). Educational interventions discussed in the reviewed studies included faculty and patient panels, small- and large-group discussions, simulation and standardized patient exercises, case-based exercises, web-based modules, didactic lectures, mentoring, and reflection paper assignments (Muzyk et al., 2020).

Summary of SUD Training Studies: Across the three professions there was a priority of the delivery of MOUD and SBIRT-focused trainings. It appears that the many studies related to MOUD were focused on preparing students for the previous DATA buprenorphine waiver programs and mechanisms to increase the likelihood that the providers would deliver MOUD post-graduation. Further, many training programs were rooted in addressing the ramifications of pain management that may include addiction. It appears that the integration of SUD curriculum varies significantly in duration, with some trainings lasting a few hours while others several weeks. Similarly, the method also varied across studies, inclusive of didactic lecture based, as well as integration of clinical training via clerkships and medical residency rotations.

Table 1. Studies examining SUD trainings.

Training Topical area	Modality of training; hours of training; type of training	Description of training
Medical Training		
SBIRT (Kidd et al., 2020)	<p>1st year of medical school, 2nd semester:</p> <ul style="list-style-type: none"> • Addiction-focused motivational interviewing small group and role-play (60 minutes) • Motivational interviewing and brief intervention didactic (60 minutes) • SBIRT standardized patient small group (90 minutes) • SUDs course (120 minutes) • General medical motivational interviewing role-plays (120 minutes) <p>2nd year, 1st semester:</p> <ul style="list-style-type: none"> • 12-step/self-help class (60 minutes) • 12-step group visits • Alcoholics Anonymous Small Group Discussion (120 minutes) • SUD screening class (60 minutes) • SBIRT Objective Structured Clinical Exam (OSCE) (i.e., a method to 	Enhanced Pre-Clinical SBIRT Curriculum designed to reduce stigma, help medical students empathize with the experiences of people using alcohol and drugs, understand substance use in-context, and feel more optimistic about efforts to prevent and treat SUDs. This study evaluated the substance-related attitudes of medical students who participated in the curriculum.

Training Topical area	Modality of training; hours of training; type of training	Description of training
	<p>assess clinical competence in medical school)</p> <ul style="list-style-type: none"> • Two SUD small group case discussions (180 minutes) • Neurobiology of addiction class (60 minutes) • SUDs course (100 minutes) 	
SBIRT (Tetrault et al., 2012)	<p>Didactic/practice portion: 1-1.5 hours of instruction.</p> <p>Standardized patient portion: 1-1.5 hours (15-minute time slots)</p> <p>Internal medicine (3rd or 4th year residents in traditional medicine, primary care, and medicine/pediatrics): Two 1.5-hour sessions separated by 1 week OR two 1.5-hour sessions offered in a day-long “addiction curriculum” day.</p> <p>Psychiatry (2nd year residents): two 1.5-hour sessions separated by 1 week.</p> <p>Obstetrics and Gynecology (4th year residents): One 3- hour session.</p>	<p>Evaluation of the feasibility and acceptability of initiating a SBIRT for alcohol and other drug use curriculum across multiple medical residency programs. SBIRT project faculty in the internal medicine, psychiatry, obstetrics and gynecology, emergency medicine, and pediatrics programs were trained in performing and teaching SBIRT.</p> <p>The SBIRT project faculty trained the residents in their respective disciplines, accommodating discipline-specific implementation issues and developed a SBIRT training Web site. Post-training, residents were observed performing SBIRT with a standardized patient. Measurements included number of residents trained, performance of SBIRT in clinical practice, and training satisfaction.</p>

Training Topical area	Modality of training; hours of training; type of training	Description of training
	<p>Emergency medicine: One 2-hour session during an allotted weekly 5-hour resident education block.</p> <p>Pediatrics (2nd year and 3rd year residents): One 2.5- hour session during required adolescent medicine rotation.</p>	
SBIRT (Neufeld et al., 2012)	3 days, 15-hour course focused on SUDs and SBIRT. The course included 5 hours of direct patient interaction during clinical demonstrations and in small-group skills development.	Course for 2nd year medical students that used SBIRT as the course foundation. The course arose from collaboration between faculty in the Departments of Medicine and Psychiatry. This course was also 1 of 7 preclinical intersessions featured in a “Genes to Society” curriculum (i.e., a model of health a disease based on how individuals adapt to their environment).
SBIRT (Wamsley et al., 2018)	<p>Hours and modalities not defined in the study; training emphases for physicians and nursing were:</p> <ul style="list-style-type: none"> • Physician: Diagnosis and treatment of acute and chronic illness; Evidence-based practice; Variable inclusion of curricular content on alcohol and drugs in post-graduate training depending on specialty. • Nursing: Physical assessment; Caring practices; Evidence- based 	Review of current literature regarding SBIRT effectiveness, training, and implementation by MDs, nurses, psychologists, and social workers. An SBIRT expert and representative from each health profession synthesized literature and training experiences to inform the development of interprofessional training and collaborative implementation strategies.

Rapid Response Request

Training Topical area	Modality of training; hours of training; type of training	Description of training
	practice; Diagnosis and management of acute and chronic disease by Advanced Practice Registered Nurses.	
DATA 2000 Waiver (McCance-Katz et al., 2017)	24-hour Substance Misuse Curriculum for pre-clerkship (MS I and II), clerkship, and clinical years (MS III and IV): spans all four years of medical school with 3 hours of classroom didactics.	Proposed model at the Brown University Alpert Medical School in which medical students complete the necessary training to be eligible for the waiver to prescribe opioid medications to treat these disorders by the time of medical school graduation.
DATA 2000 Waiver (Zerbo et al., 2020)	Hybrid online (3.5 hours) and in-person (4.5 hours) waiver training. The online portion had to be completed within 30 days of the mandatory in-person training.	Training as part of a longitudinal opioid curriculum requirement for all rising Year 4 medical students.
DATA 2000 Waiver (Lien et al., 2021)	Two options to complete the online 8-hour MAT waiver training over eight weeks: <ul style="list-style-type: none"> • 4.25-hour webinar, 3.75-hour self-paced module. • Self-paced 8-hour modules. 	Zero cost MAT waiver training integrated into Wayne State University's School of Medicine's 8-week Internal Medicine clerkship (3rd year medical students).
SUD focus in clerkships (Oldfield et al., 2020)	Workshop delivered at the midpoint of the 12-week combined psychiatry-	Mandatory workshop on harm reduction for clerkship medical students with a curriculum informed by the Department of Veterans Affairs' Overdose Education

Training Topical area	Modality of training; hours of training; type of training	Description of training
	<p>primary care clerkship at the Yale University School of Medicine.</p> <p>Didactic and discussion-based content, including two video clips and an active demonstration of naloxone administration.</p>	<p>and Naloxone Distribution (OEND) program.</p>
<p>SUD focus in clerkships (Tookes et al., 2022)</p>	<p>In-person, didactic training:</p> <ul style="list-style-type: none"> • 60-minute OUD small group case study followed by discussion. • 60-minute patient panel with a large group, with focus on OUD recovery and experiences of stigma. 	<p>Small-group, case-based activity delivered via videoconference to facilitate analytical student thinking about OUD, harm reduction, and the impact of stigma on providing care to patients with OUD. Patient panel with three patients with OUD, with moderation by physician with expertise in treating patients with OUD. The panel focused on patient recovery experiences and stigma and was intended to assist with student documentation skills during a medicine clerkship.</p>
<p>SUD focus in clerkships (Feeley et al., 2018)</p>	<p>Didactic and clinical components:</p> <ul style="list-style-type: none"> • 7 one-hour lectures. • Independent patient evaluation and treatment plan development. 	<p>Mandatory psychiatry curriculum at 3rd and 4th year medical school clerkship sites.</p>
<p>Innovations in SUD training (Monday et al., 2020)</p>	<p>Content delivered in 26 sessions (22 mandatory and 4 optional) during didactic PowerPoint lectures, case- based role playing; procedures on cadavers; a</p>	<p>Residency preparation “boot camp” nonprocedural elective course for 4th year medical students. Content divided into six interrelated domains: patient</p>

Training Topical area	Modality of training; hours of training; type of training	Description of training
	<p>session on teaching and giving feedback. 12 symptom-based modules covering common clinical scenarios.</p> <p>The curriculum was adapted for remote synchronous delivery due to the pandemic in 2020 using a combination of didactic lectures and case-based role play responses using a chat box.</p>	<p>care; medical knowledge; practice-based learning and improvement; interpersonal communication skills; professionalism; and systems-based practice.</p>
Nursing Training		
SBIRT (Knopf- Amelung et al., 2018)	<p>SBIRT training was taught in approximately 6 hours of coursework.</p> <p>Didactic instruction (SBIRT overview), either in- classroom, using asynchronous narrated slides, or 4- hour asynchronous interactive online course.</p> <p>Role-playing with peers, practicing with 2 SPs, and implementation of SBIRT in clinical rotations.</p>	<p>3-year study of n=256 BSN students trained in SBIRT during a Management of Mental Health course during their junior year: n=95 in- person, n=99 via narrated slides; n=62 via online course.</p>
SBIRT (Fioravanti et al., 2018)	<p>Didactic learning (module on sensitivity learning): duration and format not described.</p> <p>Simulation in small groups via a simulation center: duration not described.</p>	<p>Study investigating a curriculum integration project (Addiction Training for nursing trainees using SBIRT, or ATN-SBIRT) combining cultural competency education, simulation, and educating students to use SBIRT for alcohol and other drug use in one course. Students were within their junior year of an</p>

Training Topical area	Modality of training; hours of training; type of training	Description of training
		undergraduate psychiatric-mental health nursing course at the University of Pittsburg School of Nursing.
SBIRT (Lukowitsky et al., 2022)	<p>7-hour SBIRT training program:</p> <p>Online module on risky substance use, SUDs, validated screening tools, MI, brief interventions, and sample SBIRT interventions (3-4 hours).</p> <p>In-person didactics involving review of online module, sample patient screening, and video SBIRT demonstrations (1.5 hours).</p> <p>Role-playing in SBIRT simulation (1.5 hours).</p>	Study evaluating the beliefs and attitudes of graduate health care trainees toward individuals with SUDs and to assess the effect of SBIRT on those attitudes and beliefs. Participants were N=461 students from a variety of healthcare-related disciplines: PA (n=53), nurse practitioner (n=66), pharmacy (n=136), psychiatry and psychology (n=38), and medical students (n=168).
MOUD (Barcelona et al., 2022)	<p>24 total hours of training:</p> <ul style="list-style-type: none"> • First 8 hours of training offered as fully online or as hybrid (virtual didactic and online) options. • Remaining 16 hours of training completed via self-paced training. 	Innovative approach incorporating DEA X-waiver training in a required community health APRN course in partnership with addiction medicine clinicians.
Motivational Interviewing (McMorrow & Chang, 2021)	3-day curriculum of brief didactic lectures, student role-playing, and a standardized patient (SP) simulation.	This study aimed to determine whether motivational interviewing training with a standardized patient simulation improved

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Training Topical area	Modality of training; hours of training; type of training	Description of training
	<p>Two hours of didactic lectures that reviewed mental health and SUDs, motivational interviewing (MI), and an overview of the SP simulation process.</p> <p>35-minute SP simulation using MI.</p>	<p>APRN students' knowledge, confidence, and skills in MI.</p>
PA Training		
<p>Pain management (Doorenbos et al., 2013)</p>	<p>In-person; didactic and clinical education</p>	<p>1) Case-based learning: Use of real or simulated stories that include patient problems/symptoms. 2) Didactic: A Power Point presentation or lecture that may include brief question-and-answer sessions. 3) Problem-based learning: Focused, experiential learning that is organized around the investigation of clinical problems. Learner groups are presented with a case and set their own learning objectives. 4) Simulation-based learning: Simulations (low tech or high tech) duplicate clinical scenarios and allow learners to engage in activities that approximate realistic situations. 5) Team-based learning: Teacher-directed method for incorporating small-group active participation in large-group educational setting. Learners must actively participate in and out of class (preparation and discussion).</p>

Training Topical area	Modality of training; hours of training; type of training	Description of training
MOUD (Ma et al., 2022)	Online; 24 hours; didactic training	This study was conducted to assess perceived quality and value of MOUD waiver training and to determine if training improved student self-reported knowledge, confidence, interest in, comfort with, and likelihood of caring for future patients with SUD and OUD.
MOUD (Phelps et al., 2021)	<p>Online; 24 hours; didactic training</p> <p>The online 24-hour timed training consisted of 11 objectives spread between one 8-hour and one 16-hour module. The 8-hour module has 29 components with a pretest, Eight 45- to 60-minute video presentations with cases, and one posttest of 20 questions. The 16-hour module comprises 32 components with 16 PowerPoint slide sets involving cases and 16 posttests with 4 to 6 questions each.</p>	The course content was comprised of the waiver materials available through the American Academy of PAs and the American Society of Addiction Medicine. The free online course includes 2 modules: the first 8-hour module was developed from the original online training for physicians and modified to fit PAs and NPs; a second module included 16 hours of additional training.
SBIRT (Scudder et al., 2021)	<p>In-person; 4-6 hours; didactic education.</p> <p>The training was conducted by the classroom instructor for each course and took place over a 6-week period of a 15-week semester.</p>	The training consisted of five modules: (1) Introduction to SBIRT and Screening, (2) Brief Intervention, (3) Referral to Treatment, (4) Medical and Psychiatric Complications of Substance Use, and (5) Pharmacologic Treatments. Of note, students in professions with prescribing privileges (e.g., PAs, Psychiatric NPs)

Rapid Response Request

Training Topical area	Modality of training; hours of training; type of training	Description of training
		underwent expanded pharmaceutical complications and intervention modules.
Waiver (Robbins et al., 2022)	<p>Hybrid; 8 hours; didactic education.</p> <p>The 4 hours of live instruction included didactic sections on the pharmacology of MOUD, diagnosis of SUDs, instruction on how to conduct a buprenorphine induction, and 3 interactive cases studies in which participants could apply their knowledge; the four hours of online instruction focused on medication assisted treatment.</p>	<p>1) 4 hours of live instruction included didactic sections on the pharmacology of MOUD, diagnosis of SUD, instruction on how to conduct MOUD induction, and 3 interactive cases studies in which participants could apply their knowledge.</p> <p>2) 4 additional hours of online content is sponsored by Providers' Clinical Support System for Medication Assisted Treatment (PCSS).</p>
OUD (Brown & Solh, 2021)	<p>In-Person; 7 hours; didactic.</p> <p>First, a 4-hour lecture series on OUD; Next, a 3-hour opiate prescribing education lecture series was given.</p>	<p>This study compared the didactic and clinical phase PA cohorts to determine the best time to integrate the OUD training in the curriculum.</p> <p>Curriculum overview:</p> <p>Overall, OUD treatment knowledge; history taking skills; discussing urine drug screen results; patient education and counseling skills; ability to formulate a treatment plan for patients with chronic pain complaints.</p>
SUD (Finnell et al., 2022)	Online; 6 modules. (Interprofessional, nursing, PA, pharmacy, and social work)	The purpose of this study was to have multiple professionals take the same online course and determine which

Rapid Response Request

Training Topical area	Modality of training; hours of training; type of training	Description of training
	<p>This course was mapped alongside AMERSA competencies.</p>	<p>modules match the current curriculum. Content of the 6 modules included:</p> <ol style="list-style-type: none"> 1. How can I show compassion toward patients with SUDs? 2. How do I know if my patient has a SUD? 3. How do I recommend treatment options? 4. What medications help patients manage their SUDs? 5. What psychosocial or behavioral therapies are available for patients with SUDs? 6. What societal factors impact successful recovery?

Barriers to Incorporating SUD Curriculum into Existing Content

Barriers in Existing Medical School Curriculum

Prior studies to identify major obstacles to incorporating SUD content into existing medical school curricula identified three main barriers: 1) insufficient time for new content, 2) limitations in the availability of staff and clinical sites to provide lectures and supervision for SUD content learning, and 3) incentivizing medical residents to spend an additional year or more applying to and completing an SUD-focused fellowship (Schwartz et al., 2018). Consequentially, survey studies of medical school graduates indicate feelings of unpreparedness toward caring for patients with SUDs, including knowledge and prescribing of medications (Morreale et al., 2020). Correction of current failings in medical SUD curricula coverage, including under- and misdiagnosis, stigma toward individuals with SUDs, and feelings of inadequacy or helplessness in treating SUDs, is critical content needed in medical training programs. A review of literature suggests that insufficient and underdeveloped SUD education curricula are attributable to a variety of factors, including: a lack of standardized addiction medicine competencies; a dearth of educators with the expertise and availability to provide SUD training and supervision; limited space in curricula for new SUD content additions; persistent stigma in educators and trainees; and difficulty attracting trainees due to a lack of financial incentives for completing additional training.

A Lack of Standardized Competencies in Addiction Medicine

Deficiencies in SUD training exists in both the pre-clinical and clinical medical school curricula. While the literature on SUD training in medical schools is limited, available studies demonstrate there is insufficient exposure to SUD content in pre-clinical medical school curricula, including classroom didactics, lectures, and small group learning (Ram & Chisolm, 2016). No national data on the number of medical school hours dedicated to addiction medicine exists and only minimal addiction medicine competencies are present in the National Board of Medical Examiners blueprints, making it challenging for schools to prioritize it as a topic (Smith, 2022). Prior studies indicate that medical schools in the U.S. devote an average of 12 hours of curricular time to substance use, with most formal training conducted via psychiatric didactics and clerkships (Rasyidi et al., 2012; Smith, 2022). One survey conducted by the Liaison Committee for Medical Education (LCME) found that 119 of the 125 U.S. accredited medical schools reported providing SUD education as part of a larger, required course at the time of the study, yet only 12 schools offered a separate required course and only 45 offered a separate elective course on SUD (Yoast, 2008).

Curriculum Space Limitations and the Dearth of Educators

Inadequate training in addiction medicine during medical school is partially attributable to an undersupply of educators with the qualifications and availability to provide supervision and instruction on SUD training. This shortage, in combination with difficulty in acquiring space for curricular additions, poses a challenge for integrating more SUD content into medical education. Despite every specialty in medicine involving treatment of patients with SUDs, departments may interpret the inclusion of addiction content as taking time away from

other important didactic and clinic teaching time (Lembke & Humphreys, 2018). Given the difficulty of securing “teaching blocks,” or a period set aside for exclusive teaching of a single subject, educators wishing to incorporate more SUD training are likely to encounter the obstacle of not being granted enough time to cover the necessary content (Lembke & Humphreys, 2018). Program curriculum developers may consider addressing these limitations by infusing SUD curricula into existing course topics, content, case studies, vignettes, and simulations (Poon et al., 2016; Ram & Chisolm, 2016).

Trainee and Educator Stigma

Insufficient exposure to persons with SUDs, in combination with limited faculty specializing in addiction medicine, leads to inadequate SUD training that allows stigma toward persons with addictions to continue (Rasyidi et al., 2012). A study of general psychiatry residents found trainees had generally poor perceptions of careers in addiction medicine due to concerns with their addiction medicine training experience (Renner et al., 2009). Cited concerns from study participants included a lack of competent faculty, not enough exposure to addiction patients, the challenges of working with “difficult” patients, and overemphasis during training on detoxification with limited exposure to long-term care methods (Renner et al., 2009). Other studies indicate that stigma increases when clinical content lacks relevant education, supervision, and reflection (Lundin & Hill, 2022). Studies assessing the root causes of stigma are minimal, creating challenges in targeting whether clinical experiences or attitudes passed on from senior staff members are more instrumental in affecting trainee attitudes (Lundin & Hill, 2022). Numerous studies indicate the attitudes of medical trainees toward patients with SUDs as trending toward more negative with increased clinical training, suggesting internalization of their supervisors’ negative attitudes toward addiction (Kidd et al., 2020). Additional studies of medical students suggest that positive attitudes toward patients with SUDs are associated with improved self-efficacy in delivering SUD treatment and increased recognition of the role of SUD treatment in clinical care (Kidd et al., 2020).

Challenges in Recruiting Addiction Medicine Fellows

Despite growing awareness of the opioid crisis and reported commitment to social justice among contemporary medical students, recruitment for addiction medicine and addiction psychiatry remains a challenge. Although one study noted the number of Accreditation Council for Graduate Medical Education (ACGME) accredited fellowship positions in addiction psychiatry is at an all-time high of 132, only 64% of available spots were filled (Morreale et al., 2020). Residents may be reluctant to invest in an additional year of training at a lower salary than would be possible if they entered independent practice (Lembke & Humphreys, 2018). Lackluster fellowship recruitment may also be due to poor coverage of SUD care by insurance plans, limiting the quantity of attractive employment opportunities available to graduating fellows (Lembke & Humphreys, 2018). While encouraging psychiatry residents to pursue subspecialty training in addiction medicine may be a potential method of increasing the number of SUD educators, additional training for non-psychiatric physician trainees is also necessary (Morreale et al., 2020). Though the shortage of qualified physicians knowledgeable in addiction medicine may lessen in the coming decades as this workforce is

expanded through addiction medicine fellowship training, the need for qualified providers outpaces current workforce growth.

Barriers in Existing Graduate Nursing School Curriculum

Gaps in graduate nursing education, particularly inadequate instructor knowledge of SUDs and insufficient classroom and clinical hours devoted to SUD training, are well- documented in the literature (Farrell, 2020; Mitchell et al., 2013). Since the Affordable Care Act's introduction in 2010, the capacity of health systems to serve a larger patient population has grown and with this, more nurse practitioners and PAs have been called upon to address increased demand for services (Kim et al., 2023). In particular, the role of advanced practice registered nurses (APRNs) in treating patients with SUDs has expanded in primary care. For example, data from a 2013 study indicated that nurse practitioners ranked third for opioid- related insurance claims for Medicare Part D that year, covering nearly 70% of the 50 million individuals insured through Medicare (Chen et al., 2016). However, one multidisciplinary study of nursing trainees found that 77% of surveyed physicians and nurse practitioners named fear of causing harm as a primary concern and 35% identified insufficient pain management education as barriers to safe and effective opioid prescribing (Spitz et al., 2011). One study posits the limited number of SUD content hours in nursing curricula contributes to a cycle in which nurses who lack the skills and knowledge to provide adequate care inadvertently contributing to the low proportion of those seeking and receiving care due to lack of education (Mitchell et al., 2013).

Stigma and Lack of Readiness to Treat

Studies investigating the prevalence of SUD content in nursing education programs indicate a lack of content on communicating about SUDs and addressing biases in SUD care. There is limited examination of nursing students' attitudes toward patients with SUDs, with some documentation of nursing students as having the least tolerant attitude toward persons with SUDs compared with students in social work, psychology, and health and social care fields (Harling, 2017). Without intervention and education, bias and stigma against patients with SUDs by nursing professionals may persist as they transition into professional healthcare practice (Lanzillotta-Rangeley et al., 2020). Prior studies indicate that delivery of care services can be negatively impacted by biases such as expecting persons with SUDs will be challenging to care for and distrust of persons with SUDs (Selby & Trinkoff, 2023). One survey study of nursing students (n= 567) suggested that trainees generally feel knowledgeable about screening and recognizing signs and symptoms of SUDs but lack experience in applying these skills, with trainees reporting they need more information on the effects of different substances and available treatments (Selby & Trinkoff, 2023).

Limited Time Availability in Current Curricula for New SUD Content

Similar to the barriers identified in medical curricula, a lack of adequate time and content in nursing education curricula to sufficiently teach SUD training has been long documented in the literature (Farrell, 2020). Results from a study of nursing program directors indicate time constraints and limited curricular flexibility as the largest barriers for including OUD content in graduate nurse practitioner programs, with respondents reporting

that additions to the curricula would overwhelm students (Kameg et al., 2021); other respondents indicated faculty resistance to adding to students' workload as a product of opioid coverage as not any more important than other topics (Kameg et al., 2021). Additions of SUD content to current nursing curricula remains a challenge given limited openings in educational programs for added information.

Barriers in Existing Graduate Physician Assistant School Curriculum

PA education is often adopted from medical education and therefore has similar barriers to standardizing the inclusion of SUD among PA programs curricula (Judd et al., 2002). PAs are well positioned to provide care for patients experiencing SUD, however, common barriers have been cited that prohibit comprehensive SUD education.

- 1) Limited availability of clinical rotations in psychiatry/behavioral health care. Fifty percent of PA program directors stated they have a very difficult time securing clinical placements in psychiatry/behavioral health care settings (Mattingly, 2019).
- 2) Without competencies for PAs regarding SUDs there is significant variation in both the didactic and clinical instructional methods. Further, this has created difficulty in promoting and recruiting PAs to practice in addiction medicine (Mattingly, 2019).
- 3) State level barriers in prescribing buprenorphine, such as restrictions on prescribing at all (i.e., in Illinois and Missouri) or requirements for physician supervision (Andraka-Christou et al., 2022). These barriers have been raised by PA programs as it is difficult to recruit students to study SUD when certain states will not allow PAs to prescribe buprenorphine (Ma et al., 2022).
- 4) Disagreement among PA programs in how SUD training should be included in the curriculum has led to lack of consensus and resulting curricula action (White et al., 2019).

Summary of Barriers

Barriers to integration of SUD content into medical, nursing, and PA education programs share commonalities. Insufficiency of time in curricula for content additions, a shortage of qualified and interested educators, a lack of standardized competencies, inconsistency in how SUD content is presented, internalized student and/or educator stigma toward persons with SUDs, and state-level barriers all contribute to under-presentation of SUD training across all three program types.

There are well-documented barriers to incorporating SUD content into the curriculums across medical, nursing, and PA education. While these barriers are slightly nuanced among each profession, they share commonalities. Figure 2 shows the common barriers that exist across the three professions at the education, policy, and accreditation levels. Further, the sections below detail more of the specific barriers across each profession.

Figure 2. Barriers across medical, graduate nursing, and PA professions

Policy Level	Education Level	Accreditation Level
<ul style="list-style-type: none"> • State level restrictions in prescribing buprenorphine, such as restrictions to prescribing at all or requirements for physician supervision. 	<ul style="list-style-type: none"> • Lack of providers to precept and train students in clinical settings. • Lack of time to educate students in the didactic settings. • Difficulty recruiting students to spend more time specializing in SUDs. 	<ul style="list-style-type: none"> • Lack of learning competencies across all three professions to train and educate on SUD. • Lack of requirements for SUD in didactic education in medical and graduate nursing education and clinical education in medical, graduate nursing, and PA professions.

Facilitators to Incorporating SUD Curriculum into Existing Content

Facilitators to incorporating SUD content into the curricula of medical, graduate nursing, and PA education and training programs are similar across all three professions. The following sections provide an overview of common facilitators at the individual and institutional levels and offer examples demonstrating how exposure to SUD content can be improved both in and out of the classroom.

Facilitators in Existing Medical School Curriculum

Recent literature indicates an uptick in the number of health professionals pursuing certification in addiction medicine, and there is evidence of increased collaboration between the addiction psychiatry and addiction medicine subspecialties (Zisman-Ilani et al., 2023). Studies investigating the feasibility of adding SUD content to training programs suggest that availability of educational resources on addiction, such as faculty development workshops, individual mentorship, and didactic curricula, are a necessary component of supporting the curricular additions (Schwartz et al., 2018). Current medical school content modeling the SBIRT modality, including through video content, offers an introduction to SUD assessments and can improve student empathy in standard patient encounters (Frances, 2018). Supplemental educational opportunities, such as continuing

education courses and clerkships focused on SUD/ODU training, offer additional pathways to increasing exposure to SUD content in medical training programs (Schwartz et al., 2018).

Facilitators in Existing Nursing School Curriculum

Nursing student interest and faculty investment in SUD curricular additions are the primary drivers of increased SUD content in training programs. Virtually all nursing students (N=567, with n=282 BSN students, n=152 MS/MSN, n=99 DNP, and n=14 PhD) at a large mid- Atlantic school of nursing responding to a 2019 study investigating their perceived knowledge, attitudes, and interest in addictions education agreed on the importance being educated about SUD and that having an addictions nurse specialist as a resource would be helpful for their practice (Selby & Trinkoff, 2023); the majority were also interested in enrolling in an addictions course, and some students also reported viewing nurses as potential leaders in addictions care (Selby & Trinkoff, 2023). Studies assessing the feasibility of integrating OUD content into graduate nursing curricula point to the importance of faculty and stakeholder buy-in to successful curricular modifications (Kameg et al., 2018). Faculty members who identify as champions of OUD training and who enthusiastically engage in the curriculum are more likely to elicit positive student responses with high participation levels (Kameg et al., 2018; Kameg et al., 2021). Further, ensuring the availability of resources such as Centers for Disease Control and Prevention (CDC) guidelines and modules and state-level board of nursing training for trainees increases the likelihood of successful student education in SUDs (Kameg et al., 2021).

Facilitators in Existing Physician Assistant Program Curriculum

Over one-fourth of all PAs work in primary care settings and will interface with patients experiencing a SUD while receiving routine care. To address the SUD epidemic, all PA students are required to learn about SUDs as part of their didactic curriculum (ARC-PA, 2023; Saitz & Daaleman, 2017). In a 2021 qualitative study examining the readiness of university-based PAs (and other health professionals) to treat SUDs, N=15 interviewed participants comprising current/experienced (n=10) and future/new (n=5) preceptors recognized a need for further education and treatment recommendations for patients experiencing a SUD. Moreover, respondents felt providers in primary care settings should be required to receive SUD training and precepting (Lowe et al., 2022). In addition to training PAs to respond to SUD in primary care settings, the PA profession has also called for increased knowledge of SUDs when treating and managing pain. This call has facilitated training for PAs in pharmacology and SUDs (White et al., 2019). While PAs are now required to learn about SUDs as a part of their didactic curriculum, there are additional training opportunities available to meet the demand of recognizing and responding to SUDs in clinical settings.

Summary of Facilitators

Similar facilitators to SUD content integration exist across medical, graduate nursing, and PA educational programs. Increases in interprofessional collaboration across disciplines, an uptick in student interest in learning how to treat SUDs and OUD, and the importance of faculty and stakeholder advocacy for SUD content in education programs all help enable future expansion of training in this area. Greater availability of

supplemental educational opportunities, such as workshops and continuing education courses, offers a pathway for expanding the emerging workforce capable of providing SUD diagnoses and treatment services.

Summary

Curriculum standards and SUD treatment competencies are inconsistent across medical, nursing, and PA education programs. Multiple barriers associated with content integration, the supply of educators, and variability in content coverage pose challenges to ensuring sufficient workforce training in SUD diagnoses and treatments. Continued and expanded availability of educational opportunities in and beyond the classroom, including continuing education courses, addiction-focused medical clerkships, and readily accessible training guides and resources, offer trainees greater opportunities to broaden their knowledge and expertise in SUD treatment. Future research efforts may consider developing uniform competencies for addiction treatment and standardization of education and curricular requirements needed for licensure.

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Appendix I

Peer reviewed and gray literature included:

- PubMed
- PsycINFO
- Cumulated Index to Nursing and Allied Health Literature (CINAHL)
- Google Scholar
- National Institutes of Health (NIH) gray literature search

Educational accrediting bodies included:

- Medicine (including Doctor of Medicine and Doctor of Osteopathic Medicine)
 - [Liaison Committee on Medical Education \(LCME\)](#)
 - [Accreditation Council for Continuing Medical Education \(ACCME\)](#)
 - [American Medical Association \(AMA\)](#)
 - [Accreditation Council for Graduate Medical Education \(ACGME\)](#)
 - [Commission on Osteopathic College Accreditation \(COCA\)](#)
- Nursing (including undergraduate and graduate degrees in nursing)
 - [Accreditation Commission for Education in Nursing \(ACEN\)](#)
 - [Commission on Collegiate Nursing Education \(CCNE\)](#)
 - [Consortium for Advanced Practice Providers](#)
 - [National League for Nursing, Commission for Nurse Education Accreditation \(NLN CNEA\)](#)
 - American Association of Colleges of Nursing
- Physician Assistants
 - [Accreditation Review Commission on Education for the Physician Assistant \(ARC-PA\)](#)
 - [National Commission on Certification of Physician Assistants \(NCCPA\)](#)
 - [American Academy of Physician Associates \(AAPA\)](#)
 - [PA Education Association \(PAEA\)](#)

Appendix II

Examples of SUD Curricula

Medical School Curricula

Alpert Medical School, Brown University Substance Misuse Curriculum Outline

McCance-Katz, E. F., George, P., Scott, N. A., Dollase, R., Tunkel, A. R., & McDonald, J. (2017). Access to treatment for opioid use disorders: Medical student preparation. *The American journal on addictions*, 26(4), 316–318. <https://doi.org/10.1111/ajad.12550>

Pre-clerkship years (MS I and II)	Clerkship and clinical years (MS III and IV)
<p>Doctoring I and II (Year I)</p> <p>Introduction to behavioral change counseling (1 h)</p> <p>Substance use counseling/behavior change practice (2h)</p> <p>All students must screen at least five patients for substance abuse disorders; those who screen positive will receive brief intervention and referral for treatment; students must document (2h)</p> <p>Integrated medical sciences (Year I)</p> <p>Lectures on substance use disorders and their treatment (3h total including 1h on opioids)</p> <p>Doctoring III and IV (Year 2)</p> <p>All students must screen at least five patients for substance use disorders; those who screen positive will receive brief intervention and referral for treatment; students must document (2h)</p> <p>Interprofessional Education Workshop (Year I); four stations:</p> <p>Panel with individuals affected by substance use disorders and providers (1h)</p> <p>Standardized patient case to perform SBIRT in interprofessional education teams (1h)</p> <p>Naloxone training (preceded by training on http://prescribetoprevent.org/; 1h in person; 1h online preparation)</p> <p>Case study; interprofessional development of care plan with consideration of diverse medical problems (HIV, hepatitis) and social challenges that impede medical care such as homelessness, stigma, and lack of social support (1h)</p> <p>Clinical skills clerkship (Transition between Years II and III)</p> <p>Lecture on pain management/opioids and alternatives to opioids (1h)</p> <p>Small group cases on pain management/opioids/opioid alternatives (1.5h)</p> <p>Prior to 4th year Objective Structured Clinical Examination (OSCE): Lecture on medication assisted treatment: Clinical use of buprenorphine in the treatment of Opioid Use Disorder (1h)</p>	<p>Family medicine clerkship</p> <p>All students must screen at least five patients for substance use disorders; those who screen positive will receive brief intervention and referral for treatment; students must document (2h)</p> <p>Completion of Family Medicine Computer Assisted Simulations for Educating Students (fmCASES) modules on chronic pain (1h)</p> <p>Internal medicine clerkship</p> <p>All students must screen at least five patients for substance use disorders; those who screen positive will receive brief intervention and referral for treatment; students must document (2h)</p> <p>Emergency medicine elective</p> <p>Training on SBIRT for all 4th year medical students, including simulation cases (Elective)</p> <p>4th year OSCE case on SBIRT (4th year; all students) (0.5h)</p>

Core Competencies for the Prevention and Management of Prescription Drug Misuse

Antman, K. H., Berman, H. A., Flotte, T. R., Flier, J., Dimitri, D. M., & Bharel, M. (2016). Developing Core Competencies for the Prevention and Management of Prescription Drug Misuse: A Medical Education Collaboration in Massachusetts. *Academic medicine : journal of the Association of American Medical Colleges*, 91(10), 1348–1351. <https://doi.org/10.1097/ACM.0000000000001347>

Core Competencies for the Prevention and Management of Prescription Drug Misuse

In the appropriate setting, using recommended and evidence-based methodologies, the graduating medical student should be able to demonstrate the ability and/or knowledge to independently:

Primary prevention domain: Preventing prescription drug misuse (screening, evaluation, and prevention)

1. Evaluate a patient's pain using age, gender, and culturally appropriate evidence-based methodologies.
2. Evaluate a patient's risk for substance use disorders by using age, gender, and culturally appropriate evidence-based communication skills and assessment methodologies, supplemented by relevant available patient information, including but not limited to health records, prescription dispensing records (e.g., the Prescription Drug Monitoring Program), drug urine screenings, and screenings for commonly co-occurring psychiatric disorders (especially depression, anxiety disorders, and posttraumatic stress disorder).
3. Identify and describe potential pharmacological and nonpharmacological treatment options, including opioid and nonopioid pharmacological treatments for acute and chronic pain management, along with patient communication and education regarding the risks and benefits associated with each of these available treatment options.

Secondary prevention domain: Treating patients at risk for substance use disorders (engaging patients in safe, informed, and patient-centered treatment planning)

4. Describe substance use disorder treatment options, including medication-assisted treatment, as well as demonstrate the ability to appropriately refer patients to addiction medicine specialists and treatment programs for both relapse prevention and co-occurring psychiatric disorders.
5. Prepare evidence-based and patient-centered pain management and substance use disorder treatment plans for patients with acute and chronic pain with special attention to safe prescribing and recognizing patients displaying signs of aberrant prescription use behaviors.
6. Demonstrate the foundational skills in patient-centered counseling and behavior change in the context of a patient encounter, consistent with evidence-based techniques.

Tertiary prevention domain: Managing substance use disorders as chronic diseases (eliminating stigma and building awareness of social determinants)

7. Recognize the risk factors for, and signs of, opioid overdose and demonstrate the correct use of naloxone rescue.
8. Recognize substance use disorders as a chronic disease by effectively applying a chronic disease model in the ongoing assessment and management of the patient.
9. Recognize their own and societal stigmatization and biases against individuals with substance use disorders and associated evidence-based medication-assisted treatment.
10. Identify and incorporate relevant data regarding social determinants of health into treatment planning for substance use disorders.

Pennsylvania State Core Competencies for Education on Opioids and Addiction

Ashburn, M. A., & Levine, R. L. (2017). Pennsylvania State Core Competencies for Education on Opioids and Addiction. *Pain medicine (Malden, Mass.)*, 18(10), 1890–1894. <https://doi.org/10.1093/pm/pnw348>

1. Understanding core aspects of addiction
 - a. Describe what a substance use disorder is, including the concept that a substance use disorder may exist along a spectrum from mild to severe substance use disorder.
 - b. Describe the criteria used to diagnose an opioid use disorder.
 - c. Report the difference between opioid use disorder, physical dependence, and tolerance.
 - d. Summarize the precipitants and factors that interfere with successful treatment of substance use disorder.
 - e. Identify and discuss the impact that concurrent mental health disorders and social history can have on successful referral and treatment for substance use disorders.
 - f. Identify the common medical conditions that are associated with chronic substance use disorder, which may include infection (including sexually transmitted infections), HIV, hepatitis, cancer, and cardiovascular disease.
 - g. Describe the impact that substance use disorder can have on chronic health conditions, including diabetes, oral health, and infection.
2. Patient screening for substance use disorder
 - a. Describe options for how to properly screen patients for substance use disorder.
 - b. Explain the role that patient screening tools can play in patient assessment for substance use disorder.
3. Proper referral for specialty evaluation and treatment of substance use disorder
 - a. Summarize the importance of proper patient referral for substance use disorder.
 - b. Explain the importance of treating the patient with dignity, respect, and a nonjudgmental manner when discussing substance use disorders.
 - c. Describe how to discuss the diagnosis of substance use disorder with a patient, including methods for effective referral of a patient for treatment of substance use disorder.
 - d. Identify and implement the “warm handoff” referral process for patients with substance use disorder.
4. Proper patient assessment when treating pain
 - a. Demonstrate how to conduct a pain-focused history and physical examination to determine the cause(s) of the patient’s pain.
 - b. Explain the importance of patient assessment, including the value and limitations of patient-reported pain intensity.
 - c. Describe the importance of assessment of mood, sleep, and physical functioning in the evaluation of a patient with chronic pain.

Rapid Response Request

- d. Summarize the risk factors associated with increased risk of harm associated with opioid therapy in both the hospital and outpatient setting.
5. Proper use of multimodal treatment options when treating acute pain
 - a. Defend the statement that both acute and chronic pain can be best treated using a multimodal treatment that may include the use of regional anesthetic techniques, nonopioid analgesics, self-management techniques, and physical therapy.
 6. Proper use of opioids for the treatment of acute pain (after consideration of alternatives)
 - a. Summarize opioid pharmacology, including:
 - i. choice of opioid, route of administration (PO vs IV),
 - ii. use of short-acting vs long-acting drugs,
 - iii. the factors that place the patient at increased risk of harm when opioids are used to treat acute pain, and
 - iv. identifying steps that can be taken to avoid patient harm.
 - b. Describe how acute opioid prescribing decisions can directly impact the risk for long-term use, including nonmedical use and development of substance use disorder. Summarize what steps can be taken to minimize the risk of patient harm.
 - c. Describe proper opioid formulation selection (including short-acting vs long-acting formulations, as well as when an abuse-deterrent formulation may be indicated) and drug dosing when using opioids to treat acute pain.
 7. The role of opioids in the treatment of chronic non-cancer pain
 - a. Report on the factors that increase the risk of patient harm, as well as the factors that decrease the chances of improved patient outcomes.
 - b. Describe what concurrent medications or medical conditions increase the risk of patient harm.
 - c. Discuss the indications for prescribing naloxone for home use to treat opioid overdose.
 8. Patient risk assessment related to the use of opioids to treat chronic noncancer pain, including the assessment for substance use disorder or increased risk for aberrant drug-related behavior
 - a. Discuss the role that screening tools might play in identifying patients at increased risk for harm.
 - b. Describe the key patient attributes that may increase the risk of aberrant drug-related behaviors or substance use disorder.
 9. The process for patient education, initiation of treatment, careful patient monitoring, and discontinuation of therapy when using opioids to treat chronic non-cancer pain
 - a. Summarize proper methods for patient education related to proper medication storage and disposal.
 - b. Defend the role for opioid treatment agreements.
 - c. Describe the role that shared decision-making can play when considering chronic opioid therapy, including the possible role that family members can play, especially in younger patients.
 - d. Review the role of urine drug screens and review of data contained in the prescription drug database(s).
 - e. Describe the value associated with establishing treatment goals and how treatment goals can be documented and monitored throughout treatment.

Symposium on Curriculum Development in Opioid Management

Wallace, P. M., Warrier, S., Kahn, M. J., Welsh, C., & Fischer, M. (2020). Developing an opioid curriculum for medical students: A consensus report from a national symposium. *Substance abuse*, 41(4), 425–431.

<https://doi.org/10.1080/08897077.2019.1635971>

Symposium consensus on opioid curriculum core competencies

Based on consensus among symposium participants, it was agreed that an undergraduate medical opioid curriculum should consist of the following core competencies:

Pain management

- Understanding the physiology of acute and chronic pain

- Knowledge of pain assessment tools
- Knowledge of effective pharmacologic and nonpharmacologic treatments
 - Ability to take a collaborative, multidisciplinary, interprofessional approach to treating pain
- Appreciation of biopsychosocial causes and consequences of pain

Opioid use disorder

- Understanding the physiology of opioid use disorder
- Recognition of opioid use disorder risk factors and appropriate prevention strategies
- Knowledge of opioid use disorder screening tools
- Knowledge of effective opioid use disorder treatments
 - Ability to take a collaborative, multidisciplinary, interprofessional approach to treating opioid use disorder
- Appreciation of biopsychosocial causes and consequences of opioid use disorder

Other areas of competency include

- Patient-centeredness: viewing pain and opioid use disorder from the patient's perspective and within their life's context
 - Ability to provide trauma-informed care
- Resilience assessment and enhancement among patients and providers
- Understanding pain and opioid use disorder from a public health perspective
- Consideration of the relationship between our health care system and pain, opioid use disorder
- Consideration of the relationship between our society and pain, opioid use disorder
- Understanding and treating pain in a palliative care context

University of California Pain and Substance Use Disorder Competencies

Servis, M., Fishman, S. M., Wallace, M. S., Henry, S. G., Ziedonis, D., Ciccarone, D., Knight, K. R., Shoptaw, S., Dowling, P., Suchard, J. R., Shah, S., Singh, N., Cedarquist, L. C., Alem, N., Copenhaver, D. J., Westervelt, M., & Willis, B. C. (2021). Responding to the Opioid Epidemic: Educational Competencies for Pain and Substance Use Disorder from the Medical Schools of the University of California. *Pain medicine (Malden, Mass.)*, 22(1), 60–66. <https://doi.org/10.1093/pm/pnaa399>

Section	Domain	Competency
Pain	What is pain? <i>Multidimensional nature of pain</i>	Describes the complex, multidimensional, and individual-specific nature of pain* Describes how cultural, institutional, societal, and regulatory influences affect assessment and management of pain* Demonstrates knowledge of the theories and science for understanding the physiology of pain and pain transmission* Demonstrates knowledge of the terminology for describing pain, including acute pain, chronic pain, and pain at the end of life*
	How is pain assessed and measured? <i>Pain assessment and measurement</i>	Uses a biopsychosocial-spiritual model to evaluate persons with pain† Describes patient, clinician, and system factors that can facilitate or interfere with effective pain assessment and management* Recognizes patient preferences and values to determine pain-related goals and priorities, including quality of life* Uses valid and reliable tools for measuring pain, function, and associated symptoms to assess and reassess related outcomes appropriate to the clinical context and population* Uses and models language that destigmatizes pain, reflects a whole-person perspective, builds a therapeutic alliance, and promotes behavior change* Demonstrates use of proper patient assessment, including physical exam and history, when treating pain‡ Demonstrates empathic, compassionate, and professional communication during pain assessment§ Evaluates a patient's pain using culturally appropriate, evidence-based methodologies considering age and gender¶
	How is pain safely and effectively treated? <i>Treatment</i>	Uses a biopsychosocial-spiritual model to develop a whole-person care plan and prevention strategies for persons with pain† Demonstrates knowledge of risk stratification, patient selection, and ongoing monitoring for pharmacological pain treatment Differentiates among physical dependence, substance use disorder, misuse, tolerance, and nonadherence in patients§ Identifies appropriate multimodal pain treatment options as part of a comprehensive pain management plan* Identifies and describes potential pharmacological and nonpharmacological treatment options¶ Develops a treatment plan that takes into account the differences among acute pain, acute-on-chronic pain, chronic or persistent pain, and pain at the end of life§ Develops a pain treatment plan based on benefits and risks of available treatments* Demonstrates the inclusion of the patient and others, as appropriate, in the shared decision-making process for pain care§ Monitors the effects of pain management approaches to adjust the plan of care as needed with respect to functional outcomes* Empowers patients to recognize and apply health promotion and self-management strategies†

	How does context affect pain? <i>Context</i>	<p>Describes the unique pain assessment and management needs of special populations³</p> <p>Describes the role, scope of practice, and contribution of the different professions within multidisciplinary pain management care teams*</p> <p>Demonstrates how to assess and manage pain across settings and transitions of care*</p> <p>Recognizes the role of the clinician as an advocate in assisting patients in meeting treatment goals, including recognizing own and societal bias against patients with chronic pain⁵</p> <p>Uses an individualized pain management plan (including risk mitigation) that integrates the perspectives of patients, family and social support systems, and clinicians in the context of available resources⁵</p>
Substance use disorder	<p>What is substance use disorder? <i>Multidimensional nature of substance use disorder</i></p> <p>How is substance use disorder assessed and measured? <i>Pain assessment and measurement</i></p>	<p>Describes the interrelated nature of pain and opioid use disorder, including their neurobiology[†]</p> <p>Demonstrates knowledge of the pathophysiology of substance use disorders</p> <p>Recognizes the spectrum of and differences among substance use, misuse, use disorders, physical dependence, tolerance, withdrawal, and pain*</p> <p>Identifies the impact of substance (alcohol, cannabis, tobacco, opioid, sedative, and stimulant) use on health</p> <p>Uses a biopsychosocial-spiritual model to screen for and evaluate persons with substance use disorder[†]</p> <p>Recognizes and stratifies patient risk for opioid use disorder and other adverse effects, including overdose</p> <p>Demonstrates sufficient knowledge to perform proper assessment, diagnosis, and referral for treatment of substance use disorder**</p> <p>Demonstrates empathic and compassionate communication during SUD assessment*</p> <p>Uses and models language that destigmatizes addiction, reflects a whole-person perspective, builds a therapeutic alliance, and promotes behavior change</p> <p>Uses a biopsychosocial-spiritual model to develop a whole-person care plan for persons with substance use disorder[†]</p>
Section	Domain	Competency
	How is substance use disorder safely and effectively treated? <i>Treatment</i>	<p>Recognizes signs and symptoms of controlled substance overdose and demonstrates fundamental knowledge of management strategies</p> <p>Displays knowledge of substance use disorder treatment, including pharmacologic (opioids, nicotine, and alcohol use disorder), behavioral, and social options using a chronic disease model</p> <p>Demonstrates effective communication skills in counseling patients and families on the use of medical therapies</p> <p>Uses an integrated, team-based approach to substance use disorder treatment[†]</p> <p>Engages patients who use drugs in harm reduction and other secondary prevention interventions to reduce morbidity</p> <p>Engages patients' family and social support in the care of substance use disorder[†]</p>
	How is substance use disorder affected by context? <i>Context</i>	<p>Recognizes their own and societal biases and stigmatization against patients with substance use disorders, including barriers faced by special populations</p> <p>Identifies and incorporates relevant data regarding social determinants of health into treatment planning for substance use disorders</p> <p>Identifies strategies to mitigate the risk of substance use disorder and promote wellness in clinicians</p> <p>Critically evaluates systems and seeks evidence-based solutions that deliver quality care in the treatment of substance use disorders[†]</p>
Public health	Lessons learned from the opioid epidemic	<p>Describes the impact of pain, opioid use disorder, and other substance use disorders on society⁵</p> <p>Describes the social, environmental, health care system, industry, and regulatory drivers that have shaped opioid prescribing and approach to pain care, including the social determinants of health in the distribution of morbidity and mortality[†]</p> <p>Describes population health and policy efforts intended to address the opioid misuse and overdose epidemics, including co-prescribing of naloxone</p> <p>Recognizes the role of health and health care disparities in pain and substance use treatment</p> <p>Recognizes pain, opioid use disorder, and other substance use disorders as multidimensional public health problems</p> <p>Demonstrates knowledge of the epidemiology of medical and nonmedical opioid use and overdose in the United States</p> <p>Identifies primary, secondary, and tertiary prevention strategies to address opioid misuse and overdose</p>

*Competency adapted from North American Pain Competencies [15].

[†]Competency adapted from Arizona Pain and Addiction Curriculum [17].

[‡]Competency adapted from Pennsylvania State Core Competencies for Education on Opioids and Addiction [18].

[§]Competency taken directly from North American Pain Competencies [15].

[¶]Competency adapted from Massachusetts Medical Education Core Competencies for the Prevention and Management of Prescription Drug Misuse [16].

^{||}Competency taken directly from Specific Disciplines Addressing Substance Use: AMERSA in the 21st Century—2018 Update [19].

^{||}Competency adapted from Specific Disciplines Addressing Substance Use: AMERSA in the 21st Century—2018 Update [19].

**Competency taken directly from Pennsylvania State Core Competencies for Education on Opioids and Addiction [18].

Nursing Curricula

American Psychiatric Nurses Association Scope and Standard of Practice: Psychiatric Mental Health Nursing, 2nd Edition.

American Psychiatric Nurses Association (APNA). (2014). Psychiatric-Mental Health Nursing: Scope and Standards of Practice, 2nd Edition. [https://repository.poltekkes-kaltim.ac.id/601/1/Psychiatric-Mental%20Health%20Nursing%20\(%20PDFDrive.com%20\).pdf](https://repository.poltekkes-kaltim.ac.id/601/1/Psychiatric-Mental%20Health%20Nursing%20(%20PDFDrive.com%20).pdf). Accessed July 13, 2023.

Standard 1. Assessment

The psychiatric-mental health registered nurse collects and synthesizes comprehensive health data that are pertinent to the healthcare consumer's health and/or situation.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Collects comprehensive data including but not limited to psychiatric, substance, physical, functional, psychosocial, emotional, cognitive, sexual, cultural, age-related, environmental, spiritual/transpersonal, and economic assessments in a systematic and ongoing process while focusing on the uniqueness of the person.
- Elicits the healthcare consumer's values, preferences, knowledge of the healthcare situation, expressed needs, and recovery goals.
- Involves the healthcare consumer, family, other healthcare providers, and other consumer-identified support systems (as appropriate) in holistic data collection.
- Demonstrates effective clinical interviewing skills that facilitate development of a therapeutic relationship.
- Prioritizes data collection activities based on the healthcare consumer's immediate condition and the anticipated needs of the consumer or situation.
- Uses appropriate evidence-based assessment techniques and instruments in collecting pertinent data.
- Uses analytical models and problem-solving techniques.
- Ensures that appropriate consents, as determined by regulations and policies, are obtained to protect confidentiality and support the healthcare consumer's rights in the process of data gathering.
- Synthesizes available data, information, and knowledge relevant to the situation to identify patterns and variances.
- Uses therapeutic principles to understand and make inferences about the healthcare consumer's emotions, thoughts, behaviors, and condition.
- Documents relevant data in a retrievable format.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Performs a comprehensive psychiatric and mental health diagnostic evaluation.
- Initiates and interprets diagnostic tests and procedures relevant to the healthcare consumer's current status.
- Employs evidence-based clinical practice guidelines to guide screening and diagnostic activities as available and appropriate.
- Conducts a multigenerational family assessment, including medical, psychiatric, and substance use history.
- Assesses interactions among the individual, family, community, and social systems and their relationship to mental health functioning.

Standard 2. Diagnosis

The psychiatric-mental health registered nurse analyzes the assessment data to determine diagnoses, problems, and areas of focus for care and treatment, including level of risk.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Identifies actual or potential risks to the healthcare consumer's health and safety or barriers to mental and physical health which may include but are not limited to interpersonal, systematic, or environmental circumstances.
- Derives the diagnoses, problems, or areas in need of care and treatment from the assessment data.
- Develops the diagnosis or problems with the healthcare consumer, significant others, and other healthcare clinicians to the greatest extent possible in concert with person-centered, recovery-oriented practice.
- Develops diagnoses or problems that, to the greatest extent possible, are in the healthcare consumer's words and congruent with available and accepted classification systems.
- Documents diagnoses or problems in a manner that facilitates the determination of the expected outcomes and plan.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Develops standard psychiatric and substance use diagnoses (e.g., DSM, IDC-10).
- Systematically compares and contrasts clinical findings with normal and abnormal variations and developmental events in formulating a differential diagnosis.
- Utilizes complex data and information obtained during interview, examination, and diagnostic procedures in identifying diagnoses.
- Identifies long-term effects of psychiatric disorders on mental, physical, and social health.
- Evaluates the health impact of life stressors, traumatic events, and situational crises within the context of the family cycle.
- Evaluates the impact of the course of psychiatric disorders and mental health problems on the path of recovery, including quality of life and functional status.
- Assists staff in developing and maintaining competency in the diagnostic process.

Standard 3. Outcomes Identification

The psychiatric-mental health registered nurse identifies expected outcomes and the healthcare consumer's goals for a plan individualized to the healthcare consumer or to the situation.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Involves the healthcare consumer to the greatest extent possible in formulating mutually agreed upon outcomes and individualized healthcare consumer goals.
- Involves the healthcare consumer's family, healthcare providers, and other significant supports in formulating expected outcomes when possible and as appropriate.
- Derives culturally appropriate expected outcomes from the identified diagnoses and problems.
- Considers associated risks, benefits, costs, current scientific evidence, and clinical expertise when formulating expected outcomes.
- Identifies expected outcomes that incorporate scientific evidence and are achievable through implementation of evidence-based practices.
- Defines expected outcomes in terms of the healthcare consumer, the healthcare consumer's values, ethical considerations, environment or situation, with consideration of associated risks, benefits, costs, current scientific evidence, and personal recovery goals.
- Develops expected outcomes that provide direction for continuity of care.
- Documents expected outcomes as healthcare consumer-focused measurable goals in language either developed by the healthcare consumer or understandable to the healthcare consumer.
- Includes a time estimate for attainment of expected outcomes.
- In partnership with the healthcare consumer, modifies expected outcomes based on changes in the status of the healthcare consumer or evaluation of the situation.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Assists the PMH-RN in identifying expected outcomes that incorporate scientific evidence and are achievable through implementation of evidence-based practices.
- Identifies expected outcomes that incorporate cost and clinical effectiveness, satisfaction, and continuity and consistency among providers.
- Develops, implements, and supports and uses clinical guidelines linked to positive clinical outcomes.

Standard 4. Planning

The psychiatric-mental health registered nurse develops a plan that prescribes strategies and alternatives to assist the healthcare consumer in attainment of expected outcomes.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Develops an individualized plan in partnership with the healthcare consumer, family, and others considering the healthcare consumer's characteristics or situation; this plan can include, but is not limited to, values, beliefs, spiritual and health practices, preferences, choices, developmental level, coping style, culture and environment, available technology, and individual recovery goals.
- Establishes the plan priorities with the healthcare consumer, family, and others as appropriate.
- Prioritizes elements of the plan based on the assessment of the healthcare consumer's level of risk for potential harm to self or others and safety needs.
- Includes strategies in the plan that address each of the identified problems or issues, including strategies for the promotion of recovery, restoration of health, and prevention of illness, injury, and disease.
- Considers the economic impact of the plan.
- Assists healthcare consumers in securing treatment or services in the least restrictive environment.
- Includes an implementation pathway or timeline in the plan.
- Provides for continuity in the plan.
- Utilizes the plan to provide direction to other members of the healthcare team.
- Documents the plan using person-centered, non-jargon terminology.
- Defines the plan to reflect current statutes, rules and regulations, and standards.
- Integrates current scientific evidence, trends, and research.
- Modifies the plan (goals/outcomes and interventions) based on ongoing assessment of the healthcare consumer's achievement of goals and responses to interventions.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Identifies assessment and diagnostic strategies and therapeutic interventions that reflect current evidence, including data, research, literature, and expert clinical knowledge.
- Plans care to minimize complications and promote individualized recovery and optimal quality of life using treatment modalities including but not limited to psychodynamic, cognitive behavioral, supportive interpersonal therapies, and psychopharmacology.
- Selects or designs strategies to meet the multifaceted needs of complex healthcare consumers.
- Includes synthesis of healthcare consumers' values and beliefs regarding nursing and medical therapies in the plan.
- Actively participates in the development and continuous improvement of systems that support the planning process.

Standard 5. Implementation

The psychiatric-mental health registered nurse implements the identified plan.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Partners with the healthcare consumer, family, significant others, and caregivers as appropriate to implement the plan in a safe, realistic, and timely manner.
- Utilizes the therapeutic relationship and employs principles of mental health recovery.
- Utilizes evidence-based interventions and treatments specific to the problem or issue.
- Utilizes technology to measure, record, and retrieve healthcare consumer data, implement the nursing process, and enhance nursing practice.
- Utilizes community resources and systems to implement the plan.
- Provides age-appropriate care in a culturally and ethnically sensitive manner.
- Provides care and treatment related to psychiatric, substance, and medical problems.
- Provides holistic care that focuses on the person with the disease or disorder, not just the disease or disorder itself.
- Advocates for the healthcare consumer.
- Addresses the needs of diverse populations across the lifespan.
- Collaborates with nursing colleagues and others to implement the plan.
- Supervises ancillary staff in carrying out care interventions.
- Integrates traditional and complementary healthcare practices as appropriate.

- Documents implementation and any modifications, including changes or omissions, of the identified plan.
- Incorporates new knowledge and strategies to initiate change in nursing care practices if desired outcomes are not achieved.
- Manages psychiatric emergencies by determining the level of risk and initiating and coordinating effective emergency care.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Facilitates utilization of systems and community resources to implement the plan.
- Supports collaboration with nursing colleagues and other disciplines to implement the plan.
- Uses principles and concepts of project management and systems management when implementing the plan.
- Fosters organizational systems that support implementation of the plan.
- Provides clinical supervision to the PMH-RN in the implementation of the plan.
- Actively participates in the development and continuous improvement of systems that support the implementation of the plan.

Standard 5A. Coordination of Care

The psychiatric-mental health registered nurse coordinates care delivery.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Coordinates implementation of the plan.
- Manages the healthcare consumer's care in order to maximize individual recovery, independence, and quality of life.
- Assists the healthcare consumer to identify options for alternative care.
- Communicates with the healthcare consumer, family, and system during transitions in care.
- Advocates for the delivery of dignified and humane care by the interprofessional team.
- Documents the coordination of care.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Provides leadership in the coordination of interprofessional health care for integrated delivery of care and treatment services.
- Functions as the single point of accountability for all medical and psychiatric services.
- Synthesizes data and information to prescribe necessary system and community support measures, including environmental modifications.
- Coordinates system and community resources that enhance delivery of care across continuums.

Standard 5B. Health Teaching and Health Promotion

The psychiatric-mental health registered nurse employs strategies to promote health and a safe environment.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Provides health teaching (in individual or group settings) related to the healthcare consumer's needs, recovery goals, and situation that may include but is not limited to mental health problems, psychiatric and substance use disorders, treatment regimens and self-management of those regimens, coping skills, relapse prevention, self-care activities, resources, conflict management, problem-solving skills, stress management and relaxation techniques, and crisis management.
- Uses health promotion and health teaching methods appropriate to the situation and the healthcare consumer's values, beliefs, health practices, developmental level, learning needs, readiness and ability to learn, language preference, spirituality, culture, and socioeconomic status.
- Integrates current knowledge, evidence-based practices, and research regarding psychotherapeutic educational strategies and content.
- Engages healthcare consumer alliances, such as peer specialists, and advocacy groups as appropriate in health teaching and health promotion activities.
- Identifies community resources to assist and support healthcare consumers in using prevention and mental healthcare services.
- Seeks opportunities from the individual healthcare consumer for feedback and evaluation of the effectiveness of strategies utilized.
- Provides anticipatory guidance to individuals and families to promote mental health and to prevent or reduce the risk of psychiatric disorders.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Synthesizes empirical evidence on risk behaviors, learning theories, behavioral change theories, motivational theories, epidemiology, and other related theories and frameworks when designing health information and healthcare consumer education.
- Educates healthcare consumers and significant others about intended effects and potential adverse effects of treatment options and regimes.
- Provides education to individuals, families, and groups to promote knowledge, understanding, and effective management of overall health maintenance, mental health problems, and psychiatric and substance disorders.
- Uses knowledge of health beliefs, practices, evidence-based findings, and epidemiological principles, along with the social, cultural, and political issues that affect mental health in the community to develop health promotion strategies.
- Designs health information and healthcare consumer education appropriate to the healthcare consumer's developmental level, learning needs, readiness to learn, and cultural values and beliefs.
- Evaluates health information resources, such as the Internet, in the area of practice for accuracy, readability, and comprehensibility to help healthcare consumers access quality health information.
- Assists the PMH-RN in curriculum and program development in the areas of health teaching and health promotion.

Standard 5C. Consultation

The psychiatric-mental health advanced practice registered nurse provides consultation to influence the identified plan, enhance the abilities of other clinicians to provide services for healthcare consumers, and effect change.

COMPETENCIES

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Initiates consultation at the request of the consultee.
- Establishes a working alliance with the healthcare consumer or consultee based on mutual respect and role responsibilities.
- Facilitates the effectiveness of a consultation by involving the stakeholders in the decision-making process.
- Synthesizes clinical data, theoretical frameworks, and evidence when providing consultation.
- Communicates consultation recommendations that influence the identified plan, facilitate understanding by involved stakeholders, enhance the work of others, and effect change.
- Clarifies that implementation of system changes or changes to the plan of care remains the responsibility of consultee.
- Assists the PMH-RN and other members of the interprofessional team in resolving complex clinical and other situations.

Standard 5D. Prescriptive Authority and Treatment

The psychiatric-mental health advanced practice registered nurse uses prescriptive authority, procedures, referrals, treatments, and therapies in accordance with state and federal laws and regulations.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Conducts a thorough assessment of past medication trials, side effects, efficacy, and healthcare consumer preference.
- Educates and assists the healthcare consumer in selecting the appropriate use of complementary and alternative therapies.
- Provides healthcare consumers with information about intended effects and potential adverse effects of proposed prescriptive therapies.
- Provides information about pharmacologic agents, costs, and alternative treatments and procedures as appropriate.
- Prescribes evidence-based treatments, therapies, and procedures considering the healthcare consumer's comprehensive healthcare needs.
- Prescribes pharmacologic agents based on a current knowledge of pharmacology and physiology.
- Prescribes specific pharmacological agents and treatments in collaboration with the healthcare consumer and based on clinical indicators, the healthcare consumer's status, needs, and preferences, and the results of diagnostic and laboratory tests.
- Evaluates therapeutic and potential adverse effects of pharmacological and non-pharmacological treatments.
- Evaluates pharmacological outcomes by utilizing standard symptom measurements and healthcare consumer's reports to determine effectiveness.

Standard 5E. Pharmacological, Biological, and Integrative Therapies

The psychiatric-mental health registered nurse incorporates knowledge of pharmacological, biological, and complementary interventions with applied clinical skills to restore the healthcare consumer's health and prevent further disability.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Applies current research findings to guide nursing actions related to pharmacology, other biological therapies, and integrative therapies.

- Assesses the healthcare consumer's response to biological interventions based on current knowledge of pharmacological agents' intended actions, interactive effects, potential untoward effects, and therapeutic doses.
- Includes health teaching for medication management to support healthcare consumers in managing their own medications and adhering to a prescribed regimen.
- Provides health teaching about mechanism of action, intended effects, potential adverse effects of the proposed prescription, ways to cope with transitional side effects, and other treatment options, including the selection of a no-treatment option.
- Directs interventions toward alleviating untoward effects of biological interventions.
- Communicates observations about the healthcare consumer's response to biological interventions to other health clinicians.

Standard 5F. Milieu Therapy

The psychiatric-mental health registered nurse provides, structures, and maintains a safe, therapeutic, recovery-oriented environment in collaboration with healthcare consumers, families, and other healthcare clinicians.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Orients the healthcare consumer and family to the care environment, including the physical environment, the roles of different healthcare providers, how to be involved in the treatment and care delivery processes, schedules of events pertinent to their care and treatment, and expectations regarding safe and therapeutic behaviors. Orients healthcare consumers to their rights and responsibilities particular to the treatment or care environment.
- Establishes a welcoming, trauma-sensitive environment using therapeutic interventions including, but not limited to, sensory or relaxation rooms.
- Conducts ongoing assessments of the healthcare consumer in relation to the environment to guide nursing interventions in maintaining a safe environment.
- Selects specific activities (both individual and group) that meet the healthcare consumer's physical and mental health needs for meaningful participation in the milieu and promotion of personal growth.
- Advocates that the healthcare consumer is treated in the least restrictive environment necessary to maintain the safety of the individual and others.
- Informs the healthcare consumer in a culturally sensitive manner about the need for limits related to safety and the conditions necessary to remove the restrictions.
- Provides support and validation to healthcare consumers when discussing their illness experience, and seeks to prevent complications of illness.

Standard 5G. Therapeutic Relationship and Counseling



The psychiatric-mental health registered nurse (PHM-RN) uses the therapeutic relationship and counseling interventions to assist healthcare consumers in their individual recovery journeys by improving and regaining their previous coping abilities, fostering mental health, and preventing mental disorder and disability.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Uses the therapeutic relationship and counseling techniques to promote the healthcare consumer's stabilization of symptoms and personal recovery goals.
- Uses the therapeutic relationship and counseling techniques, both in the individual and group setting, to reinforce healthy behaviors and interaction patterns and help the healthcare consumer discover individualized health care behaviors to replace unhealthy ones.
- Documents counseling interventions including but not limited to communication and interviewing techniques, problem-solving activities, crisis intervention, stress management, supportive skill building and educational groups, relaxation techniques, assertiveness training, and conflict resolution.

Standard 5H. Psychotherapy

The psychiatric-mental health advanced practice registered nurse conducts individual, couples, group, and family psychotherapy using evidence-based psychotherapeutic frameworks and the nurse–client therapeutic relationship.

COMPETENCIES

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Uses knowledge of relevant biological, psychosocial, and developmental theories, as well as best available research evidence, to select therapeutic methods based on healthcare consumer needs.
- Utilizes interventions that promote mutual trust to build a therapeutic treatment alliance.
- Empowers healthcare consumers to be active participants in treatment.
- Applies therapeutic communication strategies based on theories and research evidence to reduce emotional distress, facilitate cognitive and behavioral change, and foster personal growth.
- Uses awareness of own emotional reactions and behavioral responses to others to enhance the therapeutic alliance.
- Analyzes the impact of duty to report and execute other advocacy actions on the therapeutic alliance.
- Arranges for the provision of care in the therapist's absence.
- Applies ethical and legal principles to the treatment of healthcare consumers with mental health problems and psychiatric disorders.
- Makes referrals when it is determined that the healthcare consumer will benefit from a transition of care or consultation due to change in clinical condition.

- Evaluates effectiveness of interventions in relation to outcomes using standardized methods as appropriate.
- Monitors outcomes of therapy and adjusts the care plan when indicated.
- Therapeutically concludes the nurse–client relationship and transitions the healthcare consumer to other levels of care when appropriate.
- Manages professional boundaries in order to preserve the integrity of the therapeutic process.

Standard 6. Evaluation

The psychiatric-mental health registered nurse evaluates progress toward attainment of expected outcomes.

COMPETENCIES

The psychiatric-mental health registered nurse (RN-PMH):

- Conducts a systematic, ongoing, and criterion-based evaluation of the outcomes and goals in relation to the prescribed interventions by the plan and indicated timeline.
- Collaborates with the healthcare consumer, family or significant others, and other healthcare clinicians in the evaluation process.
- Documents results of the evaluation.
- Evaluates the effectiveness of the planned strategies in relation to healthcare consumer responses and the attainment of the expected outcomes.
- Uses ongoing assessment data to revise the diagnoses and problems, outcomes, and interventions, as needed.
- Adapts the plan of care for the trajectory of treatment according to evaluation of response.
- Disseminates the results to the healthcare consumer and others involved in the care or situation, as appropriate, in accordance with state and federal laws and regulations.
- Participates in assessing and assuring the responsible and appropriate use of interventions in order to minimize unwarranted or unwanted treatment and healthcare consumer suffering.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Evaluates the accuracy of the diagnosis and effectiveness of the interventions in relationship to the healthcare consumer’s attainment of expected outcomes.
- Synthesizes the results of the evaluation analyses to determine the impact of the plan on the affected healthcare consumers, families, groups, communities, and institutions.
- Uses the results of the evaluation analyses to make or recommend process or structural changes, including policy, procedure, or protocol documentation, as appropriate.

- Assists the PMH-RN in the evaluation and re-formulation of the plan in complex situations.

Standard 7. Ethics

The psychiatric-mental health registered nurse integrates ethical provisions in all areas of practice.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Uses Code of Ethics for Nurses with Interpretive Statements (ANA, 2001) to guide practice.
- Delivers care in a manner that preserves and protects healthcare consumer autonomy, dignity, and rights.
- Recognizes and avoids using the power inherent in the therapeutic relationship to influence the healthcare consumer in ways not related to the treatment goals.
- Maintains healthcare consumer confidentiality within legal and regulatory parameters.
- Serves as a healthcare consumer advocate protecting healthcare consumer rights and assisting healthcare consumer in developing skills for self-advocacy.
- Maintains therapeutic and professional interpersonal relationships with appropriate professional role boundaries.
- Demonstrates a commitment to practicing self-care, managing stress, and connecting with self and others.
- Contributes to resolving ethical issues of healthcare consumers, colleagues, or systems as evidenced in such activities as recommending ethics clinical consultations for specific healthcare consumer situations and participating on ethics committees.
- Reports illegal, incompetent, or impaired practices.
- Promotes advance care planning related to behavioral health issues which may include behavioral health advance directives.
- Assists healthcare consumers, particularly those who may be facing life threatening medical illnesses, to plan for and gain access to appropriate palliative and hospice care.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Informs the healthcare consumer of the risks, benefits, and outcomes of healthcare regimens.
- Participates in interprofessional teams that address ethical risks, benefits, and outcomes.
- Promotes and maintains a system and climate that is conducive to providing ethical care.
- Utilizes ethical principles to advocate for access and parity of services for mental health problems, psychiatric disorders, and addiction services.

Standard 8. Education

The psychiatric-mental health registered nurse attains knowledge and competence that reflect current nursing practice.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Participates in ongoing educational activities related to appropriate knowledge bases and professional issues.
- Participates in interprofessional educational opportunities to promote continuing skill-building in team collaboration.
- Demonstrates a commitment to lifelong learning through self-reflection and inquiry to identify learning needs.
- Seeks experiences that reflect current practice in order to maintain skills and competence in clinical practice or role performance.
- Acquires knowledge and skills appropriate to the specialty area, practice setting, role, or situation.
- Maintains professional records that provide evidence of competency and lifelong learning.
- Seeks experiences and formal and independent learning activities, to maintain and develop clinical and professional skills and knowledge.
- Seeks experiences and formal and independent learning activities to maintain and develop skills in and knowledge of electronic healthcare media.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Uses current healthcare research findings and other evidence to expand clinical knowledge, enhance role performance, and increase knowledge of professional issues.
- Contributes to an environment that promotes interprofessional education.
- Models expert practice to interprofessional team members and healthcare consumers.
- Mentors registered nurses and colleagues as appropriate.
- Participates in interprofessional teams contributing to role development and advanced nursing practice and health care.

Standard 9 Evidence-Based Practice and Research

The psychiatric-mental health registered nurse integrates evidence and research findings into practice.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Utilizes evidence-based nursing knowledge, including research findings, to guide practice decisions.
- Actively participates in research activities at various levels appropriate to the nurse's level of education and position. Such activities may include:
 - Identifying clinical problems specific to psychiatric-mental health nursing research.
 - Participating in data collection (surveys, pilot projects, and formal studies).
 - Assisting with informed consent process.
 - Participating in a formal committee or program.
 - Sharing research activities and findings with peers and others.
 - Conducting evidence-based practice projects and research.
 - Critically analyzing and interpreting research for application to practice.
 - Using research findings in the development of policies, procedures, and standards of practice in nursing care.
 - Incorporating research as a basis for learning.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Contributes to nursing knowledge by conducting, critically appraising, or synthesizing research that discovers, examines, and evaluates knowledge, theories, criteria, and creative approaches to improve healthcare practice.
- Promotes a climate of research and clinical inquiry.
- Formally disseminates research findings through activities such as presentations, publications, consultation, and journal clubs.
- Promotes a culture that consistently integrates the best available research evidence into practice.

Standard 10. Quality of Practice

The psychiatric-mental health registered nurse systematically enhances the quality and effectiveness of nursing practice.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):



- Demonstrates quality by documenting the application of the nursing process in a responsible, accountable, and ethical manner.
- Uses the results of quality improvement activities to initiate changes in nursing practice and in the healthcare delivery system.
- Uses creativity and innovation in nursing practice to improve care delivery.
- Incorporates new knowledge to initiate changes in nursing practice if desired outcomes are not achieved.
- Participates in quality improvement activities. Such activities may include:
 - Identifying aspects of practice that are important for quality monitoring.
 - Using indicators developed to monitor quality and effectiveness of nursing practice.
 - Collecting data to monitor quality and effectiveness of nursing practice.
 - Analyzing quality data to identify opportunities for improving nursing practice.
 - Formulating recommendations to improve nursing practice or outcomes.
 - Implementing activities to enhance the quality of nursing practice.
 - Developing, implementing, and evaluating policies, procedures, and guidelines to improve the quality of practice.
 - Participating on interprofessional teams to evaluate clinical care or health services.
 - Participating in efforts to minimize costs and unnecessary duplication.
 - Analyzing factors related to safety, satisfaction, effectiveness, and cost–benefit options.
 - Analyzing organizational systems for barriers.
 - Implementing processes to remove or decrease barriers within organizational systems.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Obtains and maintains professional certification at the advanced level in psychiatric-mental health nursing.
- Designs quality improvement initiatives to improve practice and health outcomes.
- Identifies opportunities for the generation and use of research and evidence.
- Evaluates the practice environment and quality of nursing care rendered in relation to existing evidence.

Standard 11. Communication

The psychiatric-mental health registered nurse communicates effectively in a variety of formats in all areas of practice.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Assesses communication format preferences of healthcare consumers, families, and colleagues.*
- Assesses her or his own communication skills in encounters with healthcare consumers, families, and colleagues.*
- Seeks continuous improvement of her or his own communication and conflict resolution skills.*
- Conveys information to healthcare consumers, families, the interprofessional team, and others in communication formats that promote accuracy.
- Questions the rationale supporting care processes and decisions when they do not appear to be in the best interest of the healthcare consumer.*
- Discloses observations or concerns related to hazards and errors in care or the practice environment to the appropriate level.
- Maintains communication with other members of the interprofessional team to minimize risks associated with transfers and transition in care delivery.
- Documents referrals, including provisions for continuity of care.
- Contributes her or his own professional perspective in discussions with the interprofessional team.
- Documents plan of care communications, rationales for changes, and collaborative discussions to improve nursing care. *(BHE.MONE, 2006)

Standard 12. Leadership

The psychiatric-mental health registered nurse provides leadership in the professional practice setting and the profession.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Oversees the nursing care given by others while retaining accountability for the quality of care given to the healthcare consumer.
- Abides by the vision, the associated goals, and the plan to implement and measure progress of an individual healthcare consumer or progress within the context of the healthcare organization.
- Demonstrates a commitment to continuous lifelong learning and education for self and others.
- Mentors colleagues for the advancement of nursing practice, the profession, and quality health care.
- Treats colleagues with respect, trust, and dignity.*
- Develops communication and conflict resolution skills.
- Participates in professional organizations.
- Communicates effectively with the healthcare consumer and colleagues.
- Seeks ways to advance nursing autonomy and accountability.*
- Participates in efforts to influence healthcare policy involving healthcare consumers and the profession.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Influences decision-making bodies to improve the professional practice environment and healthcare consumer outcomes.
- Influences health policy to promote person-centered, recovery-oriented services for prevention and treatment of mental health problems and psychiatric disorders.
- Provides direction to enhance the effectiveness of the interprofessional team.
- Designs innovations to effect change in practice and improve health outcomes.
- Promotes advanced practice nursing and role development by interpreting its role for healthcare consumers, families, and others.
- Models expert practice to interprofessional team members and healthcare consumers.
- Mentors colleagues in the acquisition of clinical knowledge, skills, abilities, and judgment.
(*BHE.MONE, 2006)

Standard 13. Collaboration

The psychiatric-mental health registered nurse collaborates with the healthcare consumer, family, interprofessional health team, and others in the conduct of nursing practice.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Shares knowledge and skills with peers and colleagues as evidenced by such activities as healthcare conferences or presentations at formal or informal meetings.
- Provides peers with feedback regarding their practice and role performance.
- Interacts with peers and colleagues to enhance one's own professional nursing practice and role performance.
- Maintains compassionate and caring relationships with peers and colleagues.
- Contributes to an environment that is conducive to the education of healthcare professionals.
- Contributes to a supportive and healthy work environment.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Models expert practice to interprofessional team members and healthcare consumers.

- Mentors other registered nurses and colleagues as appropriate.
- Participates in interprofessional teams that contribute to role development and advanced nursing practice and health care.
- Partners with other disciplines to enhance health care through interprofessional activities such as education, consultation, management, technological development, or research opportunities.
- Facilitates an interprofessional process with other members of the healthcare team.

Standard 14. Professional Practice Evaluation

The psychiatric-mental health registered nurse evaluates one's own practice in relation to the professional practice standards and guidelines, relevant statutes, rules, and regulations.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Applies knowledge of current practice standards, guidelines, statutes, rules, and regulations.
- Engages in self-evaluation of practice on a regular basis, identifying areas of strength as well as areas in which professional development would be beneficial.
- Obtains informal feedback regarding practice from healthcare consumers, peers, professional colleagues, and others.
- Participates in systematic peer review as appropriate.
- Takes action to achieve goals identified during the evaluation process.
- Provides rationale for practice beliefs, decisions, and actions as part of the informal and formal evaluation processes.
- Seeks formal and informal constructive feedback from peers and colleagues to enhance psychiatric-mental health nursing practice or role performance.
- Provides peers with formal and informal constructive feedback to enhance psychiatric-mental health nursing practice or role performance.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Engages in a formal process seeking feedback regarding one's own practice from healthcare consumers, peers, professional colleagues, and others.
- Models self-improvement by reflecting on and evaluating one's own practice and role performance, and sharing insights with peers and professional colleagues.

Standard 15. Resource Utilization



The psychiatric-mental health registered nurse considers factors related to safety, effectiveness, cost, and impact on practice in the planning and delivery of nursing services.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):

- Evaluates factors such as safety, effectiveness, availability, cost–benefit, efficiencies, and impact on practice when choosing practice options that would result in the same expected outcome.
- Assists the healthcare consumer and family in identifying and securing appropriate and available services to address health-related needs.
- Assists the healthcare consumer and family in factoring in costs, risks, and benefits in decisions about treatment and care.
- Assigns or delegates elements of care to appropriate healthcare workers, based on the needs and condition of the healthcare consumer, potential for harm, stability of the healthcare consumer’s condition, complexity of the task, and predictability of the outcome.
- Assists the healthcare consumer and family in becoming informed about the options, costs, risks, and benefits of treatment and care.
- Advocates for resources that promote quality care, including technologies.
- Identifies the evidence when evaluating resources.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Utilizes organizational and community resources to formulate interprofessional plans of care.
- Formulates innovative solutions for healthcare consumer problems that address effective resource utilization and maintenance of quality.
- Designs evaluation strategies to demonstrate quality, cost effectiveness, cost–benefit, and efficiency factors associated with nursing practice.
- Builds constructive relationships with hospital and community providers, organizations, and systems to promote collaborative decision making and planning to identify and meet resource needs.

Standard 16. Environmental Health

The psychiatric-mental health registered nurse practices in an environmentally safe and healthy manner.

COMPETENCIES

The psychiatric-mental health registered nurse (PMH-RN):



- Attains knowledge of environmental health concepts, such as implementation of environmental health strategies.
- Promotes a practice environment that reduces environmental health risks for workers and healthcare consumers.
- Assesses the practice environment for factors such as sounds, odors, noises, and lights that threaten health.
- Advocates for the judicious and appropriate use of products in health care.
- Communicates environmental health risks and exposure reduction strategies to healthcare consumers, families, colleagues, and communities.
- Utilizes scientific evidence to determine if a product or treatment is an environmental threat.
- Participates in strategies to promote healthy communities.

ADDITIONAL COMPETENCIES FOR THE PSYCHIATRIC-MENTAL HEALTH ADVANCED PRACTICE REGISTERED NURSE

The psychiatric-mental health advanced practice registered nurse (PMH-APRN):

- Creates partnerships that promote sustainable environmental health policies and conditions.
- Analyzes the impact of social, political, and economic influences on the environment and human health exposures. Critically evaluates the manner in which environmental health issues are presented by the popular media.
- Advocates for implementation of environmental principles for nursing practice.
- Supports nurses in implementing environmental principles in nursing practice.

The Addictions Nursing Scope and Standards of Practice

American Nurses Association. (2013). Addictions nursing: Scope and standards of practice. American Nurses Association.

Standards of Practice

Standard 1. Assessment

The registered nurse collects comprehensive data pertinent to the healthcare consumer's health or the situation.

Standard 2. Diagnosis

The registered nurse analyzes the assessment data to determine the diagnoses or issues.

Standard 3. Outcomes Identification

The registered nurse identifies expected outcomes for a plan individualized to the healthcare consumer or the situation.

Standard 4. Planning

The registered nurse develops a plan that prescribes strategies and alternatives to attain expected outcomes.

Standard 5. Implementation

The registered nurse implements the identified plan.

Standard 5A. Coordination of Care

The registered nurse coordinates care delivery.

Standard 5B. Health Teaching and Health Promotion

The registered nurse employs strategies to promote health and a safe practice environment.

Standard 5C. Consultation

The graduate-level prepared specialty nurse or advanced practice registered nurse provides consultation to influence the identified plan, enhance the abilities of others, and effect change.

Standard 5D. Prescriptive Authority and Treatment

The advanced practice registered nurse uses prescriptive authority, procedures, referrals, treatments, and therapies in accordance with state and federal laws and regulations.

Standard 6. Evaluation

The registered nurse evaluates progress toward attainment of outcomes.

Physician Assistant Curricula

Massachusetts Physician Assistant Education Core Competencies for the Prevention and Management of Prescription Drug Misuse

Servis, M., Fishman, S. M., Wallace, M. S., Henry, S. G., Ziedonis, D., Ciccarone, D., Knight, K. R., Shoptaw, S., Dowling, P., Suchard, J. R., Shah, S., Singh, N., Cedarquist, L. C., Alem, N., Copenhaver, D. J., Westervelt, M., & Willis, B. C. (2021). Responding to the Opioid Epidemic: Educational Competencies for Pain and Substance Use Disorder from the Medical Schools of the University of California. *Pain medicine (Malden, Mass.)*, 22(1), 60–66. <https://doi.org/10.1093/pm/pnaa399>

Table 1. The Massachusetts Physician Assistant Education Core Competencies for the Prevention and Management of Prescription Drug Misuse¹⁴

In the appropriate setting, using recommended and evidence-based methodologies, the graduating physician assistant should demonstrate the independent ability and/or knowledge to:

Primary Prevention Domain—Preventing Prescription Drug Misuse: *Screening, Evaluation, and Prevention*

1. Evaluate a patient’s pain using age, gender, and culturally appropriate evidence-based methodologies.
2. Evaluate a patient’s risk for substance use disorders by using age, gender, and culturally appropriate evidence-based communication skills and assessment methodologies, supplemented with relevant available patient information including, but not limited to, health records, family history, prescription dispensing records (eg, the Prescription Drug Monitoring Program or “PMP”), drug urine screenings, and screenings for commonly co-occurring psychiatric disorders (especially depression, anxiety disorders, and PTSD).
3. Identify and describe potential pharmacological and nonpharmacological treatment options including opioid and nonopioid pharmacological treatments for acute and chronic pain management, along with patient communication and education regarding the risks and benefits associated with each of these available treatment options.

Secondary Prevention Domain—Treating Patients at Risk for Substance Use Disorders: *Engage Patients in Safe, Informed, and Patient-Centered Treatment Planning*

4. Describe substance use disorder treatment options, including medication-assisted treatment, as well as demonstrate the ability to appropriately refer patients to addiction medicine specialists and treatment programs for both relapse prevention and co-occurring psychiatric disorders.
5. Prepare evidence-based and patient-centered pain management and substance use disorder treatment plans for patients with acute and chronic pain with special attention to safe prescribing and recognizing patients displaying signs of aberrant prescription use behaviors.
6. Demonstrate the foundational skills in patient-centered counseling and behavior change in the context of a patient encounter, consistent with evidence-based techniques.

Tertiary Prevention Domain—Managing Substance Use Disorders as a Chronic Disease: *Eliminate Stigma and Build Awareness of Social Determinants*

7. Recognize the risk factors for, and signs of, opioid overdose and demonstrate the correct use of naloxone rescue.
8. Recognize substance use disorders as a chronic disease by effectively applying a chronic disease model in the ongoing assessment and management of the patient.
9. Recognize their own and societal stigmatization and biases against individuals with substance use disorders and associated evidence-based medication-assisted treatment.
10. Identify and incorporate relevant data regarding social determinants of health into treatment planning for substance use disorder.

Multidisciplinary Curricula

AMERSA: Select SUD Core Competencies Shared by Two or More Disciplines

Rutkowski B. A. (2019). Specific disciplines addressing substance use: AMERSA in the 21st century. *Substance abuse*, 40(4), 392–395. <https://doi.org/10.1080/08897077.2019.1686726>

- Recognize the signs and symptoms of SUD Specific Disciplines Addressing Substance Use: AMERSA in the 21st Century.
- Utilize evidence-based measures to perform age, gender, and culturally appropriate substance use screening and assessment.
- Intervene with patients whose health is at-risk due to alcohol or drug use and reinforce healthy behaviors for those who are at low risk.
- Utilize established protocols to ensure safe care (CIWA-Alcohol, COWS, CIWA-Benzodiazepines).
- Prescribe medications, treatment, and therapies in accordance with the healthcare consumer's values, preferences, and needs and according to state- and federally mandated scope of practice.
- Identify and address the legal and ethical issues involved in the care of patients with SUD (e.g., 42 CFR Part 2, confidentiality, minor consent, etc.)
- Use patient-centered language to mitigate the stigma associated with substance use.
- Identify referral sources and ensure linkage to treatment for those in need.
- Promote the use of statewide peer assistance programs/groups and the use of alternative to discipline programs for health professionals whose practice is impaired because of substance use.

SAMHSA: Recommendations for Curricular Elements in Substance Use Disorders Training

1. Substance Use Disorders
 - a. Use of validated screening tools for SUD and risk factors for substance use, including mental disorders.
 - b. Diagnosis and assessment of individuals who screen positive for SUDs.
 - c. The initiation and management of FDA approved medications for SUDs (opioids, alcohol and tobacco), including the impact of unique, individual physiology and metabolism on medication pharmacodynamics.
 - d. Consideration of polysubstance use and co-occurring mental disorders.
 - e. Patient and family education on safety and overdose prevention (diversion control; safe storage; use of naloxone).
2. Effective Treatment Planning
 - a. Use of patient-centered decision making and paradigms of care, and use of evidence-based communication strategies such as shared decision making and motivational interviewing.
 - b. The impact of stigma, trauma and the social determinants of health on substance use and recovery.

- c. Collaborating with other disciplines to facilitate access to medications and referrals to services such as case management.
 - d. Legal and ethical issues involved in the care of patients with SUD.
3. Pain management and substance misuse
- a. The assessment of patients with acute, subacute, or chronic pain.
 - b. Components of developing an effective treatment plan, including general principles underlying nonpharmacologic and pharmacologic analgesic therapy, as well as the importance of multidisciplinary treatment interventions.
 - c. Managing patients on opioid analgesics, including tapering off the medication when the benefits of opioids no longer outweigh the risks.
 - d. Recognizing signs of OUD in the setting of prescribed opioids.

Appendix II References

Medical Schools

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3. Pennsylvania State Core Competencies for Education on Opioids and Addiction
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Physician Assistant



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Multi-disciplinary

1. AMERSA: Select SUD Core Competencies Shared by Two or More Disciplines
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