PETITION FOR THE RECOGNITION OF A
SPECIALTY IN PROFESSIONAL PSYCHOLOGY

THIS PETITION gives guidance to the types and amounts of information necessary for a formal decision to be reached. Petitioning organizations may use additional pages where necessary. The petitioning organization is free to provide any additional material deemed relevant.

**NOTE**: Complete responses to all questions posed in each of the criteria are required. Appendix materials should not be considered as substitutes for the completion of responses to questions in the criteria.

AMERICAN PSYCHOLOGICAL ASSOCIATION
750 First Street, NE
Washington, D.C. 20002-4242
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PETITION PACKAGE
Preamble

Knowledge and practice skills in psychology have expanded and become increasingly differentiated over the past 50 years. Historically, the American Psychological Association (APA) acknowledged four professional specialties in psychology: clinical, counseling, school, and industrial/organizational psychology. It is important to note that these specialties first gained de facto recognition through a process of historical evolution. The APA accreditation guidelines also reference clinical, counseling, and school psychology as specialties.

A shared core of scientific and professional knowledge, skills, and attitudes is common to professional specialties. This shared core has been recognized in several conference reports on the future of professional psychology including the reports of groups and conferences of the National Council of Schools and Programs of Professional Psychology, the Joint Council on Professional Education in Psychology, and the National Conference on Scientist-Practitioner Education and Training for the Professional Practice of Psychology. Nothing in this document precludes a provider of psychological services from using the methods or dealing with the populations of any specialty, except insofar as they do so “within the boundaries of their competence, based on their education, training, supervised experience, consultation, study, or professional experience” (APA Ethical Principles of Psychologists and Code of Conduct, 2002).

The public will continue to need the services of general practice specialists, such as those offered by clinical, counseling, school and industrial/organizational psychologists. However, the emergence of new specialties to provide needed psychological services must also be recognized and validated. There must be a mechanism within the field to provide for the recognition of specialties.

Recent decades have produced what amounts to an explosion in professional knowledge and areas of application. As a result, new areas of application of psychology's scientific and applied knowledge have been organized around particular emphases in professional practice. The training to acquire this knowledge and skill may occur at the doctoral and/or postdoctoral levels. Such a proliferation of knowledge and an expansion of practice domains has resulted in a need to establish a process for recognizing specialties in professional practice that are differentiated from core scientific and applied professional foundations in psychology. At various times in past years, groups within and outside APA have worked to articulate such an identification and recognition process. Acknowledgement is given to the work of APA’s Task Force on Specialty Criteria, the Board of Professional Affairs Subcommittee on Specialization, and the Board of Educational Affairs Task Force on Scope and Criteria of Accreditation, as well as the American Board of Professional Psychology for important contributions to this process. Their efforts have been a part of the continuing evolution of a process to identify specialties in psychology. It is now time for APA to exercise leadership in the design and implementation of a de jure process for the recognition of specialties in psychology.

For purposes of this endeavor the following definition of a specialty is adopted:

A specialty is a defined area of professional psychology practice characterized by a distinctive configuration of competent services for specified problems and populations. Practice in a specialty requires advanced knowledge and skills acquired through an organized sequence of education and training in addition to the broad and general education and core scientific and professional foundations acquired through an APA or
CPA accredited doctoral program.* Specialty training may be acquired either at the doctoral or postdoctoral level as defined by the specialty.

*Except where APA or CPA program accreditation does not exist for that area of professional psychology

Although the specific dimensions of specialty programs may vary in their emphases and in available resources, every defined specialty in professional psychology will contain: (a) core scientific foundations in psychology; (b) a basic professional foundation; (c) advanced scientific and theoretical knowledge germane to the specialty; and (d) advanced professional applications of this knowledge to selected problems and populations in particular settings, through use of procedures and techniques validated on the same.

The relationship between a body of knowledge and a set of skills in reference to each of the parameters of practice specified in Criterion VI below represents the most critical aspect of the basic definition of a specialty.

A specialty is distinguished from a proficiency, which is a circumscribed activity in the general practice of professional psychology or one or more of its specialties that is represented by a distinct procedure, technique, or applied skill set used in psychological assessment, treatment and/or intervention within which one develops competence.

The American Psychological Association and its Commission for the Recognition of Specialties and Proficiencies in Professional Psychology (CRSPPP) will consider petitions for formal recognition of specialties. Petitions that are received by CRSPPP will be reviewed and acted upon by the APA Council of Representatives. CRSPPP will review the status of each specialty at least every seven years and recommend whether the specialty should continue to be recognized.
Name of Proposed Specialty: Clinical Psychopharmacology

Please check one:

- [ ] Petition for Initial Recognition
- [x] Petition for Renewal of Recognition
Criterion I.
Administrative Organizations. The proposed specialty is represented by a specialty council or one or more organizations that provide systems and structures sufficient to assure the organized development of the specialty. **Commentary:** The evolution of a specialty generally proceeds from networks of psychologists interested in the area to the eventual establishment of organized administrative bodies which carry out specific responsibilities for the specialty and its practitioners. These responsibilities include governance structures which meet regularly to review and further describe the specialty and appropriate policies for education and training in the specialty.

1. Please provide the following information for the organization or specialty council submitting the petition:

Name of organization or specialty council: The American Society for the Advancement of Pharmacotherapy (ASAP)/Division 55 of the American Psychological Association has submitted this petition for the recognition of Clinical Psychopharmacology as a specialty. This Society represents the active stakeholders in the training/education, research, and practice of Clinical Psychopharmacology. Division 55 was founded and approved by APA Council in 2000 and currently has 671 members. In the 19 years since its inception, the Division has grown, and the membership has evolved to include increasing numbers of early career psychologists. This infusion of early career psychologists with interest and dedication to Clinical Psychopharmacology can be seen in the growth of the number of enrollees in MSCP programs, and the increasing number of programs offering education and training leading to the MSCP. Details of this growth will be presented later in this document. The Division has well-established, standing committees that include a Training Director, Diversity, and Research Councils. The Division also has standing committees whose function is the routine, ongoing maintenance of the structure and governance of the Division, the maintenance of the specialty and quality assurance. These committees include the Bylaws, Finance, Membership, Social Media, Awards, Nomination/Elections and Continuing Education Committees. ASAP/Division 55 maintains a robust online presence with rapidly growing Facebook (546 “Likes”) and Twitter (475 followers) communities. For example, Division 55’s Twitter followership has increased over 1300% in under 3 years due to the very active Social Media Committee and engaged Division members who post and tweet regularly.

Address: 750 First Street, NE

City/State/Zip: Washington, D.C. 20002-4242

Phone: (202) 336-6013

E-mail address: apadivision55@gmail.com

Website of organization: https://www.apadivisions.org/division-55
2. Please provide the following information for the President, Chair, or representative of the organization or specialty council submitting the petition:

Name: Judi Steinman, Ph.D. (2019 President, American Society for the Advancement of Pharmacotherapy/ Division 55, American Psychological Association
APA membership status: Member
Address: 9 Hokulani Street
City/State/Zip: Hilo, HI 96720
Phone:(808) 987-8752 Fax:
E-mail address: judi.steinman.phd@gmail.com

3. Please provide the following information for the organization or specialty council submitting the petition:

Year founded: 2000
Incorporated: Yes
Incorporated: Washington, D.C.

Describe the purpose and objectives of the administrative organization or specialty council submitting the petition.

The American Society for the Advancement of Pharmacotherapy (ASAP), Division 55 of the American Psychological Association, was created to enhance psychological treatments combined with psychopharmacological medications. The Division promotes the public interest by working for the establishment of high quality statutory and regulatory standards for psychological care. Division 55 encourages the collaborative practice of psychological and pharmacological treatments with other health professions. The Division seeks funding for training in psychopharmacology and pharmacotherapy from private and public sources such as the federal Graduate Medical Education programs. Division 55 also facilitates and supports the expansion of the scope of practice for psychologists trained in pharmacotherapy.

Implicit in the objectives stated above is the facilitation of the understanding of Clinical Psychopharmacologists by both professionals (within health service psychology and within other healthcare professions) and the general public. ASAP also works to promote quality assurance in education, training, credentialing, and the practice of Clinical Psychopharmacology.

Please append the bylaws for the petitioning organization or specialty council if bylaws are not provided on the website.
Outline the structure and functions of the administrative organization or specialty council (frequency of meetings, number of meetings per year, membership size, functions performed, how decisions are made, types of committees, dues structure, publications, etc.) using the table below. Provide samples of newsletters, journals, and other publications, etc.

<table>
<thead>
<tr>
<th>Name of Organization</th>
<th>The American Society for the Advancement of Pharmacotherapy (ASAP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Meetings</td>
<td>Annual</td>
</tr>
<tr>
<td>Number of Meetings per year</td>
<td>One</td>
</tr>
<tr>
<td>Membership size</td>
<td>671</td>
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<tr>
<td>Functions Performed</td>
<td>ASAP promotes the public interest by working for the establishment of high quality statutory and regulatory standards for psychological care, supports the expansion of psychological practice to include prescriptive authority, encourages the collaborative practice of psychological and pharmacological treatments with other health professions, seeks funding for training in psychopharmacology and pharmacotherapy from private and public sources, supports research into the efficacy of psychologists prescribing, supports and aids in the implementation psychopharmacological training for psychologists, acts as a central resource and database for psychologists seeking prescriptive authority, and supports increased access to mental health services specifically in underserved populations and locales.</td>
</tr>
<tr>
<td>How are decisions made</td>
<td>By vote of membership.</td>
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<tr>
<td>Types of committees</td>
<td>ASAP has two standing committees established by the bylaws, the Finance Committee and Nomination/Elections Committee. In order to assure the crucial functions of the Division and the oversight of the Clinical Psychopharmacology Specialty, other standing committees and councils include: the Training Council (<a href="https://www.apadivisions.org/division-55/research/training-council/index">https://www.apadivisions.org/division-55/research/training-council/index</a>), the Diversity Committee, the Research Council (<a href="https://www.apadivisions.org/division-55/research">https://www.apadivisions.org/division-55/research</a>), and the Continuing Education Committee (<a href="https://www.apadivisions.org/division-55/research/continuing-education/index">https://www.apadivisions.org/division-55/research/continuing-education/index</a>). In order to make certain there is continued continuity of these oversight functions within the structure of the Division and Specialty, each year at the final Board of Directors for the calendar year, the President-Elect shall announce to the Board his/her roster of proposed committees or special projects for his/her Presidential year and his/her nominees for the committee chair and membership for each such committee. These nominees</td>
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Bylaws are provided in Appendix I.
will be officially appointed at the first meeting of the new term. Functions of each committee and council are detailed on their web page, along with their goals and ongoing projects. In brief, the Finance, Nominations/Elections, and Bylaws Committees provide for the ongoing structure of the Society managing finances, a leadership pipeline, and the continued monitoring of the Society’s bylaws to keep them current and consistent with APA bylaws. The Research Council, Training Council, and Diversity Committee provide the continuity of leadership and oversight and service as the conduit by which ASAP monitors the developments in clinical psychopharmacology. These key, and permanent committees provide continuous oversight of the specialty. This is routinely and continuously carried out through active monitoring to implement changes necessary to: keep the specialty current with developing research, keep the training required for Clinical Psychopharmacologists current as the field evolves, and allow for the integration and awareness of diversity issues ranging from genetic variations, biological diversity, and the sociocultural implications of the use of psychopharmacological agents in clinical practice. Detailed descriptions of these committees, as well as their structure and function are presented later in this petition.

### Dues Structure

- **Yearly dues:** $40.00/year

### Names of Publications

- **ASAP/Tablet**

### Website


### Present a rationale that describes how your organization or specialty council provides systems and structures which make a significant contribution to the organized development of the specialty.

The American Society for the Advancement of Pharmacotherapy (ASAP)/APA Division 55 provides the structure for the development and maintenance of the specialty of Clinical Psychopharmacology. It has worked since its inception to develop Clinical Psychopharmacology as a specialty. ASAP created and maintains a Training Directors Council, which includes representatives from the major clinical psychopharmacology training programs around the country. The Training Directors Council works to monitor the training of psychologists in clinical psychopharmacology and assists in their adherence to APA training models, the most recent of which was approved in 2019, the Model Education and Training Program in Psychopharmacology for Prescriptive Authority (APA, 2019). Through constant monitoring of developments in the field, the Research Council works to modify training as needed to keep abreast of new developments in the field. ASAP works to refine and develop training models in Clinical Psychopharmacology and keep the training offered in clinical psychopharmacology consistent with the guidelines approved by the APA Council of Representatives. Practice Guidelines Regarding Psychologists’ Involvement in Pharmacological Issues, American Psychological Association, were published in 2011 and are in active review at this time. APA has also developed a formal designation process to identify clinical
psychopharmacology programs that meet its standards. In the last three years, two additional MSCP programs have been initiated and are already in the process of attaining APA designation. ASAP’s active Research Council monitors current research trends in clinical psychopharmacology and provides an ongoing listing of current and important research and article recommendations in clinical psychopharmacology. The Board of ASAP also monitors and offers coordination between psychological organizations working to expand the scope of practice of psychology and to pass enabling legislation that would allow pharmacologically-trained psychologists to prescribe.

To assure the evaluation of prescribing specialists after receiving the postdoctoral master’s degree, and in order to practice prescribing medication within the Clinical Psychopharmacology Specialty, states require licensure, the attainment of a postdoctoral master’s degree in clinical psychopharmacology, passage of the Psychopharmacology Examination for Psychologists (PEP) administered by the Association of State and Provincial Psychology Boards (ASPPB), experiential training as required by individual state licensure statutes and rules, and any additional training as delineated by the enabling legislation in individual states. States where psychologists are able to practice have also instituted robust continuing education requirements, detailed later in this document. To further assure ongoing evaluation of Clinical Psychopharmacology specialists, ASAP is actively pursuing official recognition of Clinical Psychopharmacology as an area of board certification from the American Board of Professional Psychology (ABPP). As a recognized specialty, ongoing continuing education will be required of all Board Certified Clinical Psychopharmacologists.

4. **Signatures of official representing the organization or specialty council submitting the petition:**

<table>
<thead>
<tr>
<th>Name/Title/Date</th>
</tr>
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| Sean R. Evers, Ph.D.  
Past President, American Society for the Advancement of Pharmacotherapy, APA Division 55  
December 29, 2019 |
Criterion II. Public Need for Specialty Practice. The services of the specialty are responsive to identifiable public needs

Commentary: Specialties may evolve from the profession’s recognition that there is a particular public need for applications of psychology. Specialties may also develop from advances in scientific psychology from which applications to serve the public may be derived.

Describe the public needs that this specialty fulfills with relevant references. Under each need specify the populations served and relevant references.

The specialty of clinical psychopharmacology was founded to offer the public increased access to distinctive, competent services providing diagnosis and treatment utilizing psychopharmacological agents as appropriate for the patient and his/her presenting problems (Smyer et al., 1995; Fox et al., 2009). This includes enhancing team-based services that psychologists trained to meet the specialty requirements can provide in integrated health service settings and with older adult populations; both are growing areas requiring broad, general and specialty-specific health service psychology (Rozensky et al., 2018; Moore & Mattison, 2017).

It has long been recognized that there is an increasing need for access to high quality behavioral health care across service venues and across the lifespan. This need is partly related to a steady decline in the numbers of available psychiatrists. Between 2003 and 2013, the population of practicing psychiatrists decreased by 10 percent (Bishop et al., 2016). This study also reported that 55 percent of the counties in the continental United States have no psychiatrists. Furthermore, a study commissioned by the U.S. Department of Health and Human Services estimated that the demand for psychiatric services will outstrip supply of psychiatrists by 25 percent by the year 2025 (National Council for Behavioral Health, 2017). Similarly, the Health Resources and Services Administration (HRSA) estimates that by the year 2030, the supply of adult psychiatrists will decrease by 27 percent (HRSA Behavioral Health Workforce Projections: 2016-2030, https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/psychiatrists-2018.pdf).

In response to this identified shortage, these studies make suggestions for addressing the need that include trying to entice more medical students to choose psychiatry as a career specialty; increasing the utilization of nurse practitioners (NPs) and physician assistants (PAs), and using telemedicine technology. What is missing from this list is the utilization of specialty-trained psychologists with expertise in psychopharmacology to help address the public need, specialists who can either consult with non-psychiatrist prescribers or prescribe themselves. This approach has advantages over others that have been proposed, and it supports the need for a specialty designation in clinical psychopharmacology. In fact, pharmacologically-trained psychologists have been carrying out clinical activity that has helped to fill the gap of deficient medication management in the mental health population for over 20 years (Fox et al., 2009).

Broad and general training in psychological interventions coupled with advanced, specialized training in psychopharmacology makes the psychologist who is specially trained in clinical
psychopharmacology uniquely positioned to address a broad range of psychological disorders and populations with evidence-based interventions that are both psychological and pharmacological-based and thus help meet the needs of specific populations with various diagnoses (Muse & McGrath, 2010; McGrath & Muse, 2010). Many studies since the 1970s have shown that combined psychotherapy and psychotropic therapy is superior to monotherapy for many diagnoses, including moderate to severe major depression (Mintz, 2006), panic disorder and obsessive-compulsive disorder (Cuijpers, 2014), as well as dysthymia, chronic benign pain disorders, bulimia nervosa, binge-eating disorder, attention-deficit/hyperactivity disorder, and late life depression (Muse, 2018).

The use of psychotropic medications to treat mental health problems is widespread and generally increasing over time. For example, between 1996-1998 and 2010-2012, the percentage of children being treated with psychotropic medications increased from 5.5% to 8.9% (Olfson, 2015). Between the 1988-1994 and 1999-2002 time periods, the percentage of adults using psychotropic medications increased from 6.1% to 11.1% (Paulose-Ram, 2007). It is important to note that as adults age, not only do more of them receive prescriptions for psychotropic medications, but they are also more likely to take more medications in general due to treatments for chronic medical conditions. The CDC (2018) reports that from 2011 to 2014, 90.6% of individuals 65 years of age or older received at least one medication; 66.8% received three or more prescriptions, and 40.7% received five or more prescriptions within the prior 30 days. Moore and Mattison (2017) reported on data from national surveys that show increased utilization of psychotropic drugs in the elderly population (e.g., 25% of adults aged 60 to 85 years vs. 9% of those ages 18 to 39 years). The Population Reference Bureau (PRB) estimates that the number of individuals aged 65 or older will more than double by 2060 compared to the number of those individuals who were in the population in 2014 (PRB, 2015). All of this information supports the need for additional providers with expertise in psychopharmacology that also have expertise in understanding the changing physiological and psychological characteristics and needs of individuals throughout the lifespan.

The public need for psychologists competently trained in clinical psychopharmacology is reinforced by data that suggest, in a trend spanning several decades, that there has been a negative correlation between the number of Americans treated with psychotropics and the number of psychiatrists available to treat them. Between 2007 and 2017, psychiatrists went from the 9th most searched for physician specialty to the 2nd most searched for specialty according to consulting firm Merritt Hawkins (2017). In 2016, there were 4,627 mental health professional shortage areas (HPSAs) in the United States designated by the Health Resources and Services Administration (HRSA). HPSAs are determined based on the number of psychiatrists in a county or other area of need, such as prisons and Native American reservations. Sixty percent of United States counties have no psychiatrist at all (New American Economy, 2017). In 2017, an estimated 56.5% of adults with a mental illness received no treatment at all, and 64.1% of children with major depression received no treatment at all (Mental Health America, 2017). As the aging psychiatrist population retires and fewer psychiatrists enter the system, despite growing consumer demand, the need for quality psychiatric care is expected to grow (Kweskin, 2010).

The American Psychological Association’s recommended training guidelines underscore the significance of recognizing clinical psychopharmacology as a specialty within professional
psychology that meets a specific public need (APA, 2009). The fundamentals of clinical psychopharmacology training in the critical reading and evaluation of pharmacological research necessary for the appropriate use and understanding of the benefits and limitations of pharmacotherapy within the general public as well as within minority populations (Muse & McGrath, 2010a) incorporates the foundational basis of APA’s training guidelines, and sets psychology apart from other prescribing professions within the mental health sector. The knowledge bases of clinical psychopharmacology specialists enable them to provide quality care that also improves access to psychiatric treatment for patients. The combination of psychological treatment coupled with the rational use of pharmacological agents offers expanded treatment options for populations experiencing the critical shortages of trained prescribers of psychotropic medications, thus improving patient access (Muse & McGrath, 2010b).

Psychologists trained in the specialty of clinical psychopharmacology offer prescribing services in states and agencies where they have been permitted by law and offer consultation and enhanced opportunities for collaborative care in those areas where prescribing legislation has yet to be enacted. It is also important to highlight that prescribers and non-prescribers who specialize in clinical psychopharmacology are also trained (Muse & Moore, 2012) in the recognition of adverse reactions to medications, as well as interaction effects with other medications and medical conditions that can mimic psychological disorders and vice versa. These skills are intended to help improve patient safety. Finally, inherent to understanding the limitations of psychotropic medications is recognizing when medications are not helping and when they should be unprescribed, and/or potentially replaced/augmented with non-pharmacological interventions (https://www.apa.org/monitor/2012/06/prescribing.aspx).

In order to further highlight the public need for the specialty services of clinical psychopharmacology, this section will include a select listing of recent, relevant references highlighting presenting problems that may be treated using psychopharmacology within different populations served, and organized by diagnoses (see below). Each section will list some epidemiological data for the disorder as well as available data about underserved populations. We believe that it is clear, and not necessary to repeat in each section, that with the growth of the specialty of clinical psychopharmacology, there is an increased number of competent health service psychology providers specially trained to deliver services to those individuals diagnosed with each of the following disorders. Thus, the specialty of clinical psychopharmacology helps meet public need across diagnoses, across the life span, and across the general population, while attending specifics inherent within the multitude of minority populations, be those racial/ethnic, social, age-related, economic, or geographic.

References


A. Attention-Deficit/Hyperactivity Disorder (ADHD)
   a. Epidemiology
      i. The American Psychiatric Association (2013) estimated 5% of children meet criteria for Attention Deficit / Hyperactivity Disorder (ADHD), but according to surveys conducted by the Centers for Disease Control (CDC, 2016), 9.4% of children have been diagnosed with ADHD.
      ii. The prevalence of children ever diagnosed with ADHD increased by 42% between 2003 (7.8%) and 2011 (11.0%) according to the National Survey of Children’s Health (NSCH).
      iii. There has been little research on the prevalence of ADHD in older adults. However, one article has summarized the existing literature and overall, the prevalence of ADHD in older adults is estimated to be about 3% (Kooiji et al., 2016). In addition, these authors indicate that, as is the case in adults, the incidence of comorbid anxiety and depression continues to be associated with ADHD in older adults.
   b. Treatment
      i. There are a number of behavioral and pharmacologic treatments available for attention deficit disorders (Kapalka et al., 2018). Prescribing psychologists are qualified to use a variety of cognitive and behavioral interventions, such as training in mindfulness and organizational skills.
ii. In addition, there are many psychotropic medications approved by the Federal Drug Administration (FDA) for the treatment of attention deficit disorders. These include medications belonging to the class of drugs known as psychostimulants (e.g., methylphenidate, dextroamphetamine, lisdexamfetamine,) as well as non-stimulants (e.g., atomoxetine, guanfacine).

iii. In addition, there are a variety of adjunctive treatments that prescribing psychologists may also recommend (e.g., trazodone) to manage symptoms or side effects. Specialists may also advise regarding nutritional supplements and dietary changes that the patient may wish to use or avoid.

iv. For older adults, non-pharmacological approaches would be preferred, and a multimodal approach is recommended. Treatment interventions for older adults can include psychoeducation, medication, support groups, and coaching or cognitive-behavioral therapy. When using medications to treat ADHD in older adults, a properly trained psychologist with a specialty in psychopharmacology would be aware of the need to be cautious about the potential risks of these medications in this population. For example, stimulants can increase cardiovascular risks and, in a population that may already have chronic cardiac disorders, using stimulants may not be the best option (Kooij et al., 2016). In addition, there is the need to consider how to address the treatment of the co-occurring disorders (i.e., anxiety, depression) without increasing risk to the individual from polypharmacy.

References


### B. Autism Spectrum and Other Neurodevelopmental Disorders

#### a. Epidemiology

i. According to the CDC (https://www.cdc.gov/ncbddd/autism/data.html), the number of children diagnosed with Autism Spectrum Disorder has been steadily increasing since 2000, from 1 in 150 then to 1 in 59 in 2014.

ii. The CDC also estimates that 1 in 6 children in the United States had a neurodevelopmental disability between 2006 and 2008. (https://www.cdc.gov/ncbddd/developmentaldisabilities/features/birthdefects-dd-keyfindings.html)

#### b. Treatment

i. As of this writing, there are no FDA-approved drugs for the treatment of the core pathology of neurodevelopmental disorders, although there are some drugs being evaluated for that purpose. There are a few drugs that are approved for the treatment of symptoms of these disorders, such as aggression, sleep disturbance, and compulsive behaviors.

ii. Examples of medications approved by the FDA include certain antipsychotics like risperidone and aripiprazole.

iii. Many medications used to treat symptoms are used “off label,” and are intended to treat issues like depression, hyperactivity, repetitive behaviors, and insomnia. Drugs like methylphenidate, oxytocin, sertraline, fluoxetine, venlafaxine, memantine, and mirtazapine all have at least some empirical support for use in this population, but are not FDA-approved (LeClerc, 2015).

**References**


Major Depressive Disorder

a. Epidemiology

i. According to the Substance Abuse and Mental Health Administration (SAMHSA), the prevalence of major depressive disorder among adults in the United States was 6.7% in 2016, with a higher rate among women (8.5%) than men (4.8%) (https://www.nimh.nih.gov/health/statistics/major-depression.shtml)

ii. The rate of major depression was highest in 2016 among adults in the 18-25-year-old age bracket (10.9%) and among people belonging to two or more ethnic minority groups (10.5%).

iii. Approximately 37% of adults in 2016 received no treatment for their depression

iv. With respect to children, approximately 9% of United States children between the ages of 12 and 17 experienced a major depressive episode with severe impairment according to SAMHSA.

v. Approximately 60% of adolescents did not receive treatment for their depression.

vi. The prevalence of major depressive disorder in individuals aged 65 years or older is estimated to be anywhere between 2.6% and 2.9% (Haigh et al., 2018; SAMHSA, 2018).

b. Treatment

i. Major depressive disorder has a wide range of potential treatments beyond psychopharmacological (Merritt, 2012), including cognitive and behavioral treatments, other forms of psychotherapy, medical procedures
like ECT and TMS, exercise, and dietary changes. Prescribers and non-prescribers specialize in understanding the different causes of depression and the risks and benefits of different treatments to determine which treatments are more likely to be helpful.

ii. FDA-approved medications include multiple classes of antidepressants, such as SSRIs, TCAs, SNRIs, NRIs, NDRIs, MAOIs, and others. Certain antipsychotics (e.g., quetiapine) are also approved.

iii. A variety of medications are used “off label,” as well as herbal treatments and nutritional supplements marketed to treat depression that specialists must be aware of to advise patients as to their risks and effectiveness, as well as potential interaction effects. St. John’s wort is an example of an herbal treatment with empirical support for depression treatment, but with potential to interact harmfully with a variety of other medications. Psychostimulants, anxiolytics, mood stabilizers (including lithium), and sedatives are sometimes prescribed “off label” as adjuncts to approved treatments or to address specific symptoms of depression, such as insomnia or low energy.

iv. Based on recommendations contained in the American Psychological Association Guideline for the Treatment of Depression (2019), the initial approach to treatment of depression in older adults is the use of non-pharmacological interventions. Evidence supports the effectiveness of such approaches, including group life-review treatment or group cognitive-behavioral therapy when compared to no therapy. If psychotherapy is to be combined with pharmacotherapy, based on the reviewed literature, the APA Guideline recommends interpersonal psychotherapy combined with a second-generation antidepressant medication, usually an SSRI or SNRI.

v. In general, older adults respond as well to antidepressant treatment as do younger adults. Recommended first choice for treatment are SSRIs or SNRIs, but studies have shown that any other second-generation antidepressant can be used with equivalent efficacy. For partial response, augmentation with lithium or second-generation antipsychotics may prove helpful in the older population as it does in the younger population. Care must be taken to evaluate the overall medical history of the older adult, as well as their current medication regimen, to avoid increased risk for side effects and drug interactions (Glover & Srinivasan, 2017; Pruckner & Holthoff-Detto, 2017).

References


D. Bipolar Disorders
   a. Epidemiology
      ii. The lifetime prevalence rate was found to be 4.4% in this survey, with no significant difference between men and women.
      iii. An estimated 2.9% of adolescents between the ages of 13 and 18 were found to have bipolar disorder during the same period.
      iv. In the older adult population, the lifetime prevalence of bipolar disorder is estimated to be 1% to 2% and the one-year incidence ranges from 0.1% to 0.7% (Chen et al., 2017).
   b. Treatment
      i. Mood stabilizers and antipsychotics are the mainstay treatment for bipolar disorders. Examples of FDA approved drugs include lithium, valproate, and lamotrigine. Approved antipsychotics include certain antipsychotics like aripiprazole, olanzapine, quetiapine, risperidone, and ziprasidone.
      ii. Other families of medications that have empirical support but are not FDA-approved include all classes of antidepressants, as well as anticonvulsants like carbamazepine and topiramate; however, extreme caution must be exercised when prescribing SSRIs and SNRIs with this diagnosis due to increased likelihood of provoking hypomanic and manic reactions (Welton & Roman, 2018).
      iii. Various psychotherapies have also been shown to be effective treatments.
iv. Although there are few high-quality, randomly controlled studies in this area, the recommended approach to pharmacological treatment of older age bipolar disorder is to start with either lithium or valproic acid as monotherapy. If this is not effective or poorly tolerated, switching to or adding a second-generation antipsychotic is recommended. Beyond these suggestions, if there is still an inadequate response, trials of gabapentin or carbamazepine can be offered. Finally, the use of clozapine and ECT has shown to be effective when other interventions have proven to be less effective (Chen et al., 2017).

v. When using medications with older adults, there is also the need to be aware of concurrent chronic medical conditions and treatments that may influence choice of treatments for older-age bipolar disorder. In addition, regular monitoring of the older adult’s physical condition with regular physical examinations and laboratory tests is recommended, suggesting an integrated care model of treatment.

References


Welton, R., & Roman, J. B. Mood disorders: Evidence-based integrated biopsychosocial treatment of biopolar disorder In M. Muse’s (Ed.) *Cognitive Behavioral*
E. Schizophrenia
   a. Epidemiology
      i. The prevalence of schizophrenia and other related psychotic disorders in the United States is estimated to be in the range of 0.25% and 0.64% (https://www.nimh.nih.gov/health/statistics/schizophrenia.shtml#part_154880).
      ii. There is a growing need to engage in more research on the effects of and treatments for serious mental illness, including schizophrenia, in the population of older adults. By one report, the prevalence of schizophrenia in older adults is expected to double and reach 1.1 million individuals in the US by 2025 (Kahn & Rajji, 2019).
   b. Treatment
      i. Psychotic disorders of all types are primarily treated with antipsychotic medications to reduce positive signs, while psychotherapy has proved beneficial in addressing negative signs of schizophrenia (Shearer, Moore, & Brown, 2012). There are a large number of these drugs, all of which antagonize dopamine receptor binding to differing degrees, and they are typically divided into first-generation antipsychotics (e.g., haloperidol and clozapine) and “atypical” or second-generation antipsychotics (e.g., risperidone or olanzapine). Specialized knowledge of these medications is critical for the treatment of psychotic disorders.
      ii. There are a variety of adjunctive treatments for schizophrenia and other psychoses, including antidepressants, anxiolytics, mood stabilizers, and sedatives.
      iii. Antipsychotic medications are used to treat psychosis throughout the lifespan. In addition, these medications are used to treat specific behaviors that may not be related to a specific diagnosis. One example is the use of antipsychotic medications to treat the behavioral and psychological symptoms of dementia. The use of psychotropic medications in the population of children, adolescents, and older adults requires specialized knowledge that includes changes in pharmacokinetics and pharmacodynamics that occur with age, the impact of chronic medical conditions and their treatment on the presentation and treatment of psychiatric disorders as a person ages, and the current guidelines for treatment of special populations.
      iv. Specialists in clinical psychopharmacology have to be aware of restrictions on the use of antipsychotic medications in older adults such as the FDA Black Box Warning on use of these agents for the treatment of dementia-related psychosis, the list of drugs considered to produce increased risk when used in older adults (Beers Criteria, 2019), and programs to reduce the use of inappropriate medications in older adults.
such as the National Partnership to Improve Dementia Care (http://tinyurl.com/oh3569h).

v. Recent research has demonstrated that antipsychotic medication doses can be reduced by as much as 40% in older adults without any appreciable loss of therapeutic efficacy (Graff-Guerrero et al., 2015). This is important not only to improve functional ability, but also cognitive ability, and to reduce the increased risk for extrapyramidal symptoms and tardive dyskinesia that are known to be associated with use of antipsychotics in older adults.

References


F. Substance Use Disorders  
   a. Epidemiology  
      i. The 1-year prevalence of substance use disorders in the United States is estimated to be 3.9%, while the lifetime prevalence is 9.9%.  
      ii. Men, White and Native American persons, younger people, people with lower education and income, and people living in the western United States tend to be at elevated risk.  
      iii. Substance disorders tend to correlate with many other mental health problems.  
      iv. Only 24.6% of people who reported having a substance use disorder during their life received treatment (Grant, 2016).  
      v. Substance use disorder diagnosis is also rising in the older adult population. One report indicates that past-month illicit substance use rose from 2.5% in 2002 to 3.9% in 2013 in the 60- to 64-year-old age group (Cho et al., 2018). In addition, substance use disorders are under-recognized in elderly populations.  
      vi. Older adults’ tolerance to the effects of substances is reduced, and presenting symptoms may be misattributed to a coexisting chronic medical problem and/or evidence of cognitive impairment or decline.  
      vii. Therefore, it is important to screen for substance use in the older adult population.  
   b. Treatment  
      i. The treatment options for substance use disorders vary depending on the type of drug that is being abused. It should be noted that psychotherapy is often a critical part of the treatment plan for substance use disorders.  
      ii. Bupropion, varenicline, and nicotine replacements are FDA-approved for the treatment of nicotine addiction.  
      iii. Buprenorphine, methadone, and naltrexone are examples of drugs approved to treat opioid addiction.  
      iv. Approved drugs for alcohol use disorder include disulfiram, naltrexone, and acamprosate. There are several drugs used “off-label,” including gabapentin and topiramate.  
      v. Some drugs are necessary to treat certain acute symptoms of withdrawal or overdose, such as benzodiazepines in the case of alcohol withdrawal, or naloxone in the case of opioid overdose. Specialists are aware of these treatments and may be involved with prescribing them as well.  
      vi. Specialists also need to be aware of the various herbs and sometimes illegal drugs that are used by patients to treat their own symptoms, such as kratom, an herb sometimes used to treat symptoms of opioid withdrawal.  
      vii. In general, older adults with substance use disorders can be treated with the same medications and non-medical therapeutic interventions used to
treat these disorders in the younger populations, with an emphasis on brief interventions (Wu & Blazer, 2011).

References


G. Anxiety
   a. Epidemiology
      i. Approximately 19.1% of United States adults experienced an anxiety disorder (of any type) during the 2001-2003 time period as determined by the National Comorbidity Survey (https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder.shtml). The lifetime prevalence among adults was found to be 31.1%.
      ii. An estimated 31.9% lifetime prevalence of any anxiety disorder was found among adolescents aged 13-19.
      iii. Prevalence of past-year anxiety disorder (any type) decreases with increasing age in the older adult population. One national survey reported that 9.45% of individuals in the 65-74 age group, 8.40% of individuals in the 75-84 age group, and 7.15% of individuals in the 85+ age group had reported an anxiety disorder in the previous year (Reynolds et al., 2015). Another more recent study suggests that the lifetime prevalence rate of anxiety disorders in the older adult population may be as high as 15.1% (Ramos & Stanley, 2018).
   b. Treatment
      i. There are multiple drug classes approved by the FDA to treat the various anxiety-related diagnoses; however, evidence-based recommendations (Muse & Stahl, 2013; Muse & Stahl, 2018) indicate that psychotherapeutic approaches should be first-line for the majority of anxiety disorders, while psychopharmacological approaches may best be employed adjunctively, but should be avoided altogether in a limited number of anxieties.
      ii. Multiple antidepressants, including venlafaxine, escitalopram, paroxetine, fluoxetine, duloxetine, and sertraline are approved.
      iii. Buspirone, as an atypical anxiolytic, is approved to treat anxiety.
      iv. Certain benzodiazepines have received FDA approval, including clonazepam and alprazolam. Others are used frequently “off-label.”
      v. There are a variety of other drugs used frequently “off-label” and sometimes in conjunction with approved drugs, such as antihistamines, anticonvulsants, beta blockers, alpha blockers, MAOIs, TCAs, and antipsychotics.
      vi. There are a variety of herbal treatments some patients may use for anxiety that specialists must be aware of because of their risks, as well as potential benefits, including kava, valerian root, and passionflower.
      vii. Treatment of anxiety disorders in older adults involves careful assessment of the cause of anxiety. Anxiety can be co-occurring with depression and older adults are affected by many factors that can result in mood disturbances.
disturbances as they age, such as the loss of friends and loved ones, combatting the physiological and mental stress of chronic disease, loss of functional capacity, decline in cognitive abilities, and facing the end of their lives. Approaches to treatment include non-pharmacological interventions, such as CBT and other behavioral interventions (Ramos & Stanley, 2018). Medications can also be used with various age groups, and are as effective as in the younger population, with specific attention to the increased risks associated with some of the medications for older adults. SSRIs have been used effectively as a first-line choice (Ramos & Stanley, 2018). Use of benzodiazepines and antipsychotics in the older adult population may increase risk for falls, dependence, extrapyramidal symptoms, tardive dyskinesia, and metabolic disturbances that limit their usefulness in this population (Julien, 2013; Ramos & Stanley, 2018; Tampi & Tampi, 2014).

References


**H. Posttraumatic Stress Disorder (PTSD)**

a. **Epidemiology**


ii. Women were found to experience PTSD at a higher rate over one year (5.2%) than men (1.8%).

iii. The lifetime prevalence was found to be 6.8% for adults.

iv. Approximately 5.0% of adolescents aged 13 to 18 in the study were found to have PTSD, again with a higher rate for females (8.0%) than males (2.3%).

v. The estimate of the prevalence of PTSD in older adults is limited by the lack of targeted research in this area. One study reported a lifetime prevalence rate of 4.5% in the older adult population (Cook et al., 2017).

b. **Treatment**

i. The only FDA-approved treatments specific to PTSD are paroxetine and sertraline, both SSRIs.

ii. A number of other drugs are used “off-label,” and many of those have empirical support in improving certain symptoms of PTSD but are not FDA-approved. Examples include fluoxetine, venlafaxine, MAOIs, TCAs, prazosin, and mirtazapine.
iii. In the older adult population, trauma-focused cognitive and behavioral interventions have been recommended as a first choice for treatment (Cook et al., 2017; Kaiser et al., 2019). Although medications such as SSRIs can prove to be helpful adjunctive treatments, they should be used cautiously and with close monitoring in the older population due to increased risk of side effects that can affect cognition and daily functioning.

References


I. Dementia
   
   a. Epidemiology
      
      i. Quality epidemiological data on dementia is difficult to find—a thorough study found an estimated 6.4% of adults over age 60 in North America had some form of dementia (Ferri, 2005), but this figure has likely increased substantially since then, as the prevalence was projected to increase 49% by 2020.

      ii. Despite the prediction of increased numbers of older adults presenting with dementia due to the aging of the baby boomer population, some studies show that the overall percentage of older adults with dementia has declined from 11.6% in 2000 to 8.8% in 2012 (Langa et al., 2017). Explanations for this decreasing trend include higher educational level of those in this cohort, better healthcare for chronic medical conditions, and increased participation in exercise; however, the true causes for this observed decrease are still under investigation. However, increasing rates of obesity, cardiovascular disease, and diabetes may later affect an increase in rates of dementia. Thus, it has been suggested that the current observation of decreasing rates of dementia may be normal variation in trends (Jones & Greene, 2016; Larson & Langa, 2017).
iii. Also true is the fact that a lower detection rate or underdiagnosis of dementia in older adults may affect the reported incidence and prevalence rates (Amjad et al., 2018).

b. Treatment

i. There are different types of dementia and as our understanding of the underlying mechanisms and affected neurotransmitter systems evolves a broader range of treatments may emerge. At present, the FDA has only approved medications to treat the symptoms, and not the underlying cause, of dementia of the Alzheimer’s type. These include donepezil, galantamine, rivastigmine, and memantine. Behavioral therapies have been recommended as first-line treatments, along with medication, in the conditions of cognitive deficits of dementia and depression concomitant with dementia (McCue & Kelleher, 2018).

ii. The limitation of these agents is that they do not work for many individuals with dementia, they have not been shown to change the trajectory of the underlying disease, they may have a limited window of efficacy, and many older adults with dementia cannot tolerate the side effects of these drugs and therefore they must be discontinued.

iii. There are a variety of other drugs used “off-label” to manage the symptoms of more advanced dementia, including agitation, psychosis, sleep disturbance, and aggression. These have primarily included antipsychotics; however, mood stabilizers, benzodiazepines, and antidepressants are also frequently used.

iv. There is concern that many older adults with dementia, particularly those residing in long-term care facilities, are prescribed these psychotrophic medications without a supporting behavioral health diagnosis and may be used primarily for the convenience of staff or to suppress the behavioral and psychological symptoms of dementia. Recent efforts have been made to “deprescribe” unnecessary medications, and studies have shown that such reduction of dose, or even elimination of unneeded medication, has not resulted in significant disruption to behavior or re-emergence of psychotic symptoms (Brodaty et al., 2018).

v. Because of the health risks associated with some of these drugs and limited efficacy, behavioral interventions such as reassurance and behavioral analysis are considered first-line responses. Other behavioral interventions can be useful, such as CBT and Behavior Therapy, but specialists in psychopharmacology will also realize that there may be limitations to these behavioral approaches, and that working with loved ones, family members, and caregivers is an important component to providing a comprehensive approach to treatment (Dyer et al., 2018; Masopust et al., 2018; Travedi et al., 2019). Specialists in clinical psychopharmacology will have knowledge about both domains, and thus have a broader range of tools with which to work. They will also be familiar with the APA Guidelines for Psychological Practice with Older Adults (2014) and the APA Guidelines for the Evaluation of Dementia and Age-Related Cognitive Change (2012).
References


McCue, R., & Kelleher, M. (2018). Geriatric disorders: Evidence-Based integrated biopsychosocial treatment of depression, dementia, and dementia-related disorders in the elderly,
In M. Muse’s (Ed.) *Cognitive Behavioral Psychopharmacology: Practice of Psychobiosocial Integration*. John Wiley and Sons. Chichester, UK.


J. Chronic Pain
   a. Epidemiology
      i. An estimated 20.4% of United States adults had chronic pain in 2016 (Dahlhamer, 2018).
      ii. Higher rates were found among White persons, women, and people who are poor with low education.
   b. Treatment
      i. Integration of multidisciplinary approaches is essential to chronic pain management. CBT is the first-line intervention with nonmalignant chronic pain, with pharmacological interventions forming an essential, but adjunctive role, for many patients (DeGood, Julien, & DeGood, 2018).
      ii. All specialists in clinical psychopharmacology are encouraged to understand the psychotropic effects of medications to treat chronic pain, including opioids and NSAIDs. Nonetheless, most prescribing psychologists do not prescribe conventional analgesics.
      iii. Prescribing psychologists have traditionally prescribed psychotropic medications that have effects on pain, such as TCAs, or other antidepressants like duloxetine, as many of these drugs also have FDA approval for treatment of chronic pain. Many patients with chronic pain present with symptoms of depression, and prescribing psychologists often address chronic pain indirectly by using medications with dual purposes.

References

Describe what procedures this petitioning organization and/or other associations associated with this specialty utilize to assess changes in public needs.

The American Society for the Advancement of Pharmacotherapy is constantly examining and refining trends in assessment and intervention in the light of emergent needs and special populations. This includes reviewing a variety of sources, including, but not limited to, state census reports, workforce reports from various groups in states who have introduced or are planning to introduce legislation, and the Kaiser Family Foundation reports on mental health delivery. ASAP’s publication, The Tablet, regularly publishes articles intended to help members stay on top of changes in the field to help them provide cutting-edge treatment. Relevant articles in The Tablet, such as, “A ‘new’ antipsychotic drug: cariprazine,” “Quick RxP reference tables and clinician resource updates,” “Geriatric pharmacotherapy,” and “Suicide prevention on a northern plains reservation,” highlight efforts of the Division to be aware of, and respond to, current population needs, and to educate specialists about emerging treatments. The Division’s Research Council monitors the growing body of literature on clinical psychopharmacology, assessing the changing public needs. The Division has been involved in APA’s recent efforts to update and modernize the Model Education and Training policy in part to keep up with changes in what topics are most relevant for upcoming specialists. Finally, perhaps more than other specialties, the ASAP is actively involved in public policy by supporting the efforts of individual states to pass legislation to enable specially-trained psychologists to become prescribers. Extensive involvement in the legislative process allows for the members of ASAP to be personally immersed with the needs of their individual states and assist in shaping the legislation impacting health care to address those needs by expanding the scope of practice of professional psychology.

Describe how the specialty attends to public need.

The specialty attends to the needs of the public by training postdoctoral psychologists to help
individuals and specific populations to receive quality clinical psychopharmacological services in concert with competent, general psychological services. According to one survey, 55% of psychiatrists accepted insurance by 2010, the lowest rate of any physician specialty (Bishop et al., 2014). A similar number (55%) accepted Medicare with only 43% accepting Medicaid compared to 73% of other physician specialties. Comparatively, in a 2012 survey of New Mexico prescribing psychologists, 90% accepted Medicaid with 63% of patients living in rural areas. This information identifies specific populations of rural, publicly insured, underinsured, and uninsured who are underserved by current psychiatric resources (https://www.ruralhealthinfo.org/charts/7?state=IA). In a survey of prescribing psychologists in New Mexico and Louisiana (Muse & McGrath, 2010), 66% of those patients attended by New Mexico prescribing psychologists were disadvantaged, while 47% of patients seen by prescribing Louisiana psychologists were disadvantaged. Disadvantaged was defined as economically, socially, geographically, or linguistically underserved.

In a consumer survey of data collected from a behavioral health clinic and a federally qualified health center (FQHC) conducted by the Nebraska Psychological Association in 2017, 42% of respondents reported difficulty getting an appointment with a psychiatric prescriber, 25% worry about the wait time to address a crisis or medication side effects, and 72% would prefer an appointment with access to both therapy and mental health medications. Finally, 78% supported qualified psychologists adding prescriptive authority to their practice. This information directly relates to the public need for this specialty, as well as addressing specific populations who are most impacted by the shortage of psychiatric providers. The Washington State Psychological Association conducted a survey in 2018 and 85% expressed support for prescribing psychologists in the state. (Shearer, 2019).

At the level of the individual patient, specialists attend to public needs based on their unique skill set, competencies, and certifications. For example, specialists who are licensed to prescribe may use their unique knowledge base to assist patients who have questions about medications that have not been answered by prescribing physicians (often due to time limitations, but sometimes due to knowledge limitations). Accurate education about medications is valuable for patients to help them make informed decisions about their care, but also for many medical professionals who recognize that psychologists sometimes have greater expertise in psychopharmacology and can help them to make better treatment plans.

Specialists who are permitted to prescribe are able to meet the unmet public need for psychiatric services, not only through prescribing psychotropic drugs, but also by unprescribing. Unprescribing is an important tool for managing the very broad problem of unnecessary or risky prescription of drugs (Consumer Reports, 2012). Prescribing psychologists, because of their dual, advanced skill sets of psychological treatments and pharmacologic treatments are uniquely well suited to meet the public need for safe treatment of mental health problems by minimizing the use of unnecessary or risky treatments or, alternatively, potentially improving treatment response through combined medication/psychotherapy treatment. A rigorous training program is necessary to create skilled clinicians, which is why prescribing psychologists in all states where that is permitted must not only demonstrate thorough academic knowledge but must also engage in supervised practice as prescribers. Not only do prescribing psychologists have hundreds or, more typically, thousands of hours of experience as practicing psychologists, they must also have
hundreds of hours of experience as prescribers, minimally, and it is this broad and deep base of experience combined with comprehensive academic knowledge that distinguishes prescribing psychologists from other mental health specialists.

References


Criterion III. Diversity. The specialty demonstrates recognition of the importance of cultural and individual differences and diversity.

**Commentary:** The specialty provides trainees with relevant knowledge and experiences about the role of cultural and individual differences and diversity in psychological phenomena as it relates to the science and practice of the specialty in each of the following areas: i) development of specialty-specific scientific and theoretical knowledge; ii) preparation for practice; iii) education and training; iv) continuing education and professional development; and v) evaluation of effectiveness.

Because the population is diverse:

1. Describe the specialty-specific scientific and theoretical knowledge required for culturally competent practice in the specialty, how it is acquired and what processes are in place for assessment and continued development of such knowledge.

The specialty of Clinical Psychopharmacology is strongly committed to the culturally competent education, training and practice of clinical psychopharmacology. This petition will address the specific of the issues of biology when addressing issues of diversity, the psychosocial aspects of diversity, and the biopsychosocial integration as the basis of broad and general psychology and the specialty specifically.

The Diversity Council of APA Division 55 was formed in order to make certain that this commitment is met, monitored, a routine part of the foundation of the specialty, and to make certain that the healthcare needs of diverse and underserved populations are addressed. The Diversity Council is a key foundation of the specialty and its purpose is to assess, monitor, and address diversity from the perspective of the provider, as well as the populations served and those underserved.

One of the many tasks of the Specialty’s Diversity Council is to survey the members of Division 55 to determine their current knowledge and experience in working with diverse populations. The Diversity Council assesses the diversity of members as well as the populations served. The Council also recommended that each of our providers complete a cultural self-assessment such as is recommended by Hays (2016, p.42) to illuminate areas of potential bias. In our training programs, continuing education workshops, and ongoing supervision, we seek to expand and deepen our knowledge and understanding of the complexities of working with diverse populations. The specialty’s Diversity Council also seeks to promote more research in the area of diversity across age and generational influences, developmental or other disabilities, religion and spiritual orientation, ethnic and racial identity, socioeconomic status, sexual orientation and gender identity, indigenous heritage, and national origin, as described by Hays in her ADDRESSING model (2016).

One of the primary focuses of Division 55’s Diversity Council is to advocate for diverse and underserved populations who do not currently have access to mental health providers with an understanding of their unique treatment requirements. Whether it is older adults, people with disabilities, people in rural areas, or individuals who are economically challenged, this Specialty
Designation would help us to reach and extend our expertise to these and other diverse populations.

As stated earlier, the Specialty recognizes Hays’ (1996, 2016) “ADDRESSING” model that is often used as a framework to reflect sociocultural diversity. According to Hays, consideration of age, developmental disabilities, acquired disabilities, religion, ethnicity, sexual orientation, socioeconomic status, indigenous group membership, nationality, and gender (“ADDRESSING”) all contribute to a complete understanding of cultural identity. Each factor can help researchers and clinicians appreciate the oppressive forces, which underrepresented groups experience. Being part of a majority group comes with a series of privileges and power; whereas, being part of a minority group creates vulnerability and the potential to be targeted by members of the majority or other minorities (Hong, 2012; Perlmutter, 2002). This can create barriers to treatment for individuals in need of pharmacological treatment. Awareness of this model is inculcated throughout the education, training, and practice of the Clinical Psychopharmacology as described specifically, and in general, below.

The populations who typically suffer from a shortage of available mental health professionals, particularly those providers who can prescribe psychotropic medications, are those in the military, prison system, and in rural areas (Fagan et al., 2004; Harowski et al., 2006; Thorne, 2009) with primary care providers left to supply around 60% of mental health care in underserved populations across the nation (Geller, 1999; as stated in Harowski et al., 2006).

For example, the overall rate of mental illnesses in rural areas, such as depression, was found to be similar to urban areas, but diagnosis and treatments were significantly less available (Rost, Williams, Wherry, & Smith, 1995). These researchers found rural areas experienced reduced detection of depression, higher rates of inappropriate medication management, and lower referral rates to mental health providers than in urban communities. Having specialty recognition would allow us to compete with other prescribing professionals to better serve these groups.

It has been noted that

The increasing use of pharmacotherapy raises specific ethical concerns for psychologists working with vulnerable populations. Due to a shortage of trained specialists, professionals without training in mental health, such as primary care providers, are increasingly prescribing and monitoring psychotropic medications. Vulnerable populations (e.g., older adults, people currently low in social status, immigrants, and racial/ethnic minorities) face additional barriers to mental health treatment and are at heightened risk when these factors intersect. Hence, these patients experience unique barriers to receiving optimal psychopharmacological care and are differentially vulnerable to deleterious outcomes associated with misdiagnosis and overmedication” (Bernal, Nerbst, Lewis, & Feibelman, 2016; pg. 1).

Researchers in nursing, medicine, and pharmacy have all noted that ethnic pharmacology has been largely ignored (Campinha-Bacote, 2006; Loue, Wilson-Delfosse, & Limbach, 2015;
Munoz & Hilgenberg, 2006). Yet intrinsic to the training of any licensed psychologist is the thread of diversity awareness. It is a core part of basic clinical training, leading to licensure as practicing health care providers. Importantly to the specialty, this is additionally reinforced throughout the additional post-graduate coursework and practicum specialty training in psychopharmacology, which is required for additional state certifications/licensure in prescribing/medical psychology, granting the right to guide and implement psychopharmacological intervention by psychologists in a growing number of states and federal agencies serving diverse populations (American Psychological Association, 2009).

Each course in the Specialty training includes diversity competency criteria such that advanced training programs graduates will respect the value and dignity of individual groups across all cultural contexts, and advocate for inclusion and equity, demonstrating intercultural competence in domestic and international contexts with people who have ideas, beliefs, worldviews, experiences, and behaviors that are different from their own (American Psychological Association, 2009). These diversity competency criteria are further detailed and explained in another section of this petition.

Specialists in clinical psychopharmacology provide services to and collaborate with people differing in terms of age, gender, race, ethnicity, cultural background, religious differences, sexual orientation, and differing abilities with the goal of listening and learning from the perspectives of others. Specialists apply that knowledge of identity related to race, ethnicity, gender, sexual orientation, socioeconomic status, age, religious belief, and ability to promote more precise and individualized clinical psychopharmacological practice to promote wellbeing and facilitate social change specific to the strengths and challenges of under-resourced communities they come to serve.

For example, consistent with Hays’ model, in the LGBT community it has been reported that use of particular recreational drugs, such as gammahydroxybutrate (GHB), has become increasingly more common since the 1990s (Corkery, Loi, Claridge, Goodair, & Schifano, 2018). Similarly, elite athletes and even recreational consumers are more frequently using anabolic androgenic steroids as performance enhancing drugs; however, knowledge of sex-specific actions of these drugs is lacking (Onakomaiya & Henderson, 2016). Further, the sex-specific actions are quite relevant for transgender XX individuals transitioning to a male gender identity. Additionally, preliminary findings suggest that mirtazapine is useful in treating methamphetamine use disorder in certain subsets of the LGBT population (Coffin et al., 2019). More awareness of issues such as these is important for Specialists in Clinical Psychopharmacology in order to best serve patients with diverse sexual orientations and/or gender identities.

Thus, to address these issues, the Specialty in Clinical Psychopharmacology has worked with the APA to establish a policy on postdoctoral training in psychopharmacology that clearly states the “[P]rograms developed under these standards will continue their commitment to providing training courses and experiences that encourage sensitivity to the interactions between pharmacological interventions with development across the lifespan, gender, health status, and ethnicity of patients.” This focus then is reflected in both the didactic and experiential components of the program so that psychologists will develop the appropriate knowledge and
skill-based competencies to address diversity in the population being served (American Psychological Association, 2009)"

In 2009, the APA Council of Representatives passed a model curriculum “Model Education and Training Program in Psychopharmacology for Prescriptive Authority” for prescribing psychologists (American Psychological Association, 2009). Based on Council’s guidance, diversity factors are woven throughout MSCP training and practice (American Psychological Association, 2009). The specialty of Clinical Psychopharmacology, Division 55 of the American Psychological Association is committed to clinical psychopharmacology education and practice with an emphasis on diversity issues as well as on the pharmacokinetic and pharmacodynamic aspects of drug-gene interactions. This can be seen in the work of the APA’s Division 55’s Diversity Council at https://www.apadivisions.org/division-55/.

While clearly committed to the psychosocial issues of diversity in education and practice, it should be noted that because of its strong biological basis of practice in clinical psychopharmacology, the specialty pays special attention to a specialized field of study – ethnopsychopharmacology –dedicated to the study of how race and ethnicity affect medication response (Muñoz & Hilgenberg, 2006; Campinha-Bacote, 2006). Ethnopharmacology incorporates the emerging field of pharmacogenomics, which predicts drug response based on liver enzyme testing or other biologic markers as to how an individual might respond and tolerate a particular medication. This field of study informs prescribers regarding a particular medication that might be best suited for a specific patient versus the commonplace trial-and-error switching from one drug to another, as needed based on that individual’s response (Campinha-Bacote, 2006). This is particularly important to the specialty of Clinical Psychopharmacology given the Specialist’s awareness of the biological diversity of its patient population.

**Ethnopharmacology and the Specialty of Clinical Psychopharmacology**

The field of ethnopharmacology began with a focus on medicinal plants such as Chinese herbal traditional medications for treatment of various disorders. It is clear that ethnicity significantly affects drug responses (Munoz & Hilgenberg, 2006). Studies utilize broad categories such as Latino, Asian, Caucasian, and African American.

Examples of heterogeneity of drug responses can be found in all classes of drugs. Antidepressants are designed to help treat major depression and associated mood disorders with the exception of Bipolar and Related Disorders, which will be discussed below (Comer, 2014). Selective Serotonin Reuptake Inhibitors (SSRIs), Selective Norepinephrine Reuptake Inhibitors (SNRIs), Monoamine Oxidase Inhibitors (MAOIs), and tricyclic antidepressant (TCAs) medications are the most commonly prescribed subtypes of antidepressants (Centre for Addiction and Mental Health, 2012).

To illustrate the importance of the specialty’s focus on competency in ethnopharmacology, it is important to understand that an effective dose (ED) refers to the amount of a given drug that is needed to have a therapeutic effect. The two subtypes are an ED50 (therapeutic in in 50% of consumers) and ED95 (therapeutic in in 95% of consumers; Chow, 2010). It is important to note that the ED of each ethnic group will differ (Ng, Schweitzer, Norman, & Easteal, 2004). These authors suggest that the effectiveness of a drug depends on genetic, environment, and cultural
factors. One example of variable EDs is that Asian persons tend to be responsive to half the typical dose of antidepressants due to the genetic factor CYP450 2D6 (Chen, Barron, Lin & Chung, 2002; Ng et al., 2004). Research suggests that many Hispanic patients will also require lower dosages of antidepressants than their White counterparts (Institute for Safe Medication Practices, 2003; Reyes, Van de Putte, Falcón, & Levy, 2004).

Anxiolytic medications are designed to help alleviate a patient’s symptoms of anxiety (Comer, 2014). And there is considerable variability in ED of anxiolytic medications. For example, Asian individuals tend to require lower doses to start with (Chen et al., 2002; Institute for Safe Medication Practices, 2003). Similar findings have been observed for American Indian & Alaska Natives (Institute for Safe Medication Practices, 2003).

Antipsychotic medications are designed to reduce or eliminate symptomatic processes such as hallucinations, delusions, paranoia, and disorganized thought (Comer, 2014). Chen and colleagues (2002) emphasize that Asians are responsive to lower doses in antipsychotic medications. Once again, Hispanic individuals tend to also be responsive to lower doses than other ethnic group recipients (Reyes et al., 2004). Even though the effective dose is roughly the same between Caucasian and African American persons, tardive dyskinesia rates tend to be higher in African American individuals (Lindamer, Lacro, & Jeste, 1999; Reyes et al., 2004), calling for consideration of alternative intervention approaches and attention to early warning signs of adverse reactions.

Stimulants are designed to improve symptoms associated with attention, alertness, arousal, and locomotor activities, such as can be seen in individuals who have Attention-Deficit/Hyperactivity Disorder (ADHD; Comer, 2014). There is not much research on differences in ED for traditional psychostimulants. Across ethnic populations; however, researchers have found that these are prescribed more frequently amongst Caucasian and Hispanic individuals than African American and Asian individuals.

There is considerable research indicating that Hispanic and Asian individuals tend to respond to a lower ED than Caucasian and African American persons (Muñoz & Hilgenberg, 2006). What was striking during this review was there was a paucity of research on Native American, Hawaiian, and Pacific Island populations. Nevertheless, the preponderance of research indicates marked ethnic variations in ED. Thus, it is clear that there is a need for individualized treatment plans that account for the unique genetic, environmental, and cultural factors of the patient.

One of the challenges of associating ethnicity with pharmacological response lies with the extensive diversity within broad classes. The study of Asian populations, for example, includes people from Korea, China, Japan, India, Pakistan, and Vietnam; each of these subsets carries a specific set of genomic factors that may influence a response to a particular ligand (Chen, Barron, Lin, & Chung, 2002). Compliance to both medication and behavioral therapeutic efforts is influenced heavily by the impact of culture.

**Learner Preparation for Ethnopharmacology**

All of the students in the postdoctoral Master of Science in Clinical Psychopharmacology (MSCP) specialty training programs are licensed psychologists and have graduated from
accredited university doctoral programs. Thus, they matriculate in these postdoctoral master’s programs with knowledge of both the original and updated multicultural guidelines (American Psychological Association, 2017) as part of their broad and general education and training.

In addition, the psychosocial issues of diversity reflected in the APA Guidelines and their application to clinical psychopharmacology, given the biopsychosocial nature of the specialty are reflected in each of the APA-designated programs in clinical psychopharmacology, which offer additional advanced course work in ethnopharmacology. This course work emphasizes the genetic differences, lifestyle factors associated with cultures that impact health, drug use, metabolism of drugs, attitudes about mental health services, and the taking of drugs within cultural and subcultural groups. Clinical psychopharmacology students also learn about the new developments in genetic or DNA testing which can potentially assist prescribers in identifying particular genetic variations such as polymorphisms that may impact the effect of psychotropic medications.

Psychosocial Diversity variables in Preparation and Practice of Clinical Psychopharmacology

Along with the competencies in ethnopharmacology, the clinical psychopharmacology students also gain hands-on experience evaluating and prescribing medications with various patient culture groups. As part of their psychosocial basis of learning, it is essential for students to learn about and gain experience in using translators for managing linguistic barriers in conducting thorough assessment, diagnosis, psychotherapy, and medication management.

The programs in clinical psychopharmacology draw upon the extant research literature regarding the emerging needs and changing demographics among the United States cultural and subcultural groups (Lichter, 2013; Passel, 2011). Clinical psychopharmacology students are trained and expected to integrate research in ethnopsychology with their previously-acquired clinical practice skills day-to-day. Additionally, students gain experiences from using online (e.g., PDR, Epocrates, UpToDate) resources for analyzing medications, tracking lab results, and potential impacts on diversity of cultural groups and subgroups.

There is more stigma toward mental illness for certain minority groups than in Western cultures (Luca, Blosnich, Hentschel, King, & Amen, 2016). This cultural disparity could have a direct impact on successful pharmacotherapeutic care (Woo, 2013). The Chamorro culture, for example, relies on religious and family practices more than Western mental health care or pharmacotherapy. Traditional Chamorro families depend on spiritual practitioners called Suruhånu yan Amot, who may provide natural remedies from the land or perform other procedures to rid the person of bad spirits. For example, someone suffering from psychosis may be advised by Suruhånu to return to the jungle and remove trash that they had dropped there in order to appease spirits rather than seek behavioral or pharmacological therapy. The impact of these cultural influences is compounded with genomic patterns in Chamorro patients, who have a predilection to neurodegenerative disorders. (See Chen et al., 1996; Purdey et al., 2014).

In order to assure cultural competence education and training preparation for the specialty practice of clinical psychopharmacology, MSCP training programs that are designated by APA are required to address diversity factors when developing learners’ cultural competencies
Thus, diversity education in the specialty includes topics of: (a) Diversity-related variations in the incidence/prevalence of disorders (b) Variations in help-seeking patterns as a function of diversity factors (c) Genetic differences in drug metabolism and clearance (d) Differences in adverse reactions to medications as a function of ethnicity, age, and other diversity factors (e) Psychosocial factors in drug effects/response (f) Cultural and diversity relevant assessments and treatments (g) Variations in trauma exposure and response, and (h) Variations in environmental stressors (Model Education and Training Program in Psychopharmacology for Prescriptive Authority, pg. 7). Moreover, MSCP programs train prescribers to appreciate the complex nature of identity, with an emphasis on intersectionality (Model Education and Training Program in Psychopharmacology for Prescriptive Authority, pg. 4). This is consistent with the latest revision to the APA Multicultural Guidelines (2017).

To illustrate the infusion of diversity knowledge and cultural competency for those in the specialty, the APA Designation requirements specify a range of curriculum content areas for designated programs that are relevant to diversity:

**Integrating clinical psychopharmacology with the practice of psychology**

*Refers to the implementation of clinical practices of biopsychosocial assessment, multiaxial diagnosis and treatment including pharmacotherapy, in the context of a complex of factors influencing functioning. These factors include biological (e.g., genetic, sex, age, disease, disability), psychological (e.g., cognitive, emotional, dynamic, motivational, behavioral), psychosocial (e.g., gender, cultural/ethnic, interpersonal), and ecological/environmental factors.*

MSCP training includes emphasis on (a) Biopsychosocial variables as determinants of medication effects (e.g., age, gender, family history, patient belief systems, economics, social support, current environmental circumstances; (b) Limitations and benefits, patient perceptions, and treatment expectations regarding psychopharmacological and psychological interventions as sole, additive, or interactive treatments for given disorders and functional impairments; and (c) Case and medication management issues and strategies to enhance adherence to and effectiveness of the treatment plan (e.g., communication skills, patient education techniques, cultural competence) (Model Education and Training Program in Psychopharmacology for Prescriptive Authority, pg. 8)

**Biopsychosocial and pharmacological assessment and monitoring**

*Refers to a range of biopsychosocial, genetic, and pharmacologic assessment techniques and procedures for baseline and ongoing evaluation of the individual’s physical and psychological health status, as well as the assessment of therapeutic efficacy, adverse effects, contraindications, drug interactions, and appropriateness for medication usage, continuation, modification, or discontinuation.*
MSCP training programs emphasize: (a) Individual and family history taking procedures and psychological assessments that provide information relevant to prescribing (e.g., review of systems, dietary habits, mental status, behavioral observations); (b) Basic physical and neurological examination procedures and variations in these procedures for special populations (c) Appropriate utilization of laboratory tests and assessment procedures before prescribing particular medications (e.g., the implication of disease states, gender, sample timing, and effects of medications on those values); (d) Indications for referral to other health care providers based on identification by abnormal biopsychosocial or pharmacological evaluation measures; and (e) Intellectual and neuropsychological assessment as it pertains to aiding diagnosis (e.g., depression versus dementia, TBI versus PTSD), indications for medication regimens, and ability to provide informed consent (Model Education and Training Program in Psychopharmacology for Prescriptive Authority, pg. 8).

**Differential diagnosis**

*Refers to the use of comprehensive diagnostic information about a patient to establish an accurate diagnosis from possible medical and psychological diagnoses in order to select appropriate treatment modalities and determine appropriateness for referral to other health care providers.*

MSCP training programs recognizes culturally specific syndromes (e.g., koro, amok, ataque de nervios, evil eye/mal ojo) for the assessment and treatment of various ethnic and cultural groups. We also recognize the Council of National Psychological Associations for the Advancement of Ethnic Minority Interests (2003) guidelines for assessment and treatment with minority populations (Model Education and Training Program in Psychopharmacology for Prescriptive Authority, pg. 8).

**Pharmacology**

*Refers to the interactions of drugs with biological systems. Encompasses pharmacokinetics, pharmacodynamics, pharmacogenetics, and the use of various medications: psychotropics, adjunctive agents, and other medications; substances of abuse, over the counter (OTC) products, herbal, and other food and dietary supplements. The influence of ethnic and cultural factors, environmental factors, and responses of special populations are considered.*

MSCP training programs teach about: (a) Biological factors affecting pharmacokinetics and pharmacodynamics (e.g. sex, pregnancy, obesity); (b) Absorption (e.g., delayed-release preparations, rates of absorption after oral dosing or parenteral injection, area under the curve, timing with food intake); (c) Distribution (e.g., plasma protein binding, influence of lipophilicity); (d) Metabolism (e.g., understanding of the substrate, inhibitors and inducers of the “family” of P450 enzymes, other enzymes outside the liver); (e) Excretion (e.g., renal filtration rate, clearance of drugs); (f) Drug effects on genetic expression (e.g., down-regulation); (g) Genetic polymorphisms (e.g., ethnic and gender differences, genomic testing, differences in cytochrome P450 isoenzymes in drug metabolism); (h) Familial patterns of drug response and toxicity; and (i) Pharmacoepidemiology (e.g., epidemiology of psychotropic drug use) (Model Education and Training Program in Psychopharmacology for Prescriptive Authority, pg. 8).

**Clinical psychopharmacology**
Refers to the application of pharmacology to the management of psychological/behavioral disorders. This includes indications, contraindications, dosing, risk management, adverse effects and toxicities of psychotropic and adjunctive medications, interactions with other medications (including other drugs used in medicine, prescription and/or illicit drugs used for recreational purposes, and drugs available for OTC purchase) as well as the management of adverse reactions, overdoses, and toxicities.

Moreover, MSCP training programs address concepts of: (a) Dosing, time course of therapeutic action and adverse effects, and patient factors (e.g., weight, gender, ethnicity, culture, age, concurrent disease); (b) Drug effects in special populations (e.g., developmentally disabled, elderly, children, pregnant or lactating women, ethnic and cultural groups, substance abusing individuals); (c) Pharmacological implications for comorbidity of age-related and disability-related disorders (e.g., overanxious disorder comorbid with ADHD, avoiding using a tertiary tricyclic in an elderly patient using antihypertensives); and (d) Potential psychological and physiological manifestations of medications (including OTC drugs, herbal substances, and dietary and exercise supplements) used for non-psychological purposes (e.g., beta blockers, steroids) (Model Education and Training Program in Psychopharmacology for Prescriptive Authority, pg. 8).

In addition to these specific content areas identified for taking the Psychopharmacology Examination for Psychologists (PEP), MSCP programs identify diversity factors throughout training (i.e., when genetic factors for health conditions might have an impact on patient outcome). African Americans, for example, demonstrate a genetic predisposition for cardiovascular disease and hypertension (Carnethon et al., 2017; Hardy et al., 2017). The importance of biopsychosocial issues related to diversity is a key issue in clinical psychopharmacology. The specialty assesses knowledge of diversity factors are assessed in the ten main content areas for the PEP (see https://cdn.ymaws.com/asppb.site-ym.com/resource/resmgr/pep/Final_PEP_Exam_Blueprint_201.pdf for more information).

References


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American Psychological Association (APA).


2. Describe how the specialty prepares psychologists for practice with people from diverse cultural and individual backgrounds (e.g., through coursework, supervised practice, continued professional development, etc.) and how competence is demonstrated.

The American Psychological Association has approved several regional training programs dedicated to enhancing licensed psychologists' ability to interact and collaborate with other health professionals in the management and care of individuals with mental and behavioral disorders (https://www.apadivisions.org/division-55/resources/training). These programs are committed to training psychologists to the level of competence appropriate for independent prescriptive authority. These didactic programs use a combination of distance, on-site and online teaching methods, emphasizing applied learning via case formulation, to achieve these goals. Participants are also eligible to participate in supervised clinical experience, which prepares the participant for independent practice involving prescriptive authority. These clinical experiences use mentoring models geared to the mastery of core clinical competencies. The format of the programs allows for a rigorous and demanding learning environment, as is appropriate given the goals of the programs, while providing the flexibility needed for busy professionals to complete the training. Each program adopts a learner-centered approach that builds on the tradition and excellence of the scientist-practitioner training model, enhancing scientific and professional knowledge by delivering high-quality education through the latest technology and peer-interaction techniques.

Specialized knowledge regarding cultural diversity is essential to the practice of clinical psychopharmacology and its training is embedded into all APA-designated MSCP programs. One cannot practice clinical psychopharmacology at any level, but especially at the highest tier of Applied Clinical Psychopharmacologist, without an extensive understanding as to how cultural, ethnic, and physiological diversity affects the practice of prescribing psychotropic medications to patients. A lack of appreciation of how diversity factors interplay with pharmacologic mechanisms may lead to a life-threatening situation, either adverse reactions to medications or poor patient adherence to medication regimens, resulting in withdrawal reactions.

The advanced practice specialized training offered by APA designated programs provides a strong knowledge base in psychopharmacology and medical conditions relevant to the treatment of mental disorders in diverse populations. This knowledge can immediately facilitate a psychologists collaborative practice skills. The program requirements meet or exceed requirements outlined in the APA document “Recommended Postdoctoral Education and Training Program in Psychopharmacology for Prescriptive Authority.” This outlines the guidelines that form the foundation of the specialized orientation in this area.
Cultural skill development for this specialty involves the process of learning how to conduct a culturally sensitive psychotherapeutic physical and medication assessment. Individuals from many cultural groups maintain attitudes and health beliefs about the properties and effects of psychotropic medications that may influence the effectiveness of or their adherence to a psychotropic drug. Gaw (2001) and Conn and colleagues (2014) maintained that non-adherence to psychotropic medication in diverse populations remains a significant detriment to successful therapeutic outcome. Our Specialists in Clinical Psychopharmacology are trained to be skilled collaborative prescribers and in assessing their clients’ explanatory model of psychotropic medications.

Within this specialty, diversity awareness is enhanced and includes attention to social and environmental factors affecting ethnic differences, including

- **Demographic factors:**
  - Ethnicity
  - Age
  - Gender

- **Pharmacogenetic factors:**
  - Enzymatic differences
  - Receptor regulation

- **Pharmacokinetic factors:**
  - Enzymatic differences
  - Dietary habits
  - Smoking
  - Concurrent drug exposure

- **Dietary factors:**
  - Dietary taboos
  - Special foods
  - Body fat and weight

- **Environmental factors:**
  - Alternative models of health
  - Alternative drugs,
  - Health care systems
  - Prescribing habits

Diversity factors have a dramatic impact on pharmacokinetics, the study of how a drug moves within the body that affects the fate and distribution of a drug. Pharmacokinetics, is are determined by four processes - absorption, distribution, metabolism, and excretion. The processes of metabolism exhibit substantial cross-ethnic, gender-related, and age-related variations, as well as individual differences. Height and weight differences in gastric acidity and percentage of body fat are all affected by race and culture and can also affect the pharmacokinetics of drugs. Pharmacodynamics, the study of the effects of a drug on the person,
refers to the receptor interaction with psychotropic drugs and the underlying mechanisms of action (Katzung, 2018).

Pharmacodynamics, the study of the effects of a drug on the person, refers to the neurotransmitter, neurophysiological, behavioral, psychological, and social effects of psychotropic drugs and their mechanisms of action. An interesting and fairly common variation highlighted by Westermeyer (1989) is the flushing response to alcohol which has a variable distribution across races due to differences in enzymes acting on alcohol metabolism. Although the mechanics of alcohol flushing have been well described, the relationships between differences in blood levels, therapeutic responses, and dosage are not so well understood, and are a function of more than variable pharmacokinetics.

Training programs dedicated to the Clinical Psychopharmacology Specialty offer instruction on pharmacokinetics and pharmacodynamics at various stages of the master’s level curriculum. The concepts of how metabolism changes with pharmacogenomic variations are introduced in pathophysiology courses. The mechanisms by which these genetic and metabolic variations occur (i.e., polymorphisms, changes in nucleic acid synthesis) are highlighted in biochemistry courses. When the students reach their basic and advanced pharmacology courses, they learn the specifics about pharmacokinetic and pharmacodynamic diversity as it pertains to drug metabolism and response based on allelic variations.

Ethnic and cultural considerations are important in drug trials as well as in pharmacotherapeutic decision making. Lin et al. (1995) long ago pointed out that drugs and other foreign substances (xenobiotics) are metabolized by a number of enzymes whose activities vary substantially across individuals and ethnic groups both for genetic and environmental reasons. Although individual and inter-ethnic differences are substantial, the mechanisms responsible for such variations are less well understood (Lin et al., 1993). In addition to classical examples of drug responses across ethnic groups, the genetic control of a large number of drug-metabolizing enzymes has been established (Lau, Smith, et al., 1988). For example, the cytochrome P450 enzyme system has been linked with the oxidation of several chemotherapeutic agents. More than 20 P450 isoenzymes exist and each is encoded by a specific gene. Students are trained to understand both the phenotypic and genotypic variances of this CYP P450 enzyme systems, including knowledge as to which medications serve as substrates, inhibitors, and inducers. They show clear individual and cross-ethnic variations which have been linked to differential adaptation to divergent environmental factors. (Katzung, 2018).

Some environmental factors, such as housing and employment, will differ across ethnic groups even within the same country. Environmental factors can affect pharmacogenetics and associated pharmacokinetics of psychiatric drugs. When certain cultural and ethnic groups are exposed to specific environmental factors over a long period of time, it can lead to adaptations of metabolism, leading to a differential response which is associated with ethnicity (Smith & Mendoza, 1996). A number of minority ethnic groups also use pluralistic approaches to health care and patients or their caregivers may not volunteer the information to the clinician. The prescribing specialist, in collaboration with the recipient and other members of the health professional treatment team, must ask questions in a sensitive and careful manner (Gaws, 2001) including planning prior to prescribing to check diet, religious taboos, review history of smoking,
alcohol, and drug use. Providing collaborative feedback and educative information to the health team providers and treatment recipient regarding potential dietary and evidence based environmental influences known to impact treatment effectiveness are important ongoing processes.

Specialists in Clinical Psychopharmacology have to be aware of safety and efficacy effects of pharmacological agents throughout their master’s level training as well as through continuing education opportunities offered through APA, Division 55, and state psychological associations. Competencies pertaining to diversity factors are woven into the MSCP training, largely in the advanced pharmacology courses offered by each APA-designated program. In addition, these differences highlight the interaction between biological and cultural factors, which may often provide a clue to the effects of pharmacogenomics.

Competencies in diversity factors are tested at the various stages of learning in the MSCP training programs. The complex nature of how diversity factors influence prescribing practices calls for introductory assessment of knowledge in pathophysiology and biochemistry courses. This ensures that students acquire the appropriate mastery of the language and concepts of diversity in psychopharmacology. Students then are required to demonstrate competency in the more advanced pharmacology courses through case reports and integration of diversity factors into case presentations. Ultimately, competency is demonstrated in the capstone experience as well as practicum training.

As was noted above, a patient’s age, gender, size, body composition, and other variables are usually studied in psychopharmacological clinical specialty training; however, issues such as race and ethnicity have historically been frequently neglected in research (Campinha-Bacote, 1995). Pharmacogenomic research during the past few decades has revealed significant differences among racial and ethnic groups related to the metabolism and clinical effectiveness of many important drugs. In addition, the collaborative prescribing disciplines have recently paid more attention to pharmacological issues associated with culturally and ethnically diverse health service recipients. These joint efforts have validated the emerging field of ethnic pharmacology.

As Applied Clinical Psychopharmacologists, practitioners recognize that explanations are multifaceted, but there is evidence that these racial and ethnic disparities can be related to clinicians’ skills, knowledge, and biases (Pi & Simpson, 2005; Snowden, 2003). A framework for addressing clinicians’ knowledge, skills, and biases in the field of ethnic psychopharmacology is addressed in the specialists training to affect the existing racial and ethnic disparities noted in psychopharmacological treatment.

References

http://dx.doi.org/10.1037/0735-7028.31.6.619
3. Describe how the specialty is monitoring developments and has moved to meet identified emergent needs and changing demographics in training, research, and practice (e.g., through research, needs assessment or market surveys).

Division 55 has established a Diversity Council to monitor developments and identify emergent needs and changing demographics in training, research, and practice. Activities of the Council include monitoring research on diversity, encouraging inclusion of diverse populations on division committees, encouraging research designed to expand available information on diverse populations and their response to pharmacotherapy, and to develop web-based educational products and surveys.

Another resource is the Association of Psychologists in Academic Health Centers (APAHC). This organization offers specific resources and educational products for gathering and disseminating information on diversity issues, such as the special section on health disparities and diversity issues in the Journal of Clinical Psychology in Medical Settings.
Diversity related initiatives relevant to psychopharmacology can also be found in other organizations that are comprised of psychologists. For example, in the Society for Behavioral Medicine (SBM) there are interest groups specific to diversity such as ethnic minority and multicultural health, and military and veteran’s health. The SBM routinely releases relevant policy briefs such as “Reducing Smoking Disparities for Gender and Sexual Minorities,” available at [http://www.sbm.org/UserFiles/lgbt_smoking_disparities_statement_final.pdf](http://www.sbm.org/UserFiles/lgbt_smoking_disparities_statement_final.pdf).

APA, through the Practice Directorate and the Public Interest Directorate, is also developing programming and information on considerations relevant to diversity and socioeconomic status in research and practice.

The pharmacology literature specific to diversity, multicultural issues, and ethnopharmacology has increased dramatically over the last ten years, resulting in an increased awareness of diversity issues in clinical psychopharmacology practice. The specialty monitors these developments and publishes the most recent evidence-based studies on psychopharmacology in journals such as *The Tablet* and the *Journal of Experimental and Clinical Psychopharmacology*, which is read by our members and on which we have representation on the editorial board. As they are monitored, the emerging trends in multicultural influences and pharmacogenomics are then integrated into MSCP training through coursework and continuing education presentations at APA annual conventions and continuing education opportunities. State chapters of Division 55 also offer continuing education such as that offered by the California Psychopharmacology Conference on the topic of aging adults presented in September of this year. Division 55 also partners with APA organizations to sponsor webinars such as the one on the refugee crisis: Understanding and Responding to Mental Health Needs of Families and Children Displaced by Armed Conflict held September 2017. In addition, the specialty has been kept up to date with articles and presentations, such as the following sessions offered at the American Psychological Association:

- A Timeline for the APA Multi-Cultural Guidelines: A Living Document, Toronto, 8/06/15
- Age as a Diversity Factor: Key Issues in Competency, Training, and Ageism, Denver, 8/05/16
- Qualitative Study of Diversity Dynamics Affecting the Formation of Inclusive Faith Communities, Denver, 8/05/16.
Over the past fifteen years, ethnopharmacologic research has documented significant differences in how people of diverse ethnic groupings metabolize certain medications (Burroughs, 2002). These differences include variations in pharmacodynamics (that is, the drug mechanism of action, and its particular effect at a target site), as well as pharmacokinetics (the movement of drugs, referring to drug absorption, metabolism, distribution, and elimination; Lin & Smith, 2000). Continuing Education opportunities are listed in Criterion VIII.

In summary, prescribing psychologists monitor current developments in diversity through reading the research, being exposed to clinic/hospital rounds, and by completing mandated continuing education programs. In addition, these topics are covered in the capstone examinations as part of the graduation process in MSCP programs, as well as integrated into the PEP-2.

References


4. Describe how the education and training and practice guidelines for the specialty reflect the specialty’s recognition of the importance of cultural and individual differences and diversity.

The APA RxP Model Curriculum (American Psychological Association Recommended Postdoctoral Education and Training Program in Psychopharmacology for Prescriptive Authority Approved by APA Council of Representatives, 2009) specifies that programs developed under these standards will continue their commitment to providing training courses and experiences that encourage sensitivity to the interactions between pharmacological interventions with development across the lifespan, gender, health status, and ethnicity of patients. This focus is reflected in both the didactic and experiential components of the program so that psychologists will develop the appropriate skill-based competencies to address diversity in the population being served.

The “APA Practice Guidelines Regarding Psychologists Involvement in Pharmacological Issues” (2011) specifies how diversity issues are to be addressed for those who prescribe psychotropic medication. Guideline 3 specifies that:

Psychologists involved in prescribing or collaborating are sensitive to the developmental, age and aging, educational, sex and gender, language, health status, and cultural/ethnicity factors that can moderate the interpersonal and biological aspects of pharmacotherapy relevant to the populations they serve.

Factors taken into account include the fact that individuals from different populations may manifest mental health disorders in unique ways because of culture. Accordingly, clinical
psychopharmacologists need to take into account differences in expression of stressors, psychosocial factors that might affect a patient’s help-seeking behaviors, beliefs about the doctor-patient relationship, and beliefs about healing.

Guideline 4 calls for prescribing psychologists to use post-licensure continuing education to ensure that optimal care is provided to patients:

Psychologists are encouraged to consider what level and type of formal education and training about psychotropic medications would be appropriate to the populations they serve, recognizing that scientific and clinical information about pharmacotherapy is rapidly evolving.

Division 55 also emphasizes practice guidelines developed by APA for patient populations that pose unique challenges in the field of clinical psychopharmacology. For example, the following guidelines may be used:

The Guidelines for Psychological Practice with Older Adults take into account the fact that older individuals have physical and psychological factors that influence their care. ([http://www.apa.org/practice/guidelines/older-adults.aspx](http://www.apa.org/practice/guidelines/older-adults.aspx)).

The Guidelines for Psychological Practice with Lesbian, Gay, and Bisexual Clients ([http://www.apa.org/pubs/journals/features/amp-a0024659.pdf](http://www.apa.org/pubs/journals/features/amp-a0024659.pdf)), encourage HSPs to consider patients who may have particular intersectional characteristics that have an impact on their health care experience.
Criterion IV. Distinctiveness. A specialty differs from other recognized specialties in its body of specialized scientific knowledge and professional application.

Commentary: While it is recognized that there will be overlap in the knowledge and skill among various specialties in psychology, the petitioning organizations must describe the specialty in detail to demonstrate that it is distinct from other recognized specialties in the knowledge and skills or the need or population served, problems addressed and procedures and techniques used.

The Specialty of Clinical Psychopharmacology is distinctive and differs from all other APA recognized specialties because those psychologists practicing within the specialty as Clinical Psychopharmacologists are the only psychologists with the competencies required to prescribe or recommend the clinical use of psychotropic medications. Additionally, while all health service psychologists should receive a knowledge-based education in types of medication utilized in the treatment of mental and psychological disorders, the scientific basis and professional application of actually prescribing medication are unique to the practice of Clinical Psychopharmacology. Thus, as a specialty, Clinical Psychopharmacology, is a defined area of advanced professional psychology practice that is characterized by a distinctive configuration of competencies, which address the diagnosis and treatment of those specific diagnoses in patient populations requiring pharmacotherapy and the ongoing monitoring of psychotropic medications in concert with other forms of psychological treatment; see Criteria IX, for examples of research documenting the effectiveness of psychotropic medications and the combination of medication with psychotherapy).

Because of its distinctiveness, Clinical Psychopharmacology is currently recognized at the postdoctoral level by APA policy, which notes that prescribing requires advanced competencies, knowledge and skills, as acquired through an organized sequence of education and training, leading to the Master of Science in Clinical Psychopharmacology (MSCP received from a program that is formally “designated” by the APA as meeting specific educational and training criteria in the Major Area of Study of Clinical Psychopharmacology (see https://www.apa.org/education/grad/rxp-policies-procedures.pdf). This formal “designation” of training programs in the specialty also is unique to Clinical Psychopharmacology as education and training for other recognized specialties occurs within APA accredited programs. Please note that the characteristics that distinguish Clinical Psychopharmacology from other specialties are covered in APA-designated model curriculum in the upcoming sections of this criterion.

Distinction

The specialty of Clinical Psychopharmacology, as defined by the APA Designation Committee, entails completion of a postdoctoral educational sequence (resulting in the conferral of a postdoctoral master’s degree in clinical psychopharmacology), plus a supervised training sequence. The specialty is limited to those psychologists who engage in such by virtue of specialized postdoctoral education and training and are able to prescribe psychotropic medications to their patients because of unique provisions in state or federal psychology practice acts or regulations that allow clinical psychopharmacologists to prescribe psychotropic medications. Recognition in statute or credentialing instruction (in the case of those prescribing psychologists practicing under federal authority) and the ability to prescribe medications is unique to the profession.
Not only is the specialty unique because this is the only specialty that prescribes medication, it is the only prescribing specialty to be recognized by APA. Further, other psychologists who practice in their respective specialty areas do so under a general license to practice psychology and are not governed by specialty education and training requirements enshrined in state law or federal regulation beyond routine licensure. The APA criteria for official designation of postdoctoral programs in clinical psychopharmacology apply to the four that are currently APA designated (Fairleigh Dickinson University, California School of Professional Psychology at Alliant International University, New Mexico State University, and University of Hawai‘i at Hilo Daniel K. Inouye College of Pharmacy (APA, 2018). This process regulates applicants, curricula, and outcomes for designated postdoctoral programs, and includes, *inter alia*, the following criteria:

**Participants.** Participants in the training programs include graduates of both PsyD and PhD doctoral programs in clinical psychology, those holding a current license to practice as a psychologist, and those who practice as a "health service provider" (HSP), as defined by the APA.

**Curriculum.** While the broad and general training for the generic license to practice health service psychology reflect the overlap of the training of specialists in Clinical Psychopharmacology, the specialty has a unique curriculum, specifically vetted by the APA designation process (Designation Criteria for Education and Training Programs in Psychopharmacology for Prescriptive Authority) that highlights the unique education and training preparation of the specialty and the regulation of its training programs. Components of the APA model curriculum include at least 400 contact hours in the following domains: Basic Science (anatomy, physiology, biochemistry); Neurosciences (neuroanatomy, neurophysiology, neurochemistry); Physical Assessment and Laboratory Exams (physical assessment, laboratory and radiological assessment, medical terminology and documentation); Clinical medicine and pathophysiology with emphasis on cardiac, renal, hepatic, neurologic, gastrointestinal, hematologic, dermatologic, and endocrine systems; Clinical Medicine (emphasis on signs, symptoms, and treatment of disease states, including those with behavioral, cognitive, and emotional manifestations or comorbidities); Differential Diagnosis; Clinical Correlations; Substance Abuse and Co-occurring Disorders; Chronic Pain Management; Clinical and Research Pharmacology and Psychopharmacology (pharmacology, clinical pharmacology, pharmacogenomics, psychopharmacology, developmental psychopharmacology, diversity in pharmacological practice); Clinical Pharmacotherapeutics (combined therapies, computer-based practice aids, pharmacoepidemiology); Research (method and design of psychopharmacologic research, research interpretation and evaluation, FDA drug development and other processes); and Professional, Ethical, and Legal issues (applications of existing law and standards, relationships with pharmaceutical industry, conflict of interest, evaluation, marketing practices, critical consumer).

Nine hundred thirty four (934) students have completed the postdoctoral master’s degree in clinical psychopharmacology training, which most enabling jurisdictions require for licensure. Illinois requires the completion of the APA-approved curriculum in clinical psychopharmacology. A unique, distinctive requirement of the Clinical Psychopharmacology Specialty is passing a specific national examination to qualify for a licensure to prescribe. Specialists must pass this exam, known as the Psychopharmacology Examination for
Psychologists (PEP), which was previously housed and administered by the APA Practice Organization’s College of Professional Psychology. An updated and revised examination, named the PEP-2, has been developed by the Association of State and Provincial Psychology Boards (ASPPB) and has been administered since March 2018. To date, 462 people took the PEP exam under APA and an estimated 36 have taken it through ASPPB. Exam scores are not available from ASPPB until 2020; however, scores until 2016 from APA are found in Appendix II. Four APA-designated training programs exist to train such psychologists with a fifth that started its first cohort in January 2018 and at least one other planning to start in spring 2020.

As psychologists have expanded their scope practice and competencies to prescribe, it becomes clear that a disorder-based approach is required in order to more precisely describe the activities of those psychologists who are engaged in the prescription of psychotropic medication. While population-based approaches are always necessary, such a vantage point is of greater utility in describing the broad set of knowledge and applied competencies that all practicing psychologists should acquire regarding psychotropics; in other words, the fund of knowledge expected by those psychologists with a proficiency, rather than a specialty, in prescribing psychology. A more specific, disorder-based approach is therefore required to adequately describe the activities of prescribing psychologists.

The distinctiveness of Clinical Psychopharmacology is reflected in the need for specialty recognition of clinical psychopharmacology and can be summarized by the following (from Sammons, 2016):

> The services needs of patients with mental health problems continues to be unmet, particularly in rural or impoverished areas or among traditionally underserved groups thus necessity to increase the number of qualified prescribers; (a) the number of psychiatrists, both adult and child/adolescent, and other mental health specialists with prescriptive authority needed to treat these patients has not risen to meet demand; (b) Most mental health services are now provided in primary care settings by non-mental health providers, whose sole intervention is generally pharmacological, although data are clear that treatment of mental disorders with medication alone (in instances where a prescription is warranted) provides suboptimal relief and yields poorer long term outcomes; and (c) In contrast to practitioners trained in the medical model, and distinctive from other specialty recognized in HSP, prescribing psychologists are trained to provide a range of both pharmacological and non-pharmacological interventions in cases where combined treatments are warranted.

Areas in which Clinical Psychopharmacology is uniquely and distinctly different from other recognized specialties include:

- **Types of referral questions** primarily involve assessment of patients to determine if they are a candidate for, and will benefit from treatment with psychotropic medication. This medication related diagnostic question is uniquely different from the standard referral questions for other HSPs.

- **Intervention** While general practice psychologists and those in other recognized specialties all provide some sort of psychological intervention (psychotherapy, behavioral interventions, behavior modification), those psychologists in the specialty of Clinical Psychopharmacology uniquely, and distinctively prescribe medication as the primary treatment or combine psychotropic medications with psychotherapy.
- **Patient populations served** by clinical psychopharmacologists primarily focus on those sub-populations of patients who are considered to be more significantly impaired by their symptoms to the point of requiring psychotropic medication treatment. Specialists in Clinical Psychopharmacology may see the same patients as other HSPs, but prescribing psychologists may also see specific, diverse patient groups such as adults with serious mental illness (SMI), and children and/or adolescents with emotional and behavioral disorders (EBD). Clinical Psychopharmacology Specialists also serve those patients already on psychotropic medication who may need medication reconciliation and/or discontinuation.

- **Identification of presenting symptoms**, indications for pharmacotherapy, and amenability to medication treatment are conducted uniquely by clinical psychopharmacologists in a fashion that distinguishes Clinical Psychopharmacology from other HSP recognized specialties. This focus leads to differences from other HSPs in the types of assessments that are used. For example, the following chart delineates those methods and techniques that are distinctive and require specialized knowledge, skill, or both in Clinical Psychopharmacology.

<table>
<thead>
<tr>
<th>Specialized Knowledge</th>
<th>Specialized Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptom rating scales</td>
<td>Conducting physical exams and review of symptoms (ROS)</td>
</tr>
<tr>
<td>Ordering appropriate medical laboratory tests including imaging (CT, MRI, etc.)</td>
<td>Neurological exams (which may be similar to those conducted by neurologists and clinical neuropsychologists)</td>
</tr>
<tr>
<td>Interpreting medical laboratory tests</td>
<td>Conduct differential diagnosis to rule out other medical or biopsychosocial conditions associated with symptomatology</td>
</tr>
<tr>
<td>Adverse reaction and drug-drug interaction evaluations and scales (e.g., AIMS, Barnes, PANSS, Simpson-Angus; Suzuki, 2011)</td>
<td></td>
</tr>
</tbody>
</table>

References


1. Identify how the following parameters differentiate and where they might overlap with other specialties. Describe how these parameters define professional practice in the specialty.

   A. **Populations**
The members of the Specialty of Clinical Psychopharmacology provide diagnosis and treatment services with all categories presenting with symptoms consistent with the full range of DSM diagnoses. Similarly, the specialty is available to provide diagnosis and treatment for the entire population, across the life span, and any and all culturally and ethnically diverse populations. These two categories, all DSM diagnoses and all population groups, can overlap with other recognized specialties in professional psychology. The populations served by the Clinical Psychopharmacologist Specialty are similar to those also served by the Clinical Health Psychology Specialty; for example, both Clinical Health and Clinical Psychopharmacology Specialists treat all populations of individuals with DSM diagnoses. The two Specialties depart from each other, however, in that clinical psychopharmacologists use either behavioral or pharmacotherapeutic interventions to treat patients who have indications for the use of psychotropic medications.

Clinical psychopharmacologists treat all age groups and all conditions requiring the use of psychotropic medications. The focus of treatment is symptom resolution and management, functional improvement through the use of medication, and minimizing potential adverse effects of treatment through selection of specific drugs, routes of administration, doses of drugs, and titration schedules, minimizing polypharmacy, and monitoring responses and emergence of side effects over time.

Clinical psychopharmacologists practice in rural and urban settings – in private, clinic, hospital, and primary care settings. The Clinical Psychopharmacology Specialty differs from all other recognized specialties in its use of focused diagnostic and (medical) laboratory tests necessary to review prior to prescribing medication, and, of course, as the only psychology specialty that prescribes – as determined to be diagnostically appropriate – psychotropic medications for the full patient populations described above.

Clinical psychopharmacologists focus on problems that may present as physical complaints; accordingly, they also practice in integrated care settings in which they contribute to medication decisions for patients also seen by nursing, medical, and other psychology professionals. Their unique contribution to these patients is to merge the biopsychosocial and medical approaches required to render accurate diagnostic and prescribing decisions for patients with comorbid psychological and medical conditions, including but not limited to diabetes, hypertension, endocrine, cardiovascular, gastrointestinal, and dermatological disorders. Clinical psychopharmacologists are trained to address the drug-drug interactions and adverse reactions seen in patients receiving medications for physical and psychological conditions.

In addition to Clinical Health Psychology, other existing specialties that may to overlap with Clinical Psychopharmacology in regards to populations are:

- Clinical Neuropsychology
- Sleep Psychology
- Geropsychology
- Clinical Child Psychology
Overlap between the populations treated by Clinical Psychopharmacology and Clinical Neuropsychology include patients suffering from traumatic brain injury (TBI), delirium, various types of dementia, Parkinson’s disease, stroke, and substance use disorders across the lifespan, but differ in the focus for treatment. Clinical Psychopharmacologists use medications to either treat the disorder directly (i.e., delirium, dementia) or the emotional/behavioral symptoms of the disorder (examples: TBI, Parkinson’s disease) being mindful of the specialized knowledge of the neurological disorder necessary so as not to exacerbate the symptoms of the underlying primary disorder.

Sleep problems frequently complicate mental health disorders, as well as other chronic health conditions, including obesity, cancer, hypertension, and various neurologic disorders. In addition, medications prescribed for mental health disorders and most physical diseases can have direct or indirect effects on sleep function. There is some expected overlap between specialties that treat sleep. For example, assessment and treatment of sleep disorders have been adapted for specific medical populations (e.g., cognitive behavioral therapy for insomnia in people with cancer and both hyper- and hypothyroidism may require medical intervention to resolve secondary sleep dysfunction). The extent to which sleep psychologists and clinical psychopharmacologists treat the pathology underlying the sleep disorder is where the disciplines depart from each other. Sleep psychologists may utilize behavioral therapy to address sleep disorders, whereas clinical psychopharmacologists consider sleep-related problems from the standpoint of underlying health- and illness-related contributions and may prescribe medication if appropriate. Furthermore, not only do sleep psychologists apply assessment and behavioral therapy to patients with sleep disorders, but clinical health psychologists also take a different tactic towards sleep disorders, such as investigating the scientific focus on normal sleep phenomena, including sleep cycles, sleep deprivation in the absence of sleep disorders, and sleep changes related to age. This is in contrast to the approach applied by the Clinical Psychopharmacology Specialty, in which specialized knowledge regarding the physiological and neuroscientific aspects of sleep function are integrated into treatment decisions that may include ordering appropriate tests, prescribing medication, providing behavioral therapy, reconciling medications that underlie the sleep disorder, or referral to a sleep specialist.

Both younger and older patient populations require special consideration by several specific specialty groups. Age is a risk factor for many medical conditions, and the field of pharmacokinetics addresses specialized knowledge in treating both children and older patients. Naturally, there is overlap in care among the different specialty groups that address these unique populations. Professional geropsychologists “appl[y] the knowledge and methods of psychology to understanding and helping older persons and their families to maintain well-being, overcome problems and achieve maximum potential during later life.” Clinical health psychologists also provide care for children and older adults.

The CRSPPP definition of clinical child psychology stresses specialized knowledge in “the basic psychological needs of children and adolescents, and how the family and other social contexts influence the socioemotional adjustment, cognitive development, behavioral adaptation and health status of children and adolescents.” Many clinical child psychologists work at least a portion of the time in medical settings or with patients who have medical conditions. Clinical child psychologists attend to overall psychological functioning and problems specific to the
differential stages of development, and vary from clinical health psychologists and clinical psychopharmacologists who overlap in providing care to children and adolescents, but focus on overall health interventions and education. As with care provided to other populations, clinical psychopharmacologists diverge from other specialties in their approach to treating children and adolescents by evaluating their health using both psychological and medical testing and providing psychological as well as pharmacotherapeutic treatment.

B. Problems (psychological, biological, and/or social that are specific to this specialty):

Psychologists, in the specialist role as clinical psychopharmacologists, diagnose and prescribe both psychological and pharmacotherapeutic care for patients with a full range of DSM diagnoses including mood, anxiety, substance use, and other interpersonal problems in outpatient populations.

Patients with mental distress who are deemed to be in need of psychotropic intervention are the target population for prescribing psychologists. Patients with mental distress who are deemed to be responsive to both psychological and pharmacological interventions are those most appropriate for the services of a prescribing psychologist within the specialty. The exact intervention by the psychologist will depend on a collaborative relationship with the patient, the appropriate treatment plan based on the biopsychosocial perspective, and, of course, patient preference. The prescribing psychologist, working within an ethics-based perspective, will work with these patient choices, while encouraging patients to take advantage of optimum treatment regimens. Thus, not all patients seen by prescribing psychologists will receive both medication and psychological interventions; some may receive only psychotherapy and others only medication. The latter is particularly true in the continuation and maintenance phases of treatment, where benefit from psychotherapy may have been optimized, yet the patient is judged to require long term pharmacotherapy, as may be the case in chronically-relapsing depressive or psychotic spectrum disorders.

Clinical psychopharmacologists focus on psychological problems that may either include or mimic physical complaints; accordingly, they also practice in integrated care settings in which they contribute to medication decisions for patients also seen by nursing, medical, and other psychology professionals. Their unique contribution to these patients is to merge the biopsychosocial and medical approaches to rendering diagnostic and prescribing decisions for patients with comorbid psychological and medical conditions, including but not limited to diabetes, hypertension, endocrine, cardiovascular, gastrointestinal, and dermatological disorders. Clinical psychopharmacologists are trained to address the drug-drug interactions seen in patients receiving medications for physical and psychological conditions.

Although other HSPs will see the same patients, clinical psychopharmacologists will primarily focus on those sub-populations of individuals who are considered to be more significantly impaired by their symptoms to the point of requiring medication treatment. Examples include adults with SMI and children and/or adolescents with EBD.

The key distinction between problems addressed by other HSP psychologists and clinical psychopharmacologists is the modality used for intervention. In this case, clinical
psychopharmacologists are most likely needed to address those psychological and biological problems that significantly interfere with the individual’s daily functioning and for which psychotropic medications have an indication. Referral problems include, but are not limited to disturbances in attention and behavior in children, adolescents, and adults that interfere with home, school, and work performance secondary to a diagnosis of ADHD; Serious disturbances of thinking, perception, and behavior secondary to a diagnosis of schizophrenia, major depression, or bipolar disorder in children, adolescents, and adults; Deficits in cognitive function and behavior secondary to a diagnosis of dementia; Presenting symptoms that include nightmares, heightened vigilance, flashbacks, excessive physiological reactions to certain internal or external cues, avoidance behaviors, etc., that are related to the diagnosis of PTSD. Referrals to clinical psychopharmacologists come from general practice physicians, internists, neurologists, family practice physicians, social workers, professional counselors, marriage and family therapists, other HSP psychologists, the VA, military base commanders, Indian Health Service agencies, Public Health Service agencies, and others.

Existing specialties where there may appear to be overlap with regard to patient-specific problems are:

As noted in “A” above, the same problems that present to the following specialties: clinical neuropsychology, clinical health psychology, school psychology, clinical psychology, clinical child psychology, forensic psychology, geropsychology, sleep psychology, and rehabilitation psychology also may present to clinical psychopharmacologists. In each case, the clinical psychopharmacologist will assess for the underlying cause of the presenting problems/symptoms and determine based on diagnosis and symptom type, what type of psychotropic medication would serve to provide the greatest benefit to the individual as evidenced by a reduction in the severity or frequency of symptoms and improvement in daily functioning. It is also the case that in some instances, after a comprehensive psychological and physical assessment, the clinical psychopharmacologist may determine that no medication is indicated or that the presenting problems are not related to an underlying behavioral health disorder, but actually are signs and symptoms reflecting side effects to some psychotropic medication the individual has received from another prescriber. In these cases, the clinical psychopharmacologist will address the problem by discontinuing the offending medication, re-evaluating the individual to ensure that the presenting problem has resolved, and then determine if other psychotropic medication is indicated.

C. Procedures and techniques

Specialists in Clinical Psychopharmacology overlap with other HSP psychologists in many of the routine diagnostic work psychologists do; but the those in this specialty carry out procedures, describe below that are unique and distinctive to this specialty. The routine assessment procedures for all licensed HSP providers and specialties include, but are not limited to: diagnostic interview, mental status examination, symptom rating scales (both clinician-rated and self-report), and objective cognitive and/or personality assessment tools, and adaptive behavior analysis. Intervention modalities that overlap with other HSP psychologists include, but are not limited to: cognitive-behavior therapy, behavior therapy, relaxation training, and others.
However, in addition to these procedures and techniques and in distinction with other specialties and HSP psychologists, clinical psychopharmacologists use additional procedures and interventions in their practice that include but are not limited to:

Conducting physical examinations is a specialized skill that involves an evaluation of the whole body and its functions using inspection, palpation (feeling with the hands), percussion (tapping with the fingers), and auscultation (listening). It includes taking physiological measures, such as blood pressure, pulse, respiration rate, weight, and body mass index (BMI), which are all learned during didactic and experiential training.

Conducting neurological examinations is a specialized skill that involves examination of the central, autonomic, and peripheral components of the nervous system. Examinations of this type include more detailed assessment of brain, spinal cord, sympathetic, parasympathetic, sensory, and motor nerves from these areas. There are many aspects of this exam, including an assessment of motor and sensory skills, balance and coordination, mental status (the patient's level of awareness and interaction with the environment), reflexes, and cranial nerves. Complete neurological examination may require additional visualization techniques including magnetic resonance imaging (MRI), computed tomography (CT) scans, ultrasound, and evoked potential recordings, depending on the signs and symptoms of the patient.

A significant component of the physical examination that requires both specialized knowledge and skill is the Review of Systems (ROS). The Specialist asks a series of questions concerning each and every organ system and region of the body during history-taking and physical examination in order to gain an optimal understanding of the patient's presenting illness and medical history.

Rating scales measuring medication side effects require specialized skill. Assessment tools such as the AIMS (Abnormal Involuntary Movement Scale) is used before prescribing medication and to monitor/detect symptoms of tardive dyskinesia while medications are taken; Simpson-Angus Scale used at baseline and to detect extrapyramidal symptoms (EPS) that are neurological adverse reactions that can occur early in the treatment with certain psychotropic medications; the Barnes Scale used at baseline and to detect emerging symptoms of akathisia, which is a neurological symptom of motor restlessness that can occur during treatment with some psychotropic medications; The Positive and Negative Syndrome Scale (PANSS), used to assess the severity of schizophrenia; and Unified Parkinson’s Disease Rating Scale (UPDRS) for evaluating potential upper limb motor function indicative of neurodegenerative disorders. (https://www.sciencedirect.com/topics/medicine-and-dentistry/unified-parkinsons-disease-rating-scale)

Specialized knowledge unique to this specialty and acquired by clinical psychopharmacologists in didactic and experiential training is applied to ordering and interpreting laboratory tests, which include but are not limited to complete blood counts, basic and comprehensive metabolic panels (checking glucose, electrolytes, etc.), lipid panel (checking cholesterol, triglycerides, etc.), thyroid function tests, liver function tests, renal function tests, CT scans, MRIs, and others. Clinical psychopharmacologists must know the correct tests to order in addition to how to interpret them.

Specialized knowledge is required for reviewing medical records. Examination and interpretation of prior laboratory and medical examinations made by other medical professionals is needed to determine prior health status, prior medication treatments, current non-psychotropic medications
being prescribed, and determining potential drug-drug interactions that contribute to decisions about what current psychotropic medication should be considered.

Both specialized knowledge and skill are required for medication management. The use of selected psychotropic medications to treat target symptoms and the evaluation over time of the effectiveness of treatment is included. Based on an individual’s response to treatment, medications dosages may be increased, decreased, or discontinued and changed. Medication management also includes the evaluation and treatment of any emergent side effects related to the treatment medications.

Collaboration and coordination of care: The management of the care of an individual by providing medication management while coordinating other aspects of care with other participating providers such as primary care physicians, social works, professional counselors, marriage and family therapists, and other HSP psychologists.

The Clinical Psychopharmacology Specialty is unique in that its procedures and techniques focus on a diagnostic protocol and treatment with the use of psychotropic medications. While the broad and general competencies of all health service psychologists are used in the diagnostic process and treatment planning, after all, the Clinical Psychopharmacology Specialist is a psychologist first, with the specialized competencies to prescribe. Here is a brief description of the unique, additional diagnostic activities and unique prescribing activities of this specialty:

Diagnostic Assessment Procedures and Techniques: Unlike any other discipline in psychology, medicine or nursing, the Specialty of Clinical Psychopharmacology requires practitioners to integrate diagnostic assessment procedures and techniques from all of these individual fields of mental health care. For example, a clinical health psychologist may utilize structured interviews, medical charts, certain laboratory tests to rule out health conditions, questionnaires that assess personality, behavioral health or other health profiles. A clinical psychopharmacologist has been trained to utilize all of these tools, as well as more extensive laboratory tests, neurological imaging techniques, and physical examination. Furthermore, the Clinical Psychopharmacology Specialist has to rule out physical and mental health conditions in order to make the most skilled and informed treatment decision for a patient.

For example, consider how a Clinical Psychopharmacologist would approach a 54-year-old female patient who presents with severe depression, lethargy, dry skin, insomnia, and obesity. The Specialist may conduct a psychological assessment, but also will order multiple laboratory tests including estrogen, testosterone, Follicle Stimulating Hormone (FSH), a thyroid panel (including Thyroid Stimulating Hormone and Free T3 and T4), a comprehensive metabolic panel, and a fasting blood glucose. Each of these tests will be used for the diagnostic assessment of this patient to rule out the root cause of depression, eliminating menopause, a systemic infection, hypothyroidism, anemia, or diabetes. Treatment, as detailed below, will depend on how complete the assessment is and the Clinical Psychopharmacologist’s capacity to accurately interpret these findings.

Intervention Procedures and Techniques: Once again, the Specialist is prepared to carry out, when appropriate, evidence-based treatment based on strong psychological findings. However, the Specialist will apply the hallmarks of pharmacological intervention, including therapies that replace or prevent missing neurochemicals or act as palliative, curative, or maintenance treatments.

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Intervention Procedures and Techniques: Once again, the Specialist is prepared to carry out, when appropriate, evidence-based treatment based on strong psychological findings. However, the Specialist will apply the hallmarks of pharmacological intervention, including therapies that replace or prevent missing neurochemicals or act as palliative, curative, or maintenance treatments.
Understanding the exact mechanism of action of most psychotropic agents is not well elucidated scientifically. Most biological theories of mental disorder lack power to explain the complexities of mental distress. While we recognize that abnormalities in monoaminergic neurotransmission play some role in the genesis and maintenance of certain disorders, no unified neurochemical explanation exists for even the best-studied form of mental distress. Similarly, the hallmark of almost all psychotherapeutic interventions for mental distress is non-specificity. The axiom that one credible, active form of psychotherapy is as effective as any other (i.e., the famous Do-do-bird hypothesis; Wampold, 2000) is still largely true, with the caveat that specific procedures exist for some disorders (e.g., aggressiveness in the context of intellectual impairment). Such procedures, however, tend to be behavioral, rather than purely psychotherapeutic (e.g., response inhibition), so it is challenging to divide the disorders under discussion here into biological and non-biological domains. The boundaries of each domain are overlapping and exceedingly indistinct. We can with greater precision demarcate our interventions into those that are predominantly biological, psychological, or social, but even here it must be understood that no intervention is pure, and all are to a greater or lesser extent an admixture of all domains. Nor are the results of any particular intervention domain-specific. A psychological intervention has biological manifestations, just as a biological intervention may be more measurable in social terms.

As in any other area of psychological intervention, the prescribing psychologist commences with an evidence base that is incomplete. Aside from some relatively facile guidance (i.e., when prescribing antidepressants, begin with a low dose of a generic SRI) and proscriptions (e.g., avoiding benzodiazepines in patients with substance abuse or impulse control problems; not prescribing monoamine oxidase inhibitors with serotonergic antidepressants) that are well covered in the training curriculum, there is no science that matches the best treatment with any individual patient’s presenting problem as long as one is working within the boundaries of a specific range of disorders (e.g., depression, anxiety, psychosis, cycling mood disorders, attentional disorders, and other broad diagnostic rubrics). Some patients may prefer psychological to pharmacological interventions; some may prefer the opposite. It is up to the prescribing psychologist to best match the patient’s characteristics and preferences with the optimum treatment and to carefully document the patient’s progress under the treatment that has been mutually agreed upon. As in any other area of psychological practice, carefully delineated, mutually agreed upon informed consent is a cornerstone of effective practice.

References


In addition to the professional practice domains described above, describe the theoretical and scientific knowledge required for the specialty and provide references for each domain as described below. For each of the following core professional practice domains, provide a brief description of the specialized knowledge that is required and provide the most current available published references in each area (e.g., books, chapters, articles in refereed journals, etc.) While reliance on some classic references is acceptable, the majority of references provided should be from last five years and should provide scientific evidence for the theoretical and psychological knowledge required for the specialty.

2. a. assessment:
   b. intervention:
   c. consultation:
   d. supervision
   e. research and inquiry:
   f. public interest:
   g. continuing professional development
   h. any relevant additional core professional practice domains.

The Specialty of Clinical Psychopharmacology recognizes the “core professional practice domains” as competencies that are developed for the general practice of psychology and for the specialty practice of clinical psychopharmacology. This item (#2) reflects the knowledge bases of these core competency areas that underlie the specialty while #3 below reflects the skills or applied competencies in the actual practice of the specialty.

The practice of clinical psychopharmacology involves distinct knowledge bases and decision-making structures; these clearly differentiate this specialty from the general practice of psychology. Not only are mechanical issues radically different (obtaining special authority to prescribe, the issuance of prescriptions), but the fundamentals of practice diverge from standard psychological intervention essentially at the time the initial diagnostic assessment is undertaken.

In broad terms, the following algorithmic steps must be taken in five phases spanning the history of intervention from initial presentation to sustained resolution of the disorder. These phases are preliminary assessment, acute intervention, maintenance intervention, continuation intervention, and treatment discontinuation. These are standard terms of art used by clinical psychopharmacologists to improve interprofessional communication. The prescribing psychologist must address each of these components of treatment as they pertain to the use of psychotropic medications. Those psychologists in general practice or as specialists within other
recognized specialties, while needing familiarity with basic laboratory examinations, will not order such medically-based diagnostic tests, will not enter orders for medications, nor routinely order laboratory measures as part of routine treatment and follow up.

**Specialized Knowledge:**

**a. Assessment (knowledge):**

As noted above, assessment by a clinical psychopharmacologist not only involves the typical types of assessments performed by HSP psychologists, but also specialized assessment activities that are specific to clinical psychopharmacologists’ practice and distinct from other HSP psychologists. The review of prior medical records, including previous medical diagnoses, results of medical and laboratory tests, conducting a physical examination, neurological examination, review of systems, and the review of prior and current medication treatments, all require specialized knowledge of anatomy, pathophysiology, biochemistry, pharmacology, clinical psychopharmacology, neurology, clinical medicine, interpretation of laboratory tests, and imaging studies, among others. These assessments can occur in general hospitals, psychiatric hospitals, emergency departments, outpatient mental health clinics, clinics associated with the Public Health Service, Indian Health Service, on military bases stateside and in theater, and in private practice offices.

In addition, and in distinction to other HSP psychologists, clinical psychopharmacologists receive specialized education on appropriate assessment techniques as part of their coursework to obtain the master of science in clinical psychopharmacology (MSCP) degree that is one of the requirements to obtain authorization to prescribe. For example, based on the four APA-designated training programs, clinical psychopharmacologists receive instruction in Physical Assessment/Labs (lab and radiological assessment; signs and symptoms of physical illness; neurological examination; patient history; neurophysiological tests); Pathophysiology; and Differential Diagnosis.

Furthermore, and in distinction to other HSP psychologists, clinical psychopharmacologists must pass a national examination that tests their knowledge of assessment techniques. The Psychopharmacology Examination for Psychologists (PEP) tests both knowledge and applied skills in ten domains (test blueprint). The domains most relevant here involving assessment include, but are not limited to: Neuroscience; Nervous system pathology; Physiology and pathophysiology; Biopsychosocial and pharmacological assessment and monitoring; Differential diagnosis; and Clinical Psychopharmacology.

**References**


Brazis, P., et al. (2016). DeMyer's The Neurologic Examination: A Programmed Text, Seventh
The specialty trains prescribing psychologists in a range of assessment techniques. They are expected to have mastered routine psychological testing and interviewing, as required in APA-accredited doctoral training programs. During their postdoctoral coursework in clinical psychopharmacology, however, they develop expertise in identifying the need for and ordering and interpreting laboratory results as part of the assessment, as well as skills in discussing these results with appropriate healthcare personnel and the psychologist’s patient. While some prescribing psychologists may practice in clinics where there is considerable medical support, each prescribing psychologist is expected to be competent in measuring all vital signs that must be monitored for safe prescribing.
References


b. Intervention:

The specialty is unique in that psychologists, in their role as prescribing psychologists, are the only specialists who are prepared to intervene by prescribing medication to their patients either as the entire treatment regimen or, preferably, in combination with other evidence-based psychological interventions.

Clinical psychopharmacologists can use all of the same interventions available to other HSP psychologists such as psychotherapy, behavior therapy, relaxation training, mindfulness interventions, etc., for which they can demonstrate competence. In addition to these common interventions, clinical psychopharmacologists can uniquely provide guidance to other prescribers on appropriate use of psychotropic medications for the treatment of a wide variety of disorders across all age ranges. In some states, clinical psychopharmacologists can actively prescribe those psychotropic medications. Other interventions specifically related to clinical psychopharmacology include the management of potential adverse reactions to the psychotropic drugs used for treatment. The specialty also offers expertise on drug-drug interaction as may be seen in the event of a Clinical Psychopharmacologist prescribing multiple medications or if another medical care provider has prescribed additional medications for other conditions. Clinical psychopharmacology trains individuals to have specialized knowledge in drug-drug interactions. As specialists, they also will provide education to patients and their families on the best evidence for the benefits of treatment with psychotropic medications and how to identify potential side effects and what steps to take if and when those adverse events occur.

As noted above, and in distinction to other HSP psychologists, clinical psychopharmacologists receive specialized education on appropriate intervention techniques as part of their coursework to obtain the MSCP degree. For example, clinical psychopharmacologists receive instruction in Clinical Pharmacology; Professional Issues and Practice Management; Treatment Issues in Psychopharmacology; Special Populations; Advanced Psychopharmacology; Pharmacotherapeutics; Clinical Practicum in Psychopharmacology; Substance Related Disorders; and Chronic Pain Management.

The PEP domains that are most relevant to the topic of intervention include but are not limited
to: Integrating clinical psychopharmacology with the practice of psychology; Biopsychosocial and pharmacological assessment and monitoring; Pharmacology; Clinical Psychopharmacology; and Professional, legal, ethical, and interprofessional issues.

References


Among the components of the specialty, postdoctoral education in clinical psychopharmacology that additionally speaks to the distinctiveness of the specialty is the necessity for the prescribing psychologist to both order and interpret laboratory examinations and to have intimate familiarity with the results of physical examinations. A psychologist with postdoctoral training in clinical psychopharmacology and a license to prescribe will need to have specialized knowledge with laboratory measures and be diligent in ordering laboratory tests for monitoring effects and adverse reactions of specific medications. For example, it is well-established that both first- and second-generation antipsychotics can cause weight gain, affect the lipid profile (irrespective of weight gain), and result in a condition called metabolic syndrome (Allison et al., 1999; Hartling et al., 2012; Henderson et al., 2005). The American Diabetes Association provides recommendations for the frequency that glucose, lipid level, weight, and body mass index and should be evaluated among individuals with, or at risk for, diabetes.

Other medications can exacerbate blood pressure problems and should be monitored closely by a prescribing psychologist. Management and intervention with patients on opioids also require specific attention (Tampi et al., 2017). Some medications may affect heart rhythms so that baseline and ongoing electrocardiograms should be obtained both prior to initiating a course of medication and periodically throughout the treatment course. These cautions apply to numerous classes of medications, including frank sympathomimetics, like stimulants used in the treatment of ADHD, but many commonly-used antidepressants with pressor effects (e.g., bupropion, venlafaxine) and even other antidepressants (e.g., citalopram) previously not considered to be
arrhythmogenic (Tseng, Lee, Lin, & Lin, 2012). While the non-prescribing psychologist consultant should be familiar with the monitoring mechanisms typically used in conjunction with certain classes of medications and verify with the prescribing professional that appropriate monitoring is occurring, the responsibility for carrying out such investigations resides with the prescribing psychologist.

To summarize, the knowledge base of the prescribing psychologist differs substantially from generalist psychologists, as well as those psychologists who consult regarding psychopharmacology. Postdoctoral education consists not only of a fount of knowledge regarding drugs, but technical knowledge regarding laboratory and physical examination and their interpretation. Prescribing psychologists are uniquely qualified to both prescribe drugs to humans and independently order ancillary evaluations, making their practice a distinct specialty area in the field.

The specialty of prescribing psychology can meet two separate, but equally essential elements of need. The first recognizes the need for combined treatments for mental disorders and is based on the well-documented argument that, although the use of psychotropic agents for mental disorders has increased substantially, most patients do not exhibit a lasting positive response to pharmacological interventions alone. By extension, then, the combined treatments offered by prescribing psychologists fill a need for more effective mental health interventions. The second component of the need argument is based on extant shortages of mental health services in general, including the services of pediatric and adult psychiatrists, the other major professional groups utilizing the treatments employed by prescribing psychologists.

Prescribing psychologists’ skills in assessment and diagnosis result in improved utilization of psychotropics and may result in reduced reliance on drug treatment alone. While there is insufficient evidence to date to provide definitive support for this argument (no well-controlled studies of drug use patterns for prescribing psychologists exist), prescribing psychologists may be more abstemious in their use of drugs than purely medically-trained colleagues (Sammons, 2016). Psychologists have the advantage of being trained in non-medical models, thereby potentially lessening their reliance on unimodal pharmacological interventions. Additionally, psychologists are trained to conceptualize patient problems from a biopsychosocial, not medical, point of view, increasing the salience of non-pharmacological interventions (McGrath, 2010). In many settings where unimodal drug treatment is endemic, such as the treatment of depression in primary care (Olfson & Marcus, 2009), prescribing psychologists may have a disproportionate influence on reducing overreliance on drug treatment (McGrath & Sammons, 2011).

References


c. Consultation:

All health service psychologists are trained extensively in the importance of inter- and intra-professional consultation. Such consultation and collaboration can define the success of treatment planning for a patient in general. However, in the specialty, such consultation is key given the biopsychosocial complexity of reconciling medications used for more than one health condition (i.e., hypertension and anxiety), to ensure that patients with substance use disorders are not receiving multiple prescriptions for addictive medications, and to add to the likelihood of the patient successfully adhering to both the psychological and psychopharmacological regimes prescribed. (Shearer, Harmon, Seavey, & Tiu, 2012).

Clinical psychopharmacologists must possess a broad understanding of human anatomy, physiology, pathophysiology, biochemistry, neurology, neuroscience, differential diagnosis, medical diseases and disorders, pharmacology, and clinical psychopharmacology, among other areas. This knowledge base is critical for clinical psychopharmacologists to effectively collaborate with their medical colleagues to coordinate the treatment of individuals with behavioral health disorders who are also being treated for other medical conditions. This knowledge base is also critical when clinical psychopharmacologists are asked to be prescribers for other HSP psychologists and non-psychologist behavioral health providers. The clinical psychopharmacologists, in this instance, must know when to make a referral for medical evaluation and treatment and to which medical specialist that referral should be made.
Clinical psychopharmacologists receive academic training in this area as coursework for the MSCP degree during courses such as: Professional Issues & Practice Management; Anatomy, Physiology, Biochemistry, Neuroanatomy, Neurophysiology, Medical Terminology, and Clinical Pharmacology.

Domains of examination in the PEP include: Neuroscience; Nervous system pathology; Physiology and pathophysiology; Differential diagnosis; and Pharmacology.

References


d. Supervision (specialized knowledge):

Since clinical psychopharmacologists are generally already licensed and practicing psychologists before receiving specialized education to prescribe, there is no specific education provided about how to supervise other clinical psychopharmacologists. This item may not be relevant for clinical psychopharmacologists or the specialty in general. The skill of providing supervision for clinical psychopharmacology will be discussed below in the next section.

The specialty recognizes three important issues related to the domain of supervision. First is the literature on supervision of learners within the specialty to help them gain the unique competencies needed to be a quality-based provider. Second is the importance of learning to do supervision to help advance the field and specialty and last is the importance of understanding required supervisory hours in order to be a licensed prescribing psychologist.

A major component of licensure to prescribe is experiential or practicum training. The number of
hours of training and number of patients required vary by state law for the state sanction recognition to practice. As more and more states pass legislation allowing for specialists in Clinical Psychopharmacology to prescribe, efforts to establish uniformity in experiential training is underway to ensure that future prescribers receive excellence in practicum training.

For New Mexico:

- 80-hour practicum in clinical assessment and pathophysiology
- 400-hour supervised practicum treating no fewer than 100 patients

For Louisiana:

- Three years of experience practicing as a medical psychologist. For those individuals licensed under R.S.37:1360.55(A), such experience shall be deemed to have commenced with the issuance of the original certificate of prescriptive authority issued by the Louisiana State Board of Examiners of Psychologists.
- Treatment of a minimum of one hundred patients including twenty-five or more involving the use of major psychotropics and twenty-five or more involving the use of major antidepressants which demonstrate the competence of the medical psychologist.

For Illinois:

- A full-time practicum of at least 14 months but not more than 28 months of supervised clinical training of at least 1,620 hours, including a research project; during the clinical rotation phase, MSCP graduates complete rotations in Emergency Medicine, Family Medicine, Geriatrics, Internal Medicine, Obstetrics and Gynecology, Pediatrics, Psychiatry, Surgery, and one elective of the student’s choice.

For Iowa:

- 600 patient contacts for clinical experience.
- A practicum of at least 400 hours/100 individual patients.

For Idaho:

- Clinical experience of at least 400 hours/100 separate patients.
- A minimum of 2000 hours under supervision in not less than 24 months and not more than 48 months.

For the Military, Public Health Service, and Indian Health Service:

- Clinical psychologists need to participate in a psychopharmacology practicum for eight (8) hours per week for at least one-year. The total amount of hours per year is at least 400 hours.
- A minimum of 100 separate patients.
References


e. Research and inquiry (specialized knowledge):

Clinical psychopharmacologists must have knowledge about current research methodology in the area of clinical psychopharmacology. In order to be able to critically read the literature and select evidence-based treatments for their patients, clinical psychopharmacologists receive education and training on research designs, drug development, clinical trials, statistics, classic unbiased studies of treatment for the major mental disorders like STAR*D and CATIE, as well as the influence of complementary and alternative medicines (CAM) on the effect of psychotropic drugs.

Clinical psychopharmacologists receive academic training in this area as coursework for the MSCP degree during courses such as: Methodology and design, Interpretation of research, and Regulatory process.

The domain of examination in the PEP that assesses competency in this area is named Research.

References:


f. Public interest (specialized knowledge):

Clinical Psychopharmacologists serve and advocate for the improvement of mental health
outcomes for patients needing behavioral therapy and/or pharmacotherapeutic interventions. They are also knowledgeable about both psychobiosocial and medical models of mental and physical health and their application to patient care. In addition, Specialists in this field actively participate in multidisciplinary integrate healthcare teams, communicating with other practitioners in medical, nursing and clinical psychology disciplines.

Clinical psychopharmacologists are well-trained in the areas of healthcare delivery and health insurance coverage, particularly related to access to high-quality, least expensive, psychotropic medications. Clinical psychopharmacologists routinely advocate for their patients to state agencies that are in charge of Medicaid coverage and to insurance carriers and managed care organizations (MCOs) to ensure that the broadest medication formulary is available to ensure adequate evidence-based treatments. Clinical psychopharmacologists in states with prescription statutes also provide services to those individuals who are in rural areas and who otherwise would have no access to psychiatrists.

**Continuing professional development (specialized knowledge):**

g. A variety of resources to maintain skills and stay updated to deliver high quality psychopharmacological and integrated services is readily available. Every state's licensing requirements include continuing education for renewal of licensure. Those states with enabling statutes authorizing qualified psychologists to prescribe have additional continuing education requirements that are particular to the psychopharmacology realm. See Criterion X where the myriad topics covered by CE offerings from Division 55 are provided.

**h. Any relevant additional core professional practice domains (specialized knowledge):**

There are none identified at this time.

3. **Identify professional practice activities associated with the specialty in each of the following domains and how they differentiate and where they might overlap with other specialties.**

**Practice Skills/Competencies**

a. **Assessment (skills):**

While psychologists in this specialty engage in routine psychological evaluations, the unique nature of clinical psychopharmacology is the biological assessments, laboratory tests, and physical examination components. In the preliminary assessment, it is necessary to determine if a psychopharmacological intervention is appropriate to the problem at hand. Then, an assessment of the physiological status of the patient is required to determine if drug treatment can be safely undertaken. An assessment of physiological status may be cursory in the case of many patients, inasmuch as these patients will also be receiving services from a primary care medical provider. In other instances, however, it will remain incumbent upon the consultant to determine that due diligence is observed in recommending the assessment of particular variables that may not be in the knowledge base of many primary care providers. For example, has a complete ophthalmologic consultation been obtained prior to starting certain antipsychotic or antidepressant drugs to rule out angle closure glaucoma? Has a baseline electrocardiogram been
obtained? Assessment of other factors placing patients at risk for various pharmacological interventions must be accomplished (for example, eliciting a history of eating disorder in a patient for whom bupropion may be prescribed or substance abuse in a patient to be treated with benzodiazepines).

b. Intervention (skills):

Prescribing psychologists’ skills in assessment and diagnosis results in improved utilization of psychotropics, and may result in reduced reliance on drug treatment alone. While there is insufficient evidence to date to provide definitive support for this argument (i.e., no well-controlled studies of drug use patterns for prescribing psychologists exist), prescribing psychologists may be more abstemious in their use of drugs than purely medically-trained colleagues (Sammons, 2016). Psychologists have the advantage of being trained in non-medical models, thereby potentially lessening their reliance on unimodal pharmacological interventions. Additionally, psychologists are trained to conceptualize patient problems from a biopsychosocial, not medical, point of view, increasing the salience of non-pharmacological interventions (McGrath, 2010). In many settings where unimodal drug treatment is endemic, such as the treatment of depression in primary care (Olsson & Marcus, 2009), prescribing psychologists may have a disproportionate influence on reducing overreliance on drug treatment (McGrath & Sammons, 2011).

Psychologists who utilize pharmacotherapy in conjunction with psychotherapy rely on a body of literature that suggests that combination treatment of drugs and psychotherapy or behavioral treatment results in improved short- and long-term outcome. There are, however, significant methodological challenges involved in determining the outcome of both psychotherapy-versus-medication and combined-versus-unimodal treatment. Such challenges have been succinctly detailed in a meta-analysis by Huhn et al. (2014). In spite of their caution that funding disparities, sample size differences, placebo comparators, and other methodological and procedural issues made direct comparisons difficult, these authors concluded, inter alia, that (a) the effect sizes of both pharmacological and psychological therapies were generally modest, (b) psychotherapy had a larger acute effect size than pharmacotherapy, and that maintenance drug treatment yielded larger effect sizes than acute treatment. Importantly, their review of 12 meta-analyses of combined treatments for most major disorders, including schizophrenia, depression, dysthymia, panic disorder, and bipolar disorder trended in favor of combined treatments, which were deemed superior in 7 of the studies reviewed.

Other meta-analyses confirm not only the effectiveness of combined interventions for a variety of conditions, but that they are often preferred over unimodal treatments by patients and that their long-term efficacy is improved over unimodal interventions. Cuijpers et al. (2010) concluded on the basis of a 16-study meta-analysis that combined treatments for depression were superior to unimodal treatment or placebo for depression, and other large meta-analyses demonstrate that the addition of psychological interventions to pharmacology or treatment as usual is effective in preventing recurrence of depression (Biesheivel-Leliefeld et al., 2015). A smaller meta-analysis of 9 studies comparing combined interventions against pharmacotherapy alone found a non-statistically significant superiority of combined treatments; however, there was a significant difference in reported quality of life for those in combined conditions (von Wolff, Holzel, Westphal, Harter, & Kriston, 2012).
Having made the decision to use drugs, it is then necessary to determine if a drug treatment should be used alone or in combination with other behavioral or psychological interventions. At that point (the acute stage of pharmacologic treatment), the clinician must decide how pharmacologic treatment is to be incorporated into the overall treatment plan. At what point is it initiated? How are doses calculated to avoid initiation side effects and conversely, how are discontinuation side effects managed? How is the patient’s progress through the various stages of drug treatment gauged, and doses adjusted accordingly? Informed consent, including detailed explanations of the limitations of pharmacological treatment, as well as potential risks, benefits, side effects, duration of pharmacologic treatment, and expected goals of treatment must be provided to the patient. If laboratory monitoring of therapeutic drug levels is indicated, it must commence at this stage.

In the continuation stage of treatment, after initial presenting symptoms have resolved, remaining symptoms of the disorder should be behaviorally assessed. The effects of pharmacologic treatment must be assessed, including desired as well as undesired medication effects, the suitability of selected psychosocial strategies evaluated. Decisions regarding continued drug treatment, not only selection of appropriate pharmacological agent at the appropriate dose, must be periodically revisited. Such decisions include detection of concomitant medical issues that affect use of drugs, ordering and interpretation of laboratory tests, and assessment of treatment response throughout the continuation phase.

In the maintenance phase of treatment, a primary task is to monitor the strength of recovery and be vigilant for signs of relapse. The burden upon the clinical psychopharmacologist here is to recommend dose titrations, and, when symptoms warrant, the appropriateness of discontinuing drug treatment. When this decision is made, evidence of discontinuation syndromes (e.g., withdrawal, rebound, or recurrence of the original disorder) must be noted and appropriate pharmacological and psychosocial strategies for managing discontinuation syndromes implemented.

In the final analysis, it is important to recall that much of the practice of clinical psychopharmacology is conducted without clear scientific guidance. Major controversies continue to exist over fundamental issues, such as efficacy of antidepressants versus psychotherapy. Other practice issues, such as the recognized existence of a large placebo effect in the pharmacological treatment of essentially all mental disorders, or the absence of any specific understanding of the mechanism of action of pharmacological agents (Moncrieff & Kirsch, 2015) will continue to impede a closer connection of science and practice in this field. It is thus incumbent upon clinical psychopharmacologists to keep abreast of developments in the science in all spheres of clinical practice: pharmacological, psychological, and social.

c. Consultation (skills):

1. Common Prerequisites: In all disorders and developmental groups addressed, the following basic knowledge is presumed: In addition to prerequisite credentials, such as the completion of a doctoral degree in psychology and licensure to practice as a psychologist, Smyer and his colleagues (Smyer et al., 1992) set forth the basic parameters for specialized training in consultancy as follows:
[This] training includes in-depth knowledge of the pharmacology of psychoactive medication and drugs of abuse, but it also includes knowledge of psycho-diagnosis, physical assessment, physical function tests, drug interactions, and drug side effects. Training for [this level of] competence includes practical training beginning with psychopharmacology practica in the doctoral program, a psychopharmacology focus in the internship, and extensive on-the-job training coupled with ongoing continuing education... (page 58).

Training in each of the content areas mentioned below should, as advised by Kilbey et al. (1997) include advanced understanding of the nature of collaborative relationships between prescribers and consultants, and the particular legal and ethical issues which attend such relationships. When the patient population is below the age of legal consent, or when custodial issues are involved, issues of assent, third party consent, developmentally appropriate competency assessments must be addressed in training. Such instances include, in addition to those below the legal age of consent, patients with intellectual disability or neurocognitive deficits. Finally, Brown et al. (2008) note that in-depth multicultural competence training should be mandated in all pre-service and in-service settings. Sensitivity to cultural expectations in prescribing is required (e.g. Chaudry, Neelam, Duddu, & Husain, 2010) and the potential for ethnically-mediated metabolic differences (Malik, Lake, Lawson, & Joshi, 2008) should be kept in mind.

2. Consultancy in Child and Adolescent Psychopharmacology: Psychosocial and psychopharmacological evidence-based treatments for childhood disorders must be a part of all curricula for practicing psychologists working with children and families. Regardless of the discipline, a working knowledge of both current psychopharmacology and psychosocial therapies is of paramount importance for all professionals involved in the treatment of child and adolescent disorders (Brown et al., 2008). Training at both the pre- and post-doctoral level should include principles of clinical psychopharmacology and a working knowledge of current literature on pharmacological treatment efficacy. Brown et al. (2008) also have recommended that coursework, training practica, and internships should include skill development in the procedures and instruments that are evidenced-based for monitoring client and patient outcomes in both clinical practice and clinical trials, including symptom change, functional outcomes (both positive and negative), and adverse side effects.

Training at the postdoctoral level must be organized to further the development of skills in the implementation of evidence-based psychopharmacological treatments, consistent with current training guidelines for postdoctoral fellowships for child and adolescent psychology (Brown et al., 2008). Continuing education for child and adolescent practitioners and training faculty must emphasize contemporary evidence-based strategies in the treatment and management of childhood disorders. Practitioners must be taught systematic methods for monitoring medication efficacy; especially the evaluation of potential adverse side effects and functional outcomes. It is essential that continuing education include training emphasizing the collaboration with other treatment team members, including physicians, school personnel, caregivers, and others involved in the comprehensive care of children and adolescents. Finally, psychologists also must be taught to develop treatment plans and discuss risk-benefit analyses collaboratively with parents, adolescents, and sometimes children for the purpose of facilitating informed-decision making for treatment plans.
Proficiency in this area will be demonstrated by adequate academic preparation in basic and clinical psychopharmacology and the completion of an approved practical experience that involves extensive exposure to the target population (children with intellectual disability or neurodevelopmental disorders, for example). Prerequisite experience will include appropriate doctoral and postdoctoral training in child psychology.

3. Consultancy in Intellectual Disability and Developmental Disabilities Across the Life Span: Since most, but not all, competencies required of practitioners in this area are developmentally sensitive, this practice area is appropriate to address both in pediatric and adult populations. In children and adolescents, psychopharmacological adjuncts are often utilized in the management of intellectual disability and the treatment of neurodevelopmental disorders, and variants such as autism spectrum disorder. In particular, antipsychotic agents have been employed to reduce self-destructive behavior. Randomized controlled studies strongly support the efficacy of antipsychotics and stimulants in decreasing symptoms of disruptive behavior in children (ages 5 and older) and adolescents. The effect sizes of antipsychotics are large and that of stimulants are more modest. The specific effect of psychotropics on these children’s functional outcomes is less clear (McDougle et al., 2005). Psychosocial and psychopharmacological interventions are often used in combination, although little is known about the interactions between these two treatment modalities. For example, whether medications enhance the efficacy of psychosocial treatment or whether psychosocial treatment allows medication to be discontinued eventually without concurrence of symptoms is unclear. Consultants will be required to demonstrate knowledge of the use of specific pharmacological agents in this population, including such variables as age appropriate serum drug levels. There is a greater chance that patients in this category will also experience some inborn metabolic abnormalities, or have other congenital abnormalities that may affect drug disposition and metabolism. Therefore, focus on variations in physical functioning and accurate assessment of such variables will be an important component of training, as will be the ability to design developmentally appropriate behavioral regimens that can complement pharmacotherapy.

Separate skills and competencies are required when working with developmental disabilities across the lifespan. Issues pertaining to children and adolescents are described above. Expertise in the development of life stage appropriate biobehavioral interventions for adults with intellectual disability or other developmental disabilities is necessary. Acquisition of a distinct knowledge base is required when working with adults and elderly populations suffering from dementing disorders or trauma victims with resultant neurocognitive sequelae. These skills include the physical and psychosocial assessment of elderly patients and the use of all drug classes used in the treatment of dementing disorders. Intimate knowledge of common metabolic derangements and predicted pharmacokinetic and pharmacodynamic changes in older age groups is a core skill in working with such populations.

d. supervision (skills):

Supervision occurs during practicum activities within the APA-Designated RxP training programs. This usually involves shadowing another prescribing professional, which may include another prescribing psychologist. Prescribing psychologists may serve as supervisors to other prescribers in training such as advanced practice nurse students, and medical students and
e. research and inquiry (skills):

Specialists in Clinical Psychopharmacology are trained to conduct research on the efficacy of psychotropic medications for the treatment of behavioral health disorders. Such training occurs within the MSCP curriculum (Research and Methodology) as well as during Advanced Psychopharmacology courses in which students are trained to utilize online tools for researching disease states, appropriate medication, idiosyncratic reactions, adverse reactions and drug-drug interactions.

Specialists are encouraged to publish information in peer-reviewed journals, books and present at conferences on topics related to the practice of RxP psychologists

f. public interest (skills):

Specialists in Clinical Psychopharmacology are encouraged to become engaged in their communities and provide community service when appropriate. The nature of serving in rural areas is such that community interaction fosters better communication within families and the community at large. Other ways in which Specialists develop skills in public interactions include:

i. work with SPTAs to produce public information materials that education the public about the knowledge, skills, and practices of specially trained RxP psychologists;

ii. when asked by the public for referrals to competent providers, directly educate the public about the availability of RxP psychologists and provide information about RxP psychologists’ services;

iii. when asked by other non-psychologist behavioral health providers or other HSP psychologist providers for referrals to prescribers of psychotropic medications, use the opportunity to educate these providers of the services provided by RxP psychologists;

iv. educate other medical providers about the services provided by and the availability of RxP psychologists upon referral;

v. engage in political activities designed to educate legislators about the need for RxP psychologists;

vi. participate in local, state, and national efforts to further advance education of the public about the need for RxP psychologists;

vii. participate in local, state, and national efforts to pass legislature authorizing RxP psychologist practice;

g. continuing professional development (skills):

The Specialty of Clinical Psychopharmacology works directly with APA Division 55 to foster skills in professional development in various ways. Student members are encouraged to participate in advocacy, teaching and presentations (see Appendix B). Young members are
mentored by more experienced members and new programs in which new members are assigned a mentor are underway. Other areas in which continuing professional development skills are honed include:

i. offer to be presenters at local, regional, and national conferences and other workshops on topics related to the practice of RxP psychologists;

ii. offer to teach courses in one of the APA-Designated training programs for RxP psychology;

iii. volunteer to serve on committees for SPTAs, APA, ASPPB, and other professional organizations that are targeted to advance the practice of RxP psychologists;

iv. assist in the development of an application to establish RxP psychology as an ABPP certification;

v. act as mentor to candidates for RxP certification/licensure.

h. any relevant additional core professional practice domains (skills):

None have been identified at this time.

Problems and Procedures

Specific populations. In 1997, the APA Board of Educational Affairs (BEA) Working Group on Psychopharmacology Education and Training published its final report (Kilbey et al., 1997). This group identified four specific populations as foci of work for psychologists consulting in clinical psychopharmacology1: Children and adolescents, the seriously mentally ill, older adults, and individuals with intellectual disability or developmental disabilities. It is worth noting that the Working Group eventually agreed that a lifespan or developmental approach to disorders and populations would be most appropriate for consulting psychopharmacologists. The Working Group, however, also debated at length the merits of a disorder-specific approach to classifying skills and knowledge domains of psychologists engaged in this endeavor. After considerable discussion, it was eventually decided that a disorder-specific approach would be too restrictive and would not adequately describe the practice of most psychologists. While such an approach was arguably suitable for a discussion of a proficiency, which does not presume the direct clinical application of psychopharmaceutical agents, it is clear that in describing a specialty, it is essential to adopt a disorder-specific approach. In this major respect, a petition for a specialty differs fundamentally from that for a proficiency.

References


1 Consultancy in clinical psychopharmacology begs definition of the consultee, here and elsewhere, the psychologist is presumed to be acting as consultant to any health care provider authorized as an independent prescriber of medication.


Criterion V. Advanced Scientific and Theoretical Preparation. In addition to a shared core of knowledge, skills and attitudes required of all practitioners, a specialty requires advanced, specialty-specific scientific knowledge.

Commentary: Petitions demonstrate how advanced scientific and theoretical knowledge is acquired and how the basic preparation is extended.

1. Specialty education and training occur at the doctoral (including internship), postdoctoral, or post-licensure levels. State the level of training of the proposed specialty.

Specialty training in clinical psychopharmacology initially was established in 1996 when the Council of Representatives of the American Psychological Association (APA) ratified the document, “Recommended Postdoctoral Education and Training Program in Psychopharmacology for Prescriptive Authority.”\(^1\) (APA Council of Representatives, 1996). This document was created by a committee of scholars from relevant domains of expertise determined to be necessary for training successful and safe prescribers. A new committee was enacted in 2009, and a revised document of recommended training was accepted by the Council of Representatives of the APA (https://www.apa.org/about/policy/rxp-model-curriculum.pdf). It was proposed that the recommendations for training would occur at the postdoctoral level in order to assure that the student is well-grounded in all aspects of psychological theory before undertaking the study of psychopharmacology. It was postulated that, in this way, psychologists would maintain a psychological orientation to treatment (vs. a strictly medical model) when prescribing psychotropic medication.

\(^1\)The 1996 Recommended Training was based on several earlier documents, including the Department of Defense Psychopharmacology Demonstration Project curriculum, the report of the Blue-Ribbon Panel of the Professional Education Task Force of the California Psychological Association, and an initial document prepared by the Committee for the Advancement of Professional Practice (CAPP) Task Force on Prescription Privileges. The final draft of the document was developed by the APA Presidential Working Group and submitted to the APA Council of Representatives.

2. Training at the doctoral level is assumed to be primarily broad and general. If specialty training occurs in whole or in part at the doctoral level, describe that training. If there is specialty specific scientific knowledge that is typically integrated with aspects of the broad and general psychology curriculum (e.g., biological bases of behavior, cognitive-affective bases of behavior, individual bases of behavior, ethics (science and practice) rather than taught as a freestanding course or clinical experience, specify how this integration occurs.

Those designated postdoctoral master’s programs in Clinical Psychopharmacology build on the broad and general preparation of Health Service Psychology, but provide in the postdoctoral master’s degree a clear, sequential education and training in the necessary biological sciences underpinning Clinical Psychopharmacology. Designation by APA follows a set of procedures and guidelines that are described in the American Psychological Association Policies and Procedures for the Designation of Postdoctoral Education and Training Programs in
Psychopharmacology in Preparation for Prescriptive Authority, which was approved by APA Council of Representatives in 2009 and revised in 2012 (https://www.apa.org/education/grad/rxp-policies-procedures.pdf). There is a Designation Committee charged by APA to review new programs, as well as those programs that have already received designation status (https://www.apa.org/education/grad/psychopharmacology.aspx).

3. If specialty training occurs in full or in part during a formal postdoctoral program, describe the required education and training and other experiences during the postdoctoral residency. Are there any doctoral level prerequisites beyond an APA-accredited degree in professional psychology required for postdoctoral training?

All of the psychopharmacology programs identified in this Specialty Application document have received designation from the American Psychological Association, thereby indicating that the programs are consistent with the 2009 document detailing recommended postdoctoral education and training. Consequently, each designated program has demonstrated that it adheres to a planned and sequential curriculum designed to educate those postdoctoral students in the necessary knowledge and experience necessary to become a prescribing psychologist. While somewhat unique to other specialties, this specialty requires the attainment of a postdoctoral master of science degree in clinical psychopharmacology, a requirement that further demonstrates the necessary planned and sequential curriculum of any regionally-accredited degree program,

Doctoral training in clinical psychology requires basic competencies in core skill sets that are foundational to the education of the postdoctoral-designated programs. The requirements of the postdoctoral-designated programs expand the core competencies of doctoral training in clinical psychology to ensure students have acquired the necessary knowledge beyond their core training to safely prescribe medications. The postdoctoral-designated program requirements can be found in Appendix XX of the “Recommended Postdoctoral Education and Training Program in Psychopharmacology for Prescriptive Authority” (APA, 2009; see pages 6-11).

APA had designated four postdoctoral clinical psychopharmacology programs at the time of this report (see: https://www.apa.org/education/grad/designation.aspx). The four designated programs include:

**MS Program in Clinical Psychopharmacology**
**California School of Professional Psychology**
https://www.alliant.edu/cspp/programs-degrees/psychopharmacology/
Alliant International University
1 Beach Street, Suite 100
San Francisco, CA 94133
Designated July 25, 2011
Next Review for Renewal of Designation: 2019

**MS Program in Clinical Psychopharmacology**
**Daniel K. Inouye College of Pharmacy, University of Hawai'i, Hilo**
34 Rainbow Drive
Hilo, HI 96720
*Designated Nov. 10, 2015*
*Next Review for Renewal of Designation: 2019*

**MS Program in Clinical Psychopharmacology**  
**Fairleigh Dickinson University**  
https://view2.fdu.edu/academics/university-college/school-of-psychology/masters-level-programs/ms-in-clinical-psychopharmacology/program-overview/  
School of Psychology T-WH1-01  
Fairleigh Dickinson University  
Teaneck, NJ 07666  
*Designated Nov. 6, 2010*  
*Next Review for Renewal of Designation: 2018*  
*Under review: May 14, 2018*

**MS Program in Clinical Psychopharmacology**  
**New Mexico State University**  
https://cep.nmsu.edu/academic-programs/clinical-psychopharmacology/  
MSC 3CEP  
P.O. Box 30001  
Las Cruces, NM 88003-8001  
*Designated Nov. 6, 2010*  
*Next Review for Renewal of Designation: 2018*  
*Under review: May 1, 2018*

In addition to the four programs that have attained designation by APA, two other postdoctoral programs (The Chicago School of Professional Psychology and Idaho Allied Health School) are being modeled on the current APA designation model. Iowa also plans to base their program on the current APA designation model with the understanding that designation criteria are being updated in 2018. Idaho and Iowa plan to accept students for the fall 2019 semester and Chicago began its inaugural class in January 2018.

4. If specialty training occurs in full or in part post-licensure, describe the required education and training during this training. Are there any doctoral level prerequisites beyond an APA-accredited degree in professional psychology required for post-licensure training?

The postdoctoral programmatic requirements for the specialty of clinical psychopharmacology are based on the APA (2009) policy for training in this specialty and infused into the local programs Major Area of Study in Clinical Psychopharmacology (“Recommended Postdoctoral Education and Training Program in Psychopharmacology for Prescriptive Authority;” see Appendix XX). These education and training requirements as adopted by the APA designation committee require as a prerequisite the successful completion of doctoral training and experience leading to the obtainment of the doctoral degree in clinical psychology. Moreover, postdoctoral residency/fellowship requirements must have also been completed.
Recognizing that this is a dynamic field and that subsequent revision may become necessary over time, 400 contact hours, at a minimum, of didactic instruction is expected in the following core content areas (I-VIII). As programs may develop specific courses using different content integration approaches, these are not meant as specific courses and the contact hours are not broken down into each area. The program must demonstrate that all content is covered and that the students achieve clinical competency in all content areas. Italicized content represents examples of some of the clinical competencies that may be associated with the domain of instruction. Domains I-IV include core domains of basic science necessary for applied pharmacotherapy. These core domains include:

I. Basic Science
   A. Anatomy & Physiology
   B. Biochemistry
II. Neurosciences
   A. Neuroanatomy
   B. Neurophysiology
   C. Neurochemistry
III. Physical Assessment and Laboratory Exams
   A. Physical Assessment
   B. Laboratory and Radiological Assessment
   C. Medical Terminology and Documented Integration of A-C through supervised clinical experience or lab experience in conducting physical exam, ordering psychometric and laboratory tests, and understanding results and interpretation
IV. Clinical Medicine and Pathophysiology
   A. Pathophysiology with particular emphasis on cardiac, renal, hepatic, neurologic, gastrointestinal, hematologic, dermatologic, and endocrine systems
   B. Clinical Medicine, with particular emphasis on signs, symptoms, and treatment of disease states with behavioral, cognitive, and emotional manifestations or comorbidities
      C. Differential Diagnosis
   D. Clinical Correlations: The illustration of the content of this domain through case study
   E. Substance-Related and Co-occurring Disorders
   F. Chronic Pain Management Integration of A-F through supervised clinical experience or lab experience in taking medical history, assessment for differential diagnosis, and review of systems

Domains V to VIII include education and training in the science and application of psychopharmacology and applied pharmacotherapy. This includes special considerations for treating diverse groups of people based on gender, age, race, and ethnicity. While the prerequisite clinical psychology training already provides extensive education and training about diverse populations and the applications of diagnostic and treatment options, the postdoctoral training augments the general training of clinical psychologists by including information about metabolomic and genetic differences in certain groups of people that can influence both pharmacodynamics and pharmacokinetic drug effects. Such key knowledge goes far beyond the scope of training in clinical psychology and is essential to this specialty area. Core education and training in Domains V-VIII include:
V. Clinical and Research Pharmacology and Psychopharmacology
   A. Pharmacology
   B. Clinical Pharmacology
   C. Pharmacogenetics
   D. Psychopharmacology
   E. Developmental Psychopharmacology
   F. Issues of diversity in pharmacological practice (e.g., sex/gender, racial/ethnic, and lifespan factors related to drug metabolism access, acceptance, and adherence)
   Integration of A-F through supervised clinical experience or lab experience in Clinical Medicine and ongoing treatment monitoring and evaluation

VI. Clinical Pharmacotherapeutics
   A. Combined Therapies: Psychotherapy/pharmacotherapy interactions
   B. Computer-based aids to practice
   C. Pharmacoepidemiology Integration of A-C through supervised clinical experience or lab experience in integrated treatment planning and consultation and implications of treatment

VII. Research
   A. Methodology and Design of psychopharmacological research
   B. Interpretation and Evaluation of research C; FDA drug development and other regulatory processes

VIII. Professional, Ethical, and Legal Issues
   A. Application of existing law, standards, and guidelines to pharmacological practice
   B. Relationships with pharmaceutical industry, including conflict of interest, evaluation of pharmaceutical marketing practices, and critical consumer.

The postdoctoral programs include coursework for the successful integration of the broad and general skills of psychotherapy and specialty-related psychopharmacology competencies for the range of populations served by all psychologists (See VI above). Thus, coursework addresses the diagnosis and treatment of children, adolescents, adults, geriatrics, and patients of varied ethnicities and gender orientations/identities (See V; E and F above). In order to accomplish this, evidence-based treatments for each group are studied, including psychotherapeutic intervention and the science of physiological dynamics and genetic variations that impact metabolism (See V; F above) and effectiveness of psychotropics in each group; which is a distinctive knowledge base and skill set of the Specialty.

As part of the postdoctoral education programming for this Specialty, it is important to note that a number of prescribing psychologists have written about the unique way that prescribing psychologists address the application of clinical psychopharmacology. LeVine and Foster (2004) have termed this approach as the “psychobiosocial model of care.” In this model, the needs, beliefs, and goals of the patient are always central to classroom learning, clinical practica, and the ultimate practice within the Specialty. Students are taught that the least intrusive means for assisting patients is preferred. Medication is employed when other psychological supports have been implemented and further assistance is needed, but only with the patient’s extensive informed consent. For example, learning opportunities focus on attitudes within a culture or religion about medication, as well as the patient’s desires and concerns about effects and side
effects, which play a central role in determining if medication is prescribed.

Prescribing psychologists are trained to work with patients with a range of diagnoses from the DSM. In every case, prescribing psychologists are taught to strive to use medication as needed, to help their patients achieve a reduction in symptomatology (See Domains IV and V).
**Criterion VI. Advanced Preparation in the Parameters of Practice.** A specialty requires the advanced didactic and experiential preparation that provides the basis for services with respect to the essential parameters of practice. The parameters to be considered include: a) populations, b) psychological, biological, and/or social problems, and c) procedures and techniques. These parameters should be described in the context of the range of settings or organizational arrangements in which practice occurs. If the specialty training occurs at more than one level (e.g., doctoral, postdoctoral, post-licensure) please list the levels of preparation separately.

**Commentary:**

**A) Populations.** This parameter focuses on the populations served by the specialty, encompassing both individuals and groups. Examples include but are not limited to the following: children, youth and families; older adults; workforce participants and those who seek employment; men and women; racial, ethnic, and language minorities; gay, lesbian, bisexual and transgender individuals; persons of various socioeconomic status groups; religion; and those with physical and/or mental disabilities.

**B) Psychological, Biological, and/or Social Problems.** This parameter focuses on symptoms, problem behaviors, rehabilitation, prevention, health promotion and enhancement of psychological well-being addressed by the specialty. It also includes attention to physical and mental health, organizational, educational, vocational, and developmental problems.

**C) Procedures and Techniques.** This parameter consists of the procedures and techniques utilized in the specialty. This includes assessment techniques, intervention strategies, consultative methods, diagnostic procedures, ecological strategies, and applications from the psychological laboratory to serve a public need for psychological assistance.

The American Psychological Association (APA) shall be responsible for the designation of postdoctoral education and training programs in psychopharmacology for prescriptive authority for psychologists. The purpose of the designation is to afford public recognition of education and training programs that meet certain minimum standards and published criteria. The process of designation is voluntary, to be initiated by the program seeking to be designated. There are currently 4 programs (Alliant International University, Fairleigh Dickinson University, New Mexico State University, and University of Hawai‘i) that have received the designation status by the American Psychological Association to provide training to licensed psychologists. While the four training programs are different in the way they offer their training (e.g., in person, on-line, real-time on-line training), they each follow the expectations and responsibilities set forth by the APA of training psychologists to be qualified to able to prescribe psychotropic medications. The four APA-designated training programs are each focused on training psychologists to ensure that they

As set forth as a requirement by the American Psychological Association, each of the designated programs must cover at least 400 contact hours covering specific content domains, including, but not limited to: basic science (anatomy & physiology, biochemistry), neurosciences (neuroanatomy, neurophysiology, neurochemistry), physical assessment and laboratory exams, clinical medicine and pathophysiology (pathophysiology with particular emphasis on cardiac, renal, hepatic, neurologic, gastrointestinal, hematologic, dermatologic, and endocrine systems;
clinical medicine with particular emphasis on signs, symptoms and treatment of disease states with behavioral, cognitive, and emotional manifestations or comorbidities; differential diagnosis; clinical correlations – the illustration of the content through case study; substance-related and co-occurring disorders; and chronic pain management), clinical and research pharmacology and psychopharmacology (pharmacology, clinical pharmacology, pharmacogenetics, psychopharmacology, developmental psychopharmacology, issues of diversity in pharmacological practice, clinical pharmacotherapeutics (combined therapies – psychotherapy/aids to practice, pharmacoepidemiology), research (methodology and design of psychopharmacological research, interpretation and evaluation of research, and FDA drug development and other regulatory processes) and professional/ethical/legal issues including applications of existing law, standards and guidelines to pharmacological practice and relationships with pharmacological industry (conflict of interest, evaluation of pharmaceutical marketing practices, and critical consumer).

1. Describe the advanced didactic and experiential preparation for specialty practice in each of the following parameters of practice:

All of the psychopharmacology programs that have been identified in this specialty application document as having received designation from the American Psychological Association apply postdoctoral education and training that is consistent with the 2009 document detailing recommended practice guidelines. Consequently, each designated program has demonstrated that it adheres to a planned and sequential curriculum designed to educate those postdoctoral students in the necessary knowledge and experience necessary to become a prescribing psychologist. While somewhat unique to other specialties, this specialty requires the attainment of a postdoctoral master of science degree in clinical psychopharmacology, a requirement that further demonstrates the necessary planned and sequential curriculum of any regionally-accredited degree program.

Prescribing safely requires the utilization of a set of skills in the assessment and management of medications that expand on the more traditional psychological evaluation of patients. Specifically, the psychologist must add the assessment of the patient’s medical status and condition in addition to assessing the patient’s psychological, social and cultural functioning in order to establish a comprehensive assessment and treatment plan for the patient. High quality training of the prescribing psychologist requires that the prescriber shows sufficient skill at physical assessment using the customary tools found in current medical practice as well as in the skilled selection, adjustment and monitoring of biological agents that have shown the greatest effectiveness in enhancing patient functioning. The prescribing psychologist in training is given the opportunity to acquire these skills in an organized sequence that begins with a knowledge base, which provides an understanding of anatomy, physiology, pathophysiology, neurology, neuropathology, neuropsychology, pharmacology, clinical psychopharmacology, techniques of physical and laboratory assessment. This didactic knowledge is followed with experiential training in the practical skills of integrating patient findings into a coherent understanding of the patient’s functioning. This marriage of didactic and experiential application permits the prescribing psychologist to reach decision regarding the prescribing of biological treatments, their adjustment and monitoring. Collectively, these skills must include the ability to maintain a collaborative relationship with the patient that respects the patient’s autonomy. The training also
actively incorporates the utilization of current evidence which provides the basis for formulating optimum treatment options.

The following list of specific skills and abilities is included here to provide a more specific description of the skill set which is developed during training and is required for proficient practice. It is drawn from the Prescribing Psychologist Resident’s Manual of the Southern New Mexico Family Medicine Residency (see Appendix D for the complete manual) and guides the training of prescribing psychologists along with family medicine residents and clinical pharmacy residents at that Memorial Medical Center in Las Cruces, New Mexico. Each MSCP program offers its own specific practicum manual along these lines (see Appendix D).

Specific Required Skills and Abilities

These skills and abilities are required at a minimum for routine safe practice. The Prescribing Psychologist’s (RxP) training should encompass all of these activities which the RxP must be able to engage in skillfully. Therefore, experiential training is an opportunity to demonstrate competence at each of the activities below. Some MSCP programs include an initial Physical Assessment Practicum (usually a minimum of 80 hours) which may occur during and along with a Medication Management Practicum (usually a minimum of 400 hours).

Below is a comprehensive list of tasks and competencies that are required of a prescribing psychologist who is evaluating and treating a patient with whom care is being established for the first time.

Physical Assessment Practicum Competencies

1. Obtain a current complaint and problem list.
2. Take a comprehensive health history.
3. Reconcile the patient’s medication list.
4. Document the patient’s personal, developmental, social, academic and family history.
6. Take, document and review vital signs.
7. Evaluate cranial nerve function, basic reflexes, balance and coordination.
8. Evaluate and document the patient’s mental status.
9. Demonstrate the ability to examine the results of laboratory, radiological, physical assessment and consultation reports to identify abnormal results which can then be reviewed in collaboration with an appropriate medically trained professional to consider the limits, additional risks and implications they present for psychotropic treatment planning.
10. Propose and order appropriate laboratory assays and additional physical evaluations necessary for determining the appropriateness of the patient for treatment with psychotropic medication and other alternative treatment recommendations.

Following the Physical Assessment Practicum and during the Medication Management
Practicum the prescribing psychologist trainee will develop skills and demonstrate competencies in the following:

11. Assess and document the patient’s psychological and psychiatric functioning including developing a differential diagnosis with a plan for clarifying the diagnosis when appropriate.

12. Review the patient’s medical and psychiatric problem list and formulate hypotheses regarding the impact of the patient’s medical status on choices for the treatment of their medical and psychological conditions.

13. Evaluate all potential beneficial and adverse interactions among the patient’s medical and psychotropic medications, assessment procedures and potential treatments.

14. Identify appropriate treatment options including psychopharmacological agents including the most appropriate alternative choices and provide the rationale underlying this medical decision making.

15. Formulate and document a treatment plan that demonstrates consideration of the above and takes into consideration the patient’s history, economic and social status and conditions, cultural factors and the results of the current medical and psychological examinations that takes the current best evidence and recommended treatment protocols into consideration.


17. Prepare treatment plans that include strategies for evaluating the patient response to medication, monitoring for adverse effects of the medication and anticipated adjustments to, changes to, and discontinuation of medication based on the patient response.

18. Demonstrate knowledge of and sensitivity to the ethical and legal issues raised by the provision of psychotropic medication as part of a treatment plan.

When providing ongoing care for an established patient the RxP will need the following skills and abilities when there is an onset of new physical symptoms. These skills can be demonstrated effectively in the Medication Management Practicum.

19. The ability to take a focused history and to generate data on current complaints

20. Complete a review of those systems relevant to the new complaint

21. Development of a differential diagnosis

22. Proposing the necessary elements for a thorough physical assessment including a physical exam, laboratory and other studies completed by the patient’s primary care provider(s)

23. The ability to incorporate data from the history, ROS, physical assessment and other studies into a treatment plan with coordination regarding which team member will manage which elements of the treatment

24. Consider potential complications resulting from treatment

25. Establish the elements of effective follow up evaluation of the impact of the treatment

The above is an outline of the initial practicum training for prescriptive authority but is not expected to imply the end of training. The APA’s designation requirements mandate that the curriculum in a Prescribing Psychology experiential practicum with opportunities to provide the
trainee with substantial additional experience in the assessment and management of patients and
in the provision of biological interventions as well as psychological interventions. During the
previous (Physical Assessment) practicum, the supervision is comprehensive and highly
structured. As in other training models, trainees entering the Prescribing Psychology Practicum
will combine more practice autonomy with continuing comprehensive supervision.

The following description of the practicum represents the practicum experience offered by the
New Mexico State University program and provides clear details regarding the expectations of
the student.

Examples of Activities During the Physical Assessment Practicum:

Initial activity during the first week

1. Follow all medical providers as they examine patients with presenting and current
   complaints (40 hours)
2. Obtain the consent of the patient for the RxP’s participation in the patient’s
   examination
3. Patients presenting to establish care or for annual physicals
4. Practice taking and reviewing vital signs
5. Obtain details of the patient’s current complaint
6. Take detailed health histories and complete a reviews of systems – patients who
   are establishing care at the clinic
7. Present the results of a health history and review of systems to a senior resident
   who will then examine the patient
8. Observe (and participate as appropriate) as the senior resident verifies the details
   of the health history, review of systems, and then completes the physical
   examination of the patient
9. Established patients presenting with new complaints
10. Practice taking and reviewing vital signs
11. Obtain details of the patient’s current complaint
12. Take a focused history and a review of systems for patient presenting with a new
    complaint
13. Present the results of the interview to a PGY II or PGY III resident being
    followed
14. Follow residents during the verification of the details of the complaint and the
    physical examination of the patient
15. Propose laboratory and other studies to the resident and observe the residents’
    decision making regarding the full physical assessment of the patient
16. Patients who are being seen for follow up assessments
17. Follow providers as they examine patient’s, evaluate results of laboratory studies
    in long term care (hours
18. Summarize the findings from laboratory studies for the provider being followed
    and discuss the providers evaluation of the meaning of the laboratory results
19. Discuss the management of the psychotropic medication used by medically ill
    patients seen for continuity care with provider
Documentation requirements

1. Although the RxP will not be documenting in the patient’s chart, the RxP will document each examination during which the RxP observed or participated and will retain a copy of such documentation as well as make a copy available to the supervisor at the end of the practicum to be retained as part of the trainee’s record of supervision.

2. At the end of the Physical Assessment Practicum the RxP will generate and submit to the supervisor a summary of learning objectives generated by the 80 hour training period which describe the RxP’s goals for continuing education regarding the physical assessment of patients presenting for psychological treatment.

During the Medication Management Practicum the RxP does the following, in addition to perform specific tasks from above that are required for safe prescribing:

1. Assess and document the patient’s psychological and psychiatric functioning including developing a differential diagnosis with a plan for clarifying the diagnosis when appropriate.

2. Review the patient’s medical and psychiatric problem list and formulate hypotheses regarding the impact of the patient’s medical status on choices for the treatment of their medical and psychological conditions.

3. Evaluate all potential beneficial and adverse interactions among the patient’s medical and psychotropic medications, assessment procedures and potential treatments.

4. Identify appropriate treatment options including psychopharmacological agents including the most appropriate alternative choices and provide the rationale underlying this medical decision making.

5. Formulate and document a treatment plan that demonstrates consideration of the above and takes into consideration the patient’s history, economic and social status and conditions, cultural factors and the results of the current medical and psychological examinations that takes the current best evidence and recommended treatment protocols into consideration.


7. Prepare treatment plans that include strategies for evaluating the patient response to medication, monitoring for adverse effects of the medication and anticipated adjustments to, changes to, and discontinuation of medication based on the patient response.

8. Demonstrate knowledge of and sensitivity to the ethical and legal issues raised by the provision of psychotropic medication as part of a treatment plan.

In order to provide the reader with a better mental picture of the experience of Physical Assessment Training, the following, which is taken from the SNMFMRP’s Prescribing Psychologist Resident’s Manual (See Appendix D), offers concrete directions to the trainee: The New Mexico State University 80 Hour Practicum is organized into two 5 day parts. During the first part, the RxP Practicum Student will observe the assessment and treatment of a diverse
population of patients by primary care physicians, both residents and faculty. During the second part, the RxP Practicum Student will be assigned to begin the assessment of patient.

Specific Expectations – Part 1 of the Physical Assessment Practicum

1. Arrive at the Family Medicine Center by 7:45 am in order to gain entry
2. Be present at the morning huddle (7:55 am) and the afternoon huddle (12:55 pm) in order to register presence and availability to follow physicians and obtain an assigned physician to follow from the physician preceptor and managing nurse
3. Have needed tools (stethoscope, reflex hammer etc.) as well as form for documenting visits
4. Follow physician as patients are treated
   a. Review the patient’s chart with the physician prior to the examination of the patient when possible
   b. Upon entering the encounter room, introduce yourself to the patient: (“My name is Dr. __________ and I’m a psychologist. I’m learning more about physical health and how people are treated medically so that I can learn to prescribe mental health medications.)
   c. Collaborate with the physician in obtaining informed consent from the patient for the RxP Practicum Student’s observation and participation in the exam: (“Is it alright with you if Dr. Student is here during your exam? Can Dr. Student also look in your ear?)
5. Participate in the physical assessment as coordinated by the physician and as appropriate to the patient’s condition wishes and needs
6. Review laboratory and other studies with the physician as appropriate
7. Discuss the physician’s findings and treatment plan following the examination while being sensitive to the physician’s time constraints
8. Share any observations regarding the patient’s psychological status with the physician while remaining sensitive to the physician’s time constraints
9. Follow the physician if the physician consults with the preceptor in order to observe the physicians summary of the patient’s health status and proposed treatment plan
10. Document the patient encounter
11. Continue to follow the physician in the treatment of the next patient (if appropriate) or seek reassignment to another physician from the nurse or physician as needed
12. Remember hygiene protocol: cleans hands prior to entering the encounter room and upon leaving the encounter room

Specific Expectations – Part 2 of the Physical Assessment Practicum

1. Continue the routines of arrival and departure times as above
2. Request an assignment to a senior resident who will act as a physical assessment teacher
3. Once daily for 5 days (minimum)
   a. Remind physician that you need the experience of doing the initial assessment of a patient in order to be assigned a patient who is presenting
b. Obtain a patient assignment and review any patient records (prior encounters, laboratory tests and other studies, etc.)
c. Follow the MA or Nurse as the patient is being roomed and participate in the taking of vital signs
d. Introduce yourself (as above) and obtain the patient’s informed consent (as above) for your participation in the interview and examination
e. Participate in the completion of screening questionnaires (e.g. PHQ 2, PHQ 9, whatever we call those CMS mandated questions)
f. Obtain detail on the patient’s Current Complaint
g. Obtain and Health History
h. Review the Patient’s Medications and reconcile the medications as appropriate
i. Complete a Review of Systems
j. Report your findings to the physician including your conclusions regarding the systems which need to be examined further, which laboratory tests and other studies might be ordered, and any preliminary hypotheses regarding the patient’s diagnoses
k. Follow the physician as s/he enters the room and examines the patient – participate as described above

Similarly, the following section taken from the SNMFMRP’s Resident’s Manual provides a concrete description of daily activities for trainees in the Medication Management Practicum and then in the Prescribing Psychology Residency:

1. Arrive at the Family Medicine Center by 7:45 am in order to gain entry
2. Review personal schedule of patients
3. Be present at the morning huddle (7:55 am) and the afternoon huddle (12:55 pm) in order to register presence and availability for referrals from providers
4. Review each scheduled patient to examine
   a. New patients – review background information including treatment history, problem list, medication list, laboratory and other studies and the reason the patient has been referred
   b. Established patients – review any new information regarding patient progress/problems occurring since previous session.
5. Review laboratory and other studies with a physician as appropriate
6. Meet with patient as scheduled
   a. New patients -
      i. Examine the patient’s age to determine whether the patient or a parent or guardian must provide informed consent for treatment by you.
      ii. Upon entering the encounter room, introduce yourself to the patient: (“My name is Dr. ________ and I’m a psychologist who is learning to treat patients with medication as well as other psychological treatments. I am working with your medical doctor to help you. Do you have any questions about that?”) After you
have responded to the patient’s questions, obtain informed consent of the patient (or from the appropriate individual) for treatment. (“Are you willing to work with me?”)

b. Returning patients – assess the patient for any new acute CC.

c. Obtain and document the history of the CC.

d. Reconcile the patient’s medications – include OTC’s and other substances – check for potential interactions and ADE’s (e.g. sedation, agitation, dizziness)

e. Complete a Review of Systems

f. Complete a current examination of the patient including an evaluation of the patient’s mental and neurological status as appropriate

g. Establish a working differential diagnosis or confirm diagnosis(es)

h. Formulate a treatment plan

i. Report your findings to a collaborating physician including a plan for a further examination (e.g. lab orders, EKG, other studies)

j. Once agreement about the treatment plan has been obtained, request that the physician place orders for additional studies and medications as indicated by the follow up plan

k. Document the agreement of the collaborating physician with the treatment plan

l. Provide education to the patient regarding the potential risks and benefits of alternatives in the treatment plan.

m. Obtain consent from the patient for the proposed treatment plan

n. Establish a plan for follow-up with the patient with an assessment of the impact of the treatment on the patient occurring no more than two weeks after the plan has been initiated

o. Provide the patient with all contact information and specific instructions regarding how and when to obtain assistance with adherence to the plan or management of acute changes in health status (e.g. onset of side-effects/adverse effects, increase in suicidal ideation)

p. Document the encounter, completing the documentation on the same day that the encounter takes place

q. Forward the encounter note to the prescribing psychologist mentor for an endorsement who will then forward the note, once it is complete, to the collaborating physician for signature

A. Populations (target groups, other specifications)

Each of the four APA-Designated programs ensures that all students are trained to address issues of diversity in populations with specific emphasis on children, older adults, minority populations, and those that live in rural areas across their coursework. The focus on these populations is monitored by the Designation Committee of the APA to ensure compliance. In addition, the programs infuse knowledge about these differences in pharmacoepidemiology, as well as genetic differences and demonstration of the application of this information throughout the program.
Research has been clear that different ethnic groups may exhibit different metabolic processes within pharmacokinetics and pharmacodynamics; therefore, it is imperative that the coursework on medications address these possible differences.

B. Problems (psychological, biological, and/or social (including symptoms, problem behaviors, prevention, etc.)):

Each of the 4 training programs specifically address all areas of psychological diagnosis and assessment and problems that the patient population may present with to a prescribing psychologist. The coursework focuses on each of the areas that a psychologist and prescribing psychologist would address, including but not limited to: depression, anxiety, other mood disorders, psychotic disorders, substance use disorders, neurodevelopmental disorders (i.e., ADHD, specific learning disorder), and sleeping disorders. The training across all four programs considers all possible disorders which can be seen; however, it is important to note that most state and federal laws that permit prescriptive authority for psychologists include the ability of psychologists to treat most mental disorders defined in DSM-5 but there may be some limitations. The training will focus on APA standards and not limit training due to legislative limitations. The reason is that many of the programs train students across the county and to limit to specific state legislative standards would not meet criteria in other states. This way, the trained psychologists may be over-trained in some areas and may not use the training in their state but other psychologists would have a broader training which meets standards in other states. For example, currently in Illinois per statute, prescribing psychologists will not be working with the pediatric population but all graduates of an MSCP program would be trained in this domain. Each of the 4 APA-Designated training programs includes coursework that addresses psychological, biological, and/or social problems related to a patient’s functioning that the patient population may present with to a prescribing psychologist. Coursework at the doctoral level would include an introduction to the field through discussion of available medications, as well as their effects and potential side effects. Continued coursework at the postdoctoral level would include advanced and more nuanced information in these areas. Content to address that covers the core areas of APA designation criteria would include, but not be limited to: depression, anxiety, other mood disorders, psychotic disorders, substance use disorders, neurodevelopmental disorders (e.g., ADHD, specific learning disorder, Autism Spectrum Disorder), and sleep/wake disorders to enable the psychologist to work in a consultative role for the patient. Completion of this coursework, in addition to clinical assessment training and practicum (fellowship?) hours is needed to become a fully licensed prescribing psychologist. Clinical assessment and practicum will be completed when certain milestones are reached and meet APA program designation standards. Each state may also have additional requirements in the practical areas of training and supervision, such as the number of hours required and/or the specific medical specialties (e.g., psychiatry, family medicine, geriatrics, etc.) through which the prescribing psychology practicum student must rotate and gain experience. As discussed above,
prescribing psychologists are trained in the biological, social, and psychological functioning of patients and, as a result, are able to assess and treat patients in all areas of psychological diagnosis.

C. Procedures and techniques (for assessment, diagnosis, intervention, prevention, etc.):

The advanced preparation for this specialty has both didactic and experiential components of this Major Area of Study in Clinical Psychopharmacology.

a. Assessment and diagnosis
   a. Psychological interventions to assess and diagnose
      i. Using psychological assessment to pinpoint proper medication selection
      ii. Laboratory and medical testing and monitoring
      iii. Physical assessment
      iv. Medical terminology and documentation

b. Intervention
   a. Psychopharmacology intervention competencies
   b. Integration of psychological interventions with psychopharmacological interventions

Please see section above for additional information on the areas in which the graduates of an MSCP program are trained.
References


Criterion VII. Structures and Models of Education and Training in the Specialty. The specialty has structures and models to implement the education and training sequence of the specialty. The structures are stable, sufficient in number, and geographically distributed. Specialty education and training may occur at the doctoral, postdoctoral, or both.

Commentary:

A) Sequence of Training. A petition describes a typical sequence of training, including curriculum, research, and supervision.

B) History and Geographic Distribution. A specialty has at least four identifiable psychology programs providing education and training in the specialty in more than one region of the country that are geographically distributed and which have produced an identifiable body of graduates over a period of years.

C) Psychology Faculty. Specialty programs have an identifiable psychology faculty responsible for the education and training of students and their socialization into the specialty. The faculty has expertise relevant to the education and training offered. Faculty may include individuals from other disciplines as appropriate. Specialty programs also have a designated psychologist who is clearly responsible for the integrity and quality of the program and who has administrative authority commensurate with those responsibilities. This psychologist has credentials of excellence (e.g., the diplomate from one of the specialty boards affiliated with the American Board of Professional Psychology, or status as a fellow of the American Psychological Association or the Canadian Psychological Association, or other evidence of equivalent professional recognition) and a record of scholarly productivity as well as other clear evidence of professional competence and leadership.

D) Procedures for Evaluation. Specialty programs regularly monitor the progress of trainees to ensure the relevance and adequacy of the curriculum and integration of the various training components. Attention focuses on the continuing development of the trainee's knowledge, skills, attitudes, and values. Formal performance-based feedback is provided to trainees in the program.

E) Admission to the Program. Program descriptions specify the nature and content of the program and whether they are designed to satisfy current licensing and certification requirements for psychologists as well as whether or not graduates can satisfy the education and training requirements for advanced recognition in the specialty. Postdoctoral programs have procedures that take into account the trainees' prior academic and professional record. These programs design an education and training experience that builds upon the doctoral program and internship and the professional experiences of the postdoctoral residents as they prepare for meeting the guidelines of preparation for the specialty.

1. How are education and training programs in the specialty recognized? How many programs exist in the specialty?

The APA has established a “designation program” to recognize programs specifically with Major
Areas of Study in Clinical Psychopharmacology with specific policies and procedures that are used to evaluate these programs (http://www.apa.org/education/grad/rxp-policies-procedures.pdf). Further, APA has published the model curriculum for the Specialty “Recommended Postdoctoral Education and Training Program in Psychopharmacology for Prescriptive Authority (http://www.apa.org/about/policy/rxp-model-curriculum.pdf).

There are currently four APA-designated programs that award the postdoctoral master of science in clinical psychopharmacology degree (MSCP). They follow the APA Designation Model for the postdoctoral training in clinical psychopharmacology. There is a fifth postdoctoral program that began in January 2018 and at least one additional postdoctoral program being created, all based on the APA Designation Model.

Each of these designated training programs is geared specifically to train licensed psychologists to prescribe psychotropic drugs, which originally became possible by the Department of Defense Psychopharmacology Demonstration Project (PDP). The APA then stepped in and created training programs guidelines, which have become the standard of practice. It is important to recognize that the experts in clinical psychopharmacology have worked together to ensure that the MSCP students (important that at this time they are all licensed psychologists in these programs) are receiving the best training possible to ensure specialty knowledge.

2. Describe the qualifications necessary for faculty who teach in these programs. Describe the qualifications required for the director of such programs.

Faculty must be experts in their courses; for example, in the Fairleigh Dickinson University program, the Clinical Pharmacology course is taught by a pharmacist to provide the students with the most specific training material. In addition, the 4 courses on psychopharmacologic treatment of different disorders are taught by a prescribing psychologist. Similarly, Alliant International University has pharmacologists, prescribing psychologists, psychiatrists, and other medical professionals teach courses in their area of expertise. The University of Hawai‘i MSCP program utilizes faculty from the Nursing and Pharmacy programs to teach content specific to their areas of expertise such as the Advanced Psychopharmacology and Integrated Pharmacotherapy course series. This is consistent across the four programs, where the faculty are specialty-trained in the courses they teach. Directors are all doctors of psychology and the trend is that they have completed MSCP training; some states (such as New Mexico) require the Director, who is signing off on the student/alumni licensure applications, to be MSCP-trained.

1. If programs are doctoral level, what are the requirements for admission? Provide sample evaluation forms.

Currently, education and training for the Specialty of Clinical Psychopharmacology is postdoctoral. Each of the APA-designated programs requires that their students be licensed psychologists and therefore are all postdoctoral.

2. If programs are postdoctoral, what are the requirements for admission? Provide sample evaluation forms.

Each program requires that their students hold a license to practice psychology in order to
complete the program as set out by the APA Designation Model. Examples of admissions forms are provided (See Appendix B). As one example to illustrate admission requirements for all programs, the admissions requirements for the CSPP at Alliant MSCP program are located at: https://www.alliant.edu/cspp/programs-degrees/psychopharmacology/admissions-tuition/:

- Written proof from the State or Provincial Board of Examiners that the applicant holds a current, valid license in good standing as a doctoral level psychologist. (Applicants who are preparing for a state licensing exam should contact the Program Director at psychopharm@alliant.edu, who must individually review and approve each case.)
- Curriculum vitae or resume that summarizes professional activities.

5. Include or attach education and training guidelines, for this specialty as appropriate for doctoral training, postdoctoral training, or both. (In this context, education and training guidelines may be found in documents or websites including, but not limited to, those bearing such a title or as described in a variety of published textbooks, chapters, and/or articles focused on such contents.)

The Specialty of Clinical Psychopharmacology has a rich history of developing, on a national basis, a model curriculum for prescribing psychologists as detailed by McGrath (2010). McGrath details this evolution since 1989 when APA’s Board of Professional Affairs first endorsed advanced, specialized training in psychopharmacology for psychologists.


6. Provide sample curriculum expected of model programs.

The following sample curriculum at Fairleigh Dickinson University directly reflects that described by McGrath (2010) and APA model curriculum for the Specialty listed immediately above (and elsewhere in this petition). This curriculum is typical of all APA-designated programs in the Specialty.

See Criterion V grids for all of the curricula in Appendix B.

Here is the sample curriculum for Fairleigh Dickinson University’s MSCP program:

**Fairleigh Dickinson University**
**MSCP Curriculum**

**The Didactic Sequence**

The didactic sequence consists of 10 courses delivered in five 15-week semesters over two years. Courses run consecutively rather than concurrently, so within a semester each course is completed in 7.5 weeks, with two 7.5-week courses per semester. Each course is approved for 45 continuing professional education credits for psychologists, and 3 graduate academic credits. The
School of Psychology is approved by the American Psychological Association (APA) to offer continuing education for psychologists. Fairleigh Dickinson University School of Psychology maintains responsibility for the program.

The courses were specifically designed for psychologists seeking to expand their knowledge of psychopharmacology. A sequence of core courses provides the basic science foundation and knowledge base in pathophysiology, neuroscience, and pharmacology for clinical applications. A professional issues course addresses the legal and ethical considerations and related standard of care topics. The didactic program concludes with a series of treatment courses addressing specific categories of mental disorders and the related pharmacological issues. These courses provide psychologists with important knowledge of the treatment of mental disorders with medication. A detailed description of each course is provided in the next section, Curriculum Plan.

During your last semester of the program, you should submit a Declaration to Graduate Form, which informs the University you anticipate completion of the program in the near future. This initiates a records review so that once you have completed all remaining program requirements you can be cleared to graduate. A link to the Declaration to Graduate Form is available through the Program Documents page on our website, www.rxpsychology.com/Documents/Program_Documents.htm

CURRICULUM PLAN

Courses 1 and 2 (PSYC7910/7915): Biological Foundations of Clinical Psychopharmacology I and II (7.5 Weeks Each)

These courses present an integrated approach to the study of primary body systems (respiratory, cardiovascular, renal, hematologic/immunologic, gastrointestinal, hepatic, endocrine, reproductive, musculoskeletal, and dermatologic) that correlates fundamental knowledge of the anatomy, physiology and pathophysiology of a specific body system with the clinical applications (health assessment, physical examination, laboratory assessment, and differential diagnosis) pertaining to that system. Exploration of clinical medicine concepts will utilize a problem-solving approach. The goals of these two courses are to enhance the student’s recognition of signs and symptoms of medical conditions requiring collaboration with and referral to other health professionals and to provide knowledge about the psychological, biological and medical correlates of disease. Medical sequelae of psychotropic agents and familiarity with standard medical treatment of common disease states are addressed. Each course is approved for 45 CE Credits for Psychologists and 3 graduate academic credits.

Course 3 (PSYC7920): Neuroscience (7.5 Weeks)

This course focuses on the anatomy and physiology of the nervous system, beginning at the cellular level. Knowledge of principles of neurochemistry, neuroendocrinology and neuropathology will serve as a foundation for the understanding of neurotransmitter systems and
their role in the etiology and treatment of mental disorders. This course is approved for 45 CE Credits for Psychologists and 3 graduate academic credits.

Course 4 (PSYC7925): Neuropharmacology (7.5 weeks)

This course introduces the knowledge base pertaining to pharmacology and psychopharmacology. It includes continued study of neurotransmitter systems and other factors in the psychopharmacological treatment of mental disorders, as well as an introduction to classes of psychotropic medications. This course is approved for 45 CE Credits for Psychologists and 3 graduate academic credits.

Course 5 (PSYC7930): Clinical Pharmacology (7.5 weeks)

This course presents major classes of drugs (excluding psychotropics) and their uses in clinical settings. It includes an examination of the social, cultural and behavioral aspects of prescribing medications. Issues of epidemiology, the drug approval process, and pharmacogenomics are also addressed. This course is approved for 45 CE Credits for Psychologists and 3 graduate academic credits.

Course 6 (PSYC7935): Professional Issues and Practice Management (7.5 weeks)

This course reviews issues in prescribing from the perspective of a professional healthcare provider. Legal and ethical issues, as well as standards of care ranging from informed consent to documentation, are addressed. Interprofessional relationships and aspects of collaborative practice, as well as practice enhancement strategies such as computer-based aids, will provide learners with a solid foundation for the continued integration of psychopharmacology into their practices. An introduction to the critical evaluation of pharmacological research is also provided. This course is approved for 45 CE Credits for Psychologists and 3 graduate academic credits.

Courses 7-10: Treatment Issues in Clinical Psychopharmacology (7.5 weeks each)

This treatment-focused series of sessions provides students with access to virtual practicum experiences through didactic information and case studies addressing specific categories of mental disorders. Each case addresses the following: diagnosis/differential diagnosis; etiology/biological basis of disorder; psychopharmacological treatment options, including mechanism of action, side effects, adverse reactions, polypharmacy, drug interaction, and patient education. The integration of treatment strategies as well as the empirical basis for treatments is presented. Disorders covered will include the mood disorders, psychotic disorders, anxiety disorders, cognitive disorders, substance abuse and chemical dependency, chronic pain, disorders
of childhood/adolescence, as well as others. Each course is approved for 45 CE Credits for Psychologists and 3 graduate academic credits.

Course 7 (PSYC7940): Affective Disorders
Course 8 (PSYC7945): Psychotic Disorders
Course 9 (PSYC7950): Anxiety Disorders
Course 10 (PSYC7955): Other Disorders

OVERVIEW OF THE PROGRAM

The Postdoctoral M.S. Program in Clinical Psychopharmacology is designed to provide psychologists and other health care professionals the knowledge required to prepare them for the clinical application of psychopharmacology as it relates to collaborative practice and the potential prescription of psychotropic medications. This program provides the educational foundation and elective clinical experiences as outlined in the American Psychological Association’s model curriculum for postdoctoral training psychologists in psychopharmacology, available at www.apa.org/about/policy/rxp-model-curriculum.pdf

The FDU program has been Designated by the APA as consistent with that model curriculum, one of only three programs in the country that has achieved this distinction.

The program consists of up to five components. The first two are mandatory, the final three are optional. They are:

1. The 10-course didactic sequence (required for the master’s degree)
2. The qualifying examination (required for the master’s degree)
3. The clinical laboratory/PEP prep (optional; completed near the end of the didactic program)
4. The clinical practicum (optional; begun near the end of the didactic program)
5. The capstone experience (optional; occurs at the end of the clinical practicum)

The Qualifying Examination

After completing the didactic sequence, students must complete a qualifying examination before they are eligible to graduate. There are two options for this exit requirement. Twice each year we offer a qualifying examination online. This exam consists of 100 questions and you must complete it within 2.5 hours. Second, you can complete the APA Psychopharmacology Examination for Psychologists (PEP). The PEP has a cost associated with it, but passage of the PEP is expected to represent a requirement for licensure as a prescribing psychologist in most states. The PEP is offered by the APA College of Professional Psychology. You can find more information about the PEP at www.apapracticecentral.org/ce/courses/application.aspx

There is also a link to this page from the Program Documents page on our website, www.rxpsychology.com/Documents/Program_Documents.htm

The Program Documents page also has more information about the qualifying exam.
Once the qualifying exam is passed, either our online exam or the PEP, you have completed all requirements for the degree Postdoctoral Master of Science (M.S.) in Clinical Psychopharmacology. At this point, you are eligible to participate in the optional components of the program (though the clinical laboratory/PEP prep and practicum can overlap with your final semester in the program).

**The Clinical Laboratory/PEP Prep**

This is the only component of the program that involves a face-to-face meeting. It is scheduled for a location that is fair for the class as a whole. Each year, we schedule a five-day clinical laboratory, followed by a two-day PEP prep session (which is also appropriate to the in-house qualifying exam). The clinical laboratory is a necessary part of the practicum, discussed next. Each year, you will receive an announcement of the clinical laboratory, but it is only expected that students in the final year of the program will participate, and it is only required for students who want to complete the optional practicum. More details about the clinical laboratory may be found in our Supervised Clinical Experience manual, which can be accessed at the Program Documents page on our website, www.rxpsychology.com/Documents/Program_Documents.htm

**The Practicum**

The APA model curriculum, the military, and most bills that have been submitted at the state level authorizing psychologists to prescribe all call for the completion of a supervised clinical experience as part of the training. Students seeking prescriptive authority in Louisiana do not have this requirement.

The supervised clinical experience includes supervised evaluation of cases for medication. If you want us to monitor your involvement in this supervised experience, you will enroll in the course PSYC7960 Practicum. Because our role in this course is just monitoring of progress, it is a pass/fail course worth 0 credits, and you pay a fee (approximately $500) rather than tuition. Participants must identify and make arrangements for a clinical supervisor with independent prescriptive authority (M.D., D.O., or prescribing psychologist) to be approved by Fairleigh Dickinson University. In some cases we can assist in the identifying a supervisor, but we cannot guarantee a supervisor.

As defined by the APA model curriculum, the practicum must include at least 100 supervised patients and span at least two semesters. If an authorizing entity such as a state legislature has established its own conditions for the practicum, those conditions will supersede the APA guidelines. Even after the 100-patient criterion is met, participants may elect to continue participating in the practicum. More details about the practicum are available in our Supervised Clinical Experience manual, which can be accessed at the Program Documents page on our website, www.rxpsychology.com/Documents/Program_Documents.htm

**The Capstone Experience**
The APA model curriculum calls for a capstone experience at the end of the supervised clinical experience. We cannot provide a certificate of completion of the APA model curriculum without completion of the capstone experience, but we can confirm completion of the practicum for legal reasons (e.g., pursuit of licensure as a prescriber) without the capstone.

The capstone is a two-hour oral examination covering case formulation, treatment planning, and other elements of the supervised clinical experience. More details may be found in our Supervised Clinical Experience manual, which can be accessed at the Program Documents page on our website, www.rxpsychology.com/Documents/Program_Documents.htm

7. Select four exemplary doctoral and/or postdoctoral level geographically distributed, and publicly identified programs in psychology in this specialty and provide the requested contact information. If no example programs that are APA accredited are available, please complete the appropriate Attachment (A or B) for the level of the program. If the specialty education and training occurs at both the doctoral and postdoctoral level, provide examples of both and not from the same institution.

Programs that prepare psychologists for prescriptive authority must be “Designated by APA” (see http://www.apa.org/education/grad/designation.aspx) rather than accredited.

Four postdoctoral programs with a Major Area of Study in Clinical Psychopharmacology that offer the master’s degree in clinical psychopharmacology are:

**Program One**

Name of University, School, or Institution offering program: Alliant International University

Name of Program: Postdoctoral masters in clinical psychopharmacology

Address: 10065 Old Grove Rd. Suite 103

City/State/Zip: San Diego, CA 92131

Contact Person: Judi Steinman, PhD, Director

Telephone No: (808) 987-8752

E-mail address: jsteinman@alliant.edu

Website: https://www.alliant.edu/cspp/admissions/apply/rxp-app-req/

APA Accreditation (Designation): Yes

**Program Two:** Postdoctoral
Name of University, School, or Institution offering program: Fairleigh Dickinson University

Name of Program: Postdoctoral master’s in clinical psychopharmacology

Address: 1000 River Road

City/State/Zip: Teaneck, NJ 07666

Contact Person: Anne Farrar-Anton, Ph.D., MSCP

Telephone No. 201-315-7652

E-mail address: Farraran@fdu.edu

Website: http://view2.fdu.edu/academics/university-college/school-of-psychology/masters-level-programs/ms-in-clinical-psychopharmacology/

APA Accreditation (Designation): Yes

Program Three: Postdoctoral

Name of University, School, or Institution offering program: University of Hawai‘i Hilo

Name of Program: Postdoctoral master’s in clinical psychopharmacology

Address: Daniel K. Inouye College of Pharmacy, 34 Rainbow Drive Annex

City/State/Zip: Hilo, HI 96720

Contact Person: Chad Kawakami, PharmD

Telephone No. 808-371-2423

E-mail address: chadkkaw@hawaii.edu

Website: http://pharmacy.uhh.hawaii.edu/academics/MSCP/
Program Four: Postdoctoral

Name of University, School, or Institution offering program: New Mexico State University

Name of Program: Postdoctoral master’s in clinical psychopharmacology

Address: MSC 3CEP, P.O. Box 30001

City/State/Zip: Las Cruces, New Mexico 88003-8001

Contact Person: Casey McDougall

Telephone No. 575-646-5739

E-mail address: clm-rxp@nmsu.edu

Website: https://cep.nmsu.edu/academic-programs/clinical-psychopharmacology/

APA Accreditation (Designation): Yes
Criterion VIII. Continuing Professional Development and Continuing Education. A specialty provides its practitioners a broad range of regularly scheduled opportunities for continuing professional development in the specialty practice and assesses the acquisition of knowledge and skills.

Commentary: With rapidly developing knowledge and professional applications in psychology, it is increasingly difficult for professionals to deliver high quality services unless they update themselves regularly throughout their professional lives through continuing education mechanisms. A variety of mechanisms may be used to achieve these goals.

1. **Describe the opportunities for continuing professional development and education in the specialty practice. Provide detailed examples, such as CE offerings that are available.**

Specialty training in clinical psychopharmacology occurs during the sequence of courses that are required in the postdoctoral master’s degree in clinical psychopharmacology. In Criterion V this sequence of courses was presented in detail. The course work and sequence of training in the specialty training for clinical psychopharmacology follows the “Recommended Postdoctoral Education and Training Program in Psychopharmacology for Prescriptive Authority,” approved by the APA Council of Representatives in 2009 ([https://www.apa.org/about/policy/rxp-model-curriculum.pdf](https://www.apa.org/about/policy/rxp-model-curriculum.pdf)). Training programs in clinical psychopharmacology also have the benefit of the ability receive APA Designation to ensure the quality of their educational content and course sequencing. Established programs that have received APA Designation are Fairleigh Dickinson University ([http://view2.fdu.edu/academics/university-college/school-of-psychology/masters-level-programs/ms-in-clinical-psychopharmacology](http://view2.fdu.edu/academics/university-college/school-of-psychology/masters-level-programs/ms-in-clinical-psychopharmacology)), New Mexico State University ([https://cep.nmsu.edu/academic-programs/clinical-psychopharmacology](https://cep.nmsu.edu/academic-programs/clinical-psychopharmacology)), California School of Professional Psychology at Alliant International University ([https://www.alliant.edu/cspp/programs-degrees/psychopharmacology/](https://www.alliant.edu/cspp/programs-degrees/psychopharmacology/)) and University of Hawaii, ([https://hilo.hawaii.edu/uhh/accreditation/DstLrngMSCP.php](https://hilo.hawaii.edu/uhh/accreditation/DstLrngMSCP.php)). A list of these programs can be found at [http://www.apadivisions.org/division-55/resources/training.aspx](http://www.apadivisions.org/division-55/resources/training.aspx). Programs in development indicated that they either have or plan to apply for APA Designation, as detailed in Criterion V.

Clinical psychopharmacology, as a specialty, has developed in a milieu of changing delivery models for educational experiences. Postdoctoral training in clinical psychopharmacology has embraced multiple models of educational delivery. APA-designated postdoctoral clinical psychopharmacology programs at Fairleigh Dickinson University ([http://view2.fdu.edu/academics/university-college/school-of-psychology/masters-level-programs/ms-in-clinical-psychopharmacology](http://view2.fdu.edu/academics/university-college/school-of-psychology/masters-level-programs/ms-in-clinical-psychopharmacology)), and California School of Professional Psychology at Alliant International University ([https://www.alliant.edu/cspp/programs-degrees/psychopharmacology/](https://www.alliant.edu/cspp/programs-degrees/psychopharmacology/)) demonstrate the efficacy and acceptance of this high-bred model offering training via on-site, web-based, and other distance learning models.

Specialists in clinical psychopharmacology can receive continuing education (CE) training in many different formats and across a broad range of psychopharmacological topics. Building on the models cited above, clinical psychopharmacology CE is offered in the traditional conference-
or lecture-based face-to-face delivery, web-based training, self-directed study, and interdisciplinary training programs with other prescribing professionals. This multimodal model of CE presentation in clinical psychopharmacology is not limited to national or regional conferences and has allowed clinical psychopharmacologists and those interested in the specialty to access additional training and enhance their expertise after completing their postdoctoral master’s degree in clinical psychopharmacology.

**Conferences**

APA’s annual convention has provided a venue for CE programs in clinical psychopharmacology. Formal symposia, paper sessions, and poster sessions allow practitioners the ability to learn about clinical psychopharmacology, as well as about the cutting-edge treatment interventions, applications, and pharmacological research shaping the field of pharmacology. CE and other programming from the 2018 APA convention are included in Appendix XXXXX. The American Society for the Advancement of Pharmacotherapy (ASAP)/APA Division 55 also sponsors a yearly conference focused on psychopharmacology. Programs for the 2017 and 2018 conference are included in Appendix VIII. State and regional conferences co-sponsored by ASAP on clinical psychopharmacology also present CEs on clinical psychopharmacology. Related issues are also listed in Appendix VIII; these include CE offerings by the New Mexico Psychological Association and the Louisiana Association of Medical Psychologists (LAMP). Other annual conferences supported by ASAP/Division 55 are cited in Appendix VIII. They include annual conferences by the Neuroscience Education Institute and Harvard Medical School/Beth Israel Deaconess Medical Center. ASAP’s website also has a web page (https://www.apa.org/about/division/div55.aspx) that announces current and future CE opportunities.

Clinical psychopharmacology is a rapidly growing specialty and pharmacologically-trained psychologists play a significant role in other discipline-specific and population-specific meetings and conventions. These programs represent the specialty’s multidisciplinary focus and involvement with underserved populations.

**Web-Based Instruction**

Web-based instruction in clinical psychopharmacology is provided by ASAP-sponsored providers, as well as other APA-approved CE providers (see Appendix VIII). The American Society for the Advancement of Pharmacotherapy (ASAP)/Division 55 also offers a free web-based CE that serves as an introduction to clinical psychopharmacology (https://www.apa.org/about/division/div55.aspx), ASAP/ Division 55 is an APA-approved CE sponsor.

The ASAP/Division 55 Committee on Continuing Education also lists a selection of currently available APA-approved, web-based CE opportunities in clinical psychopharmacology (https://www.apa.org/about/division/div55.aspx).

**Self-Directed Study**
Books, journals, and newsletters offer additional sources for learning in clinical psychopharmacology and CE opportunities. Book, article, and video-based CE opportunities in clinical psychopharmacology and related topics are available from APA’s Continuing Education web page (www.apa.org/Education/ce). Additional self-directed study is available through other ASAP/APA approved CE providers (See Appendix VIII).

Other Continuing Education Opportunities

Due to the integration of psychology, clinical psychopharmacology, and pharmacology inherent in the specialty of clinical psychopharmacology, many clinical psychopharmacologists attend CE programs presented in related fields. Beyond extending their understanding of psychopharmacology, their participation encourages additional CE providers to seek APA CE approval in the future.

2. **Describe the formal requirements, if any, for continuing professional development and education to maintain competence in the specialty.**

The American Psychological Association (APA) Recommended Postdoctoral Education and Training Program in Psychopharmacology for Prescriptive Authority, approved by APA Council of Representatives in 2009 (https://www.apa.org/about/policy/rxp-model-curriculum.pdf), notes that “Postdoctoral training programs in psychopharmacology for prescriptive authority are rigorous and comprehensive in didactic content, clinical experiences, and the integration of psychological and pharmacological principles. Programs developed under these standards place a special emphasis on preparing psychologists to evaluate future advances in psychopharmacological knowledge and on the critical importance of lifelong learning in psychopharmacological practice.” (APA, 2009). This culture and the rapid developments in clinical psychopharmacology make it incumbent upon the practicing clinical psychopharmacologist to pursue ongoing continuing education (CE). Options for CE are cited above and occur by face-to-face training in conferences, meetings, and other lecture-based CE presentations, web-based CE credits, self-directed CE, and other APA-approved CE courses in psychopharmacology or related topics. The number of required CE credits mandated for maintenance of prescribing privileges depends on the jurisdiction in which the clinical psychopharmacologically-trained prescribing psychologist is practicing. With the establishment of a board certification in clinical psychopharmacology, requirements for lifelong continuing education can be formalized.

Each state that has passed legislation to allow clinical psychopharmacologists to prescribe has included in their enabling legislation continuing education as a requirement. New Mexico requires 60 hours of CE credits every two years, with 40 in psychopharmacology, (http://dhhs.ne.gov/publichealth/licensure/documents/NewMexicoRequirementsForPrescCerts.pdf). Louisiana requires 40 hours every two years to maintain a license as a psychologist (https://www.continuingeducation.com/psychology/state-ce-requirements/louisiana) and since medical psychologists (those who can prescribe medication) are licensed by the State Medical Board, they are also required to take an additional 20 credits in psychopharmacology yearly (http://www.lsbsme.la.gov/content/medical-psychology-practice-act). Illinois requires 24 continuing education credits for their biannual license renewal as a clinical psychologist and an
additional 10 continuing credits in pharmacology for prescribing psychologists (http://www.ilga.gov/legislation/iles/iIcs3.asp?ActID=1294&ChapterID=24). Iowa requires 40 continuing education hours every 2 years to renew a license as a psychologist (https://www.legis.iowa.gov/docs/ACO/chapter/645.241.pdf) and an additional 20 hours in psychopharmacology yearly for psychologists with prescriptive authority (Lonning, personal communication, 2018). Idaho requires 20 hours of continuing education every two years to maintain a license as a psychologist (https://ibol.idaho.gov/IBOL/BoardAdditional.aspx?Bureau=PSY&BureauLinkID=110); an additional 20 hours of continuing education credits is proposed for those psychologists who prescribe (Farber, personal communication, 2018).

ASAP has begun initial discussions with the American Board of Professional Psychology (ABPP) to establish board certification for clinical psychopharmacology. While only in initial stages, this would establish a peer review examination methodology to assure quality within the specialty. At the current time, ASAP and specialty leadership believe that initially 157 individuals would qualify to sit for the initial board certification exam in clinical psychopharmacology, contingent upon ABPP eligibility requirements.

3. **Describe the minimum expectations, if any, for continuing professional development and education to maintain competence in the specialty.**

While all licensed practitioners are responsible for maintaining competency in a manner consistent with the ethical conduct of practice in clinical psychopharmacology, minimum hours of continuing professional development and educational requirements are clearly specified in the respective state statutes in New Mexico, Louisiana, Illinois, Iowa, and Idaho.

Science-based, core knowledge, as well as clinical application and practice skills are to be maintained through the continuing education process across the lifespan of a clinical pharmacist’s career. The maintenance of clinical competence and professional development is an ethical standard incumbent upon all practicing psychologists, as well as practicing clinical pharmacists. As can be seen by review of state CE requirements for prescribing psychologists presented above, those committed to maintaining their competence in the specialty commit to a higher level of continuing education than that required for the maintenance of a license to practice psychology. The regulatory authority within each of the respective states - New Mexico, Louisiana, Illinois, Iowa, and Idaho - routinely verify the CE credits that are claimed by individual prescribing/medical psychologists through periodic licensee audits.

The recognition of clinical psychopharmacology as a specialty and the establishment of a board certification through ABPP will serve to establish standardized minimum expectations for continued professional development. Based upon requirements of other health service psychologists, is it expected that board-certified clinical psychopharmacologists will be required to participate in ongoing continuing professional development activities within the following categories: collaborative consultation (case consultations, supervision, research), teaching and training (participation in teaching, providing supervision, participation in thesis and dissertation committees), continuing education, research, and seeking leadership positions in professional associations.
References

Farber, S. Personal communication, December 10, 2018.

Lonning, B. Personal communication, December 10, 2018.

Criterion IX. Effectiveness. Petitions demonstrate the effectiveness of the services provided by its specialist practitioners with research evidence that is consistent with the APA 2005 Policy on Evidence-based Practice.

Commentary: A body of evidence is be presented that demonstrates the effectiveness of the specialty in serving specific populations, addressing certain types of psychological, biological and social behaviors, or in the types of settings where the specialty is practiced.

PLEASE NOTE: If the same article illustrates more than one of these items, it may be referenced under each applicable category. Evidence should include the most current available published references in each area (e.g., books, chapters, articles in refereed journals, etc.) While reliance on some on classic references is acceptable, the majority of references provided should be from last five years.

1. Provide at least five psychological manuscripts published in refereed journals (or equivalent) that demonstrate the efficacy of the specialty's services for dealing with the types of clients or populations (including groups with a diverse range of characteristics and human endeavors) usually served by this specialty. Summarize and discuss the relevance of the findings of the studies, specify populations, interventions, and outcomes in relation to the specialty practice.

Prescribing psychologists, the specialists within the specialty of Clinical Psychopharmacology have a robust, successful history of utilizing psychopharmacological agents with their patients for well over 20 years. The Specialty subscribes to the tenants of APA’s policy on evidence based practice (APA, 2006) with the expectation that education, training, and practice of clinical psychopharmacology be based on the policy and focus on research, clinical expertise, and patient characteristics as the foundation of evidence based practice. The literature on the effectiveness of the services provided by the Clinical Psychopharmacology specialist can be divided into three areas – the effectiveness of the actual psychopharmacology therapeutic agents prescribed by the specialist, the effectiveness of the combination of psychopharmacology and psychotherapy, and the actual effectiveness of the practice of those individuals who are clinical psychopharmacology specialists. We will begin with the effectiveness of the practice of clinical psychopharmacology.

**Effectiveness of Psychopharmacological Agents**

Clinical Practice Guidelines (CPG), dosing regimens, and indications for psychotropic medication are the same for all prescribers regardless of discipline. Those prescribing psychologists who would be considered as specialists in Clinical Psychopharmacology have a long history of using essentially the same formulary as all healthcare providers who prescribe psychopharmaceutical agents. In this section, we will describe studies that look at various populations and the psychopharmacological interventions. Later, we will describe effectiveness of psychopharmacological interventions with specific diagnoses and the combination of techniques of psychotherapy and psychopharmacology.

**Increasing Rates of Alcohol Abstinence in Men and Women with Alcohol Dependence**

*Mason and colleagues (2014)* conducted a 12-week, double-blind, placebo controlled, randomized dose-ranging trial comparing gabapentin (900 mg/day or 1800 mg/day) with placebo. The participants were 150 men and women 18 years and older with a diagnosis of alcohol dependence. The research was conducted at a single clinical facility. The authors sought to compare rates of complete abstinence and no heavy drinking as well as secondary outcomes of changes in mood, sleep, and cravings. When compared to placebo, gabapentin demonstrated
improved alcohol abstinence (4.1% placebo arm, 11.1% gabapentin 900 mg arm, 17% gabapentin 1800 mg arm, p=0.04), and improved the rate of no heavy drinking (22.5%, 29.6%, 44.7% respectively, p=0.02). Results for mood, sleep, and cravings were similar to those rates found for abstinence and no heavy drinking. Overall, the tolerability and safety of the drug was positive. The authors concluded that these results suggest that gabapentin could be considered for alcohol relief craving, alcohol relapse prevention, alcohol dependence, and may be particularly useful for patients with comorbid anxiety.

Reducing Rates of Suicide in Patients with Mood Disorders
Smith and Cipriani (2017) conducted a meta-review of the literature on the effect of lithium on rates of self-harm and suicide. The authors searched PubMed, PsycINFO, and the Cochrane Library for publications between January 1980 and June 2017. Only systematic reviews and meta-analyses of RCTs were included in the study. No age limit was used, rendering these data applicable to older adults as well. Sixteen systematic reviews met the criteria for the meta-analysis, which included 48 RCTs. The results indicated that lithium, when used to treat mood disorders, significantly reduced the risk of suicide when compared to placebo (OR 0.13, 95% CI 0.03-0.66) and the risk of death from any cause (OR 0.38, 95% CI 0.15-0.95). The authors concluded that the anti-suicidal effects of lithium have been shown in a robust literature base over the past four decades. They conclude that lithium should be used more often in clinical practice and included more frequently in clinical practice guidelines.

Reducing Nightmares in Active Duty Soldiers with Combat Trauma Posttraumatic Stress Disorder
Raskind and colleagues (2013) conducted a 15-week double-blind RCT comparing the alpha-1 adrenoreceptor antagonist prazosin to placebo for nightmares in active duty soldiers with PTSD. Sixty-seven male and female soldiers were randomly assigned to either placebo or the experimental treatment group. Eleven participants withdrew from the study before the first evaluation leaving a total of 56 participants. Attrition continued throughout the study with a total of 46 completing the 15-week study, with 23 in the placebo group and 23 in the prazosin group. Drug dosing was titrated based on nightmare response and ranged from 5 mg in the morning and 20 mg at night for men and 2 mg in the morning and 10 mg at night for women. The mean bedtime dose for men was 15.6 mg of prazosin (SD=6.0) and 7.0 mg for women (SD=3.5). The mean midmorning dose for men was 4.0 mg of prazosin (SD=1.4) and 1.7 mg for women (SD=0.5). The primary outcome measures included the CAPS nightmare item, Pittsburgh Sleep Quality Index, and the Clinical Global Impressions Scale (CGI). Prazosin significantly outperformed placebo in all three groups. Decrease from baseline in the CAPS nightmare item score was 3.1 (SE=0.3) in the prazosin group vs 1.2 (SE=0.3) in the placebo group, which was significant at p<0.001; decrease from baseline on the Pittsburgh Sleep Quality Index was 5.6 (SE=0.7) in the prazosin group vs 2.8 (SE=0.6) in the placebo group, which was significant at p=0.003; and the rating of change items on the CGI in the markedly or moderately improved range was 64% for the prazosin group and 27% for the placebo group with a significant difference at p<0.001. The authors concluded that active duty soldiers with combat related PTSD could experience clinically and statistically significant improvement in nightmares with the use of prazosin.

Improving Cognition in Depressed Adults
McIntyre and colleagues (2014) evaluated improvement in cognitive functioning with
vortioxetine (a multimodal antidepressant) compared to placebo in depressed adults with moderate to severe depression. In this experiment, double-blind study participants (N=602) were randomly assigned to either placebo or vortioxetine in doses of either 10 mg or 20 mg once daily for 8 weeks. Age ranged from 18-65 years, which extends the results of the study to both younger and older adults. The primary measures of cognition were change scores from baseline on a composite z-score derived from scores on the Digit Symbol Substitution Test (DSST) and the Rey Auditory Verbal Learning Test (RAVLT). Mean difference z-scores on the composite measure between the vortioxetine group and the placebo group comprised the main outcome. On the composite z-score, the mean change from baseline for vortioxetine was significantly greater than placebo for both doses of vortioxetine and both differences were significant at p<0.0001; the mean treatment difference from placebo for vortioxetine 10 mg was 0.36 (95% CI:0.22-0.50) and vortioxetine 20 mg was 0.33 (95% CI: 0.19-0.47). Improvement in depression was also measured and the authors concluded that the improvement in cognition was “largely a direct treatment” effect and not moderated by improvement in depression. The authors further concluded that the use of vortioxetine might increase the likelihood of a return to normal functioning even in the absence of a full recovery from mood symptoms.

**Reducing Psychiatric Hospitalization in Patients with Bipolar Disorder**

Joas and colleagues (2017) compared outcomes for patients diagnosed with bipolar disorder and treated with one of six psychotropic agents: lithium, valproate, carbamazepine, lamotrigine, quetiapine, and olanzapine. Using national registers in Sweden, the authors identified 35,022 patients diagnosed with bipolar disorder and treated between 2006 and 2009 (male 38.4%, female 61.6%). They found that 72.3% of these patients had exposure to one or more of the drugs in the study. The most commonly prescribed drug was lithium and least was carbamazepine. The main outcome measure was number of psychiatric hospital admissions. During the study period, 25% of patients had at least one hospital admission. They found that use of any of the drugs was associated with reduced rate of admission to a psychiatric hospital (HR=0.67, 95% CI 0.64–0.71). Periods of time during the study period when the individual was not taking the drug of interest was used for comparison. Lithium had the lowest rate of hospital admission with a 34% reduction in admission followed by valproate (27%), olanzapine (23%), lamotrigine (22%), and quetiapine (18%). The authors concluded that the risk of psychiatric hospital admission is reduced for patients with bipolar disorder with the use of lithium, valproate, lamotrigine, olanzapine, and quetiapine.

References


2. Provide at least five psychological manuscripts published in refereed journals (or equivalent) that demonstrate the efficacy of the specialty's services for dealing with the types of psychological, biological, and/or social problems usually confronted and addressed by this specialty. Summarize and discuss the relevance of the findings of these studies, particularly their measures and outcome results.

Based on APA’s (2006) policy on evidence based practice, in this section we focus on patient characteristics and first will discuss specific psychological diagnoses noting that prescribing psychologists in this specialty routinely see, diagnosis, and treat patients with these disorders. The medications utilized for these diagnoses by prescribing psychologists are the medications routinely used in treatment and the literature cited notes the effectiveness of these treatments. We will also cite studies that note the effectiveness of the combination of psychopharmacology and psychotherapy. Providing this combination of therapeutic approaches is routinely carried out by the clinical psychopharmacology specialist in health service psychology. We will now detail the efficacy of psychopharmacological agents across several key diagnostic groups.

**Schizophrenia**

Wang and colleagues (2017) conducted a 6-8 week randomized comparison trial of 175 inpatient participants with first-episode schizophrenia to evaluate efficacy and tolerability of five atypical antipsychotic medications in this population. The study spanned a two year period between 2012 and 2014 and included the following atypical antipsychotics: aripiprazole, risperidone, quetiapine, olanzapine, and ziprasidone. Efficacy was primarily measured by change scores on the Brief Psychiatric Rating Scale (BPRS) total score. Acceptability was measured by discontinuation. All antipsychotics measured showed a significant decrease in change scores on the BPRS total score (p<0.01). After controlling for age of onset, risperidone was significantly superior to aripiprazole (p<0.01) and olanzapine (p<0.05), but not significantly different from the other medications. While there was no statistically significant difference in discontinuation between the atypical antipsychotics, there was a difference between male and female participants, with males having lower risk of discontinuation (χ² = 9.897, P = 0.002) (OR 0.37, 95% CI 0.19 to 0.69). The authors concluded that all five atypical antipsychotics studied here have good efficacy for first-episode schizophrenia and that risperidone may outperform aripiprazole and olanzapine, especially with regard to short-term outcomes.
**Generalized Anxiety**

Slee and colleagues (2019) conducted a network meta-analysis of pharmacological treatments for generalized anxiety disorder (GAD) from MEDLINE, Web of Science, Cochrane Library, ClinicalTrials.gov, Chinese National Knowledge Infrastructure (CNKI), Wanfang data, Drugs@FDA, and commercial pharmaceutical registries. Only trials with adult participants were included in the search for RCTs and the primary outcomes were efficacy and acceptability. Efficacy was determined by mean difference changes in the Hamilton Anxiety Scale (HAM-A) and acceptability was measured as all cause discontinuation. The search between 1994 and 2017 produced 1,992 studies; 89 studies met the inclusion criterion, which included 22 medications or placebo for 25,441 male and female patients in randomized trials. Both older and younger adults were included in the sample. The following drugs were found to have reasonable tolerability and be superior to placebo: duloxetine (MD -3.13, 95% CI -4.13 to -2.13), pregabalin (MD -2.79, 95% CI 3.69 to -1.91), and escitalopram (MD -2.45, 95% CI -3.27 to -1.63). Quetiapine was found to have the largest effect as measured by the HAM-A mean change scores (OR 1.44, 95% CI 1.64 to 1.80), but was not well tolerated. Outcomes for other medications were positive, but the sample sizes were small, so no general recommendations are made. The authors concluded that medication in particular pregabalin, escitalopram, and duloxetine, can be an effective and well-tolerated treatment for GAD. Further, there are a number of choices in different classes of medication that have evidence for efficacy in the treatment of GAD.

**Depression**

Cipriani and colleagues (2018) conducted a systematic review and network meta-analysis of placebo controlled and head-to-head comparisons of 21 antidepressants used for the treatment of adults with major depression. The authors searched the Cochrane Central Register of Controlled Trials, CINAHL, Embase, LILACS database, MEDLINE, MEDLINE In-Process, PsycINFO, the websites of regulatory agencies, and international registers for published and unpublished, double-blind, randomized controlled trials from all available years through 2016. The outcome measures were acceptability and efficacy (as determined by response rate). Of the over 28,000 citations identified, 522 trials with 116,477 participants met the inclusion criteria. The results showed that all antidepressants included in the study were superior to placebo and Odds Ratios (ORs) ranged from the lowest for reboxetine (OR 1.37, 95% CI 1.16 to 1.63) to the highest for amitriptyline (OR 2.13, CI 95% 1.89 to 2.41). Acceptability (measured by discontinuation) ranged from the most discontinuations for clomipramine (OR 1.30, 95% CI 1.01 to 1.68) to the most acceptable for agomelatine (OR 0.84, 95% CI 0.72 to 0.97). In head-to-head studies, the most effective antidepressants were agomelatine, amitriptyline, escitalopram, mirtazapine, paroxetine, venlafaxine, and vortioxetine (range of ORs 1.19–1.96). The least effective were fluoxetine, fluvoxamine, reboxetine, and trazodone (range of ORs 0.51–0.84). The results of this study show that while all antidepressants studied here were superior to placebo, some antidepressants are more effective and better tolerated than others. The authors concluded that this information could help guide clinicians, policy makers, and guideline developers in making best choices in antidepressant medication.

**Insomnia**

Rosner and colleagues (2018) conducted a systematic review of controlled trials of eszopiclone for insomnia. Databases searched included Cochrane Central Register of Controlled trials (CENTRAL), MEDLINE, Embase, PsycINFO, PSYNDEX, and registry databases (WHO trials...
portal, ClinicalTrials.gov). Only trials comparing eszopiclone to active control or placebo were included and, after inclusion criteria were applied, 14 RCTs with 4,732 participants were eligible for the review. Older adults were included in the analysis making results applicable to geriatric patients. Results comparing eszopiclone to placebo were positive with a 12-minute decrease of sleep onset latency [mean difference (MD) -11.94 min, 95% CI 16.03 to 7.86], a 17-minute decrease of wake time after sleep onset (MD -17.02 min, 95% CI -24.89 to -9.15), and a 28-minute increase of total sleep time (MD 27.70 min, 95% CI 20.30 to 35.09). Adverse events were more common for eszopiclone vs placebo, such as unpleasant taste, dry mouth, somnolence, and dizziness. The risk differences (RD) were small to moderate for adverse events ranging from 0.2 to 0.18. The authors concluded that eszopiclone appears to be a moderately effective medication for both sleep onset and maintenance. While adverse events were annoying, there was little or no evidence of harm if the medication was taken as prescribed.

**Bipolar Disorder**

Pinto and colleagues (2019) investigated the efficacy and tolerability of a newer atypical antipsychotic, cariprazine, which is FDA approved for the treatment of bipolar disorder. The authors conducted a systematic review of meta-analysis RCTs investigating the efficacy of cariprazine in adult patients diagnosed with bipolar disorder (male and female) in PubMed, Web of Science, Embase, and PsychInfo databases from inception to 2018. Only 7 of the 391 studies identified met the inclusion criteria. Outcome measures were change scores on the Montgomery and Asberg Depression Rating Scale (MADRS) and the Young Mania Rating Scale (YMRS). On the YMRS, cariprazine was clinically and statistically superior to placebo in terms of remission rates (OR: 2.05, 95% CI 1.61 to 2.61, p=0.006) and response rates (OR: 2.31, 95% CI 1.35 to 3.95, p=0.021) for manic and mixed episodes. The YMRS change scores for manic symptoms were also significant (SMD, -0.52, 95% CI -0.82 to -0.21, p = .018). On the MADRS, the change scores were small but statistically significant for depressive symptoms at the two doses used [1.5 mg and 3 mg; (SMD, −0.26, 95% CI−0.49 to −0.02; p=.040)(SMD, −0.21, 95% CI −0.41 to −0.01; p= .045]. Side effects were more common with cariprazine than placebo, but did not result in statistically different drop-out rates. The authors concluded that cariprazine appears to be effective and safe when dosed as recommended for acute mania and mixed episodes in bipolar disorder.

This next section will briefly review how combined treatment approaches are utilized by the psychopharmacology specialist in health service psychology as applied to a sample of specific psychological problems. There is agreement among experts that some psychological problems may respond well to combined psychological and psychopharmacological approach [e.g., Pfiffner & Haack, 2015 (ADHD); Dougherty, Rauch, & Jenike, 2015 (OCD); Cuijpers et al., 2014 (depression and anxiety)]. Other disorders are often treated with either medication or psychotherapy alone. In some cases the addition of medication to psychotherapy, or vice versa, may improve outcomes (e.g., Cuijpers et al., 2014).

A sampling of clinical practice guidelines demonstrates the importance of combined treatment practices. The American Psychological Association (APA) guidelines for the treatment of depressive disorders (APA, 2019) indicate that for a general adult population, medication, psychotherapy, or both may be considered as first line treatment. For older adults, the APA guidelines recommend either a combined approach or group therapy. Similarly, the American
Psychiatric Association (ApA) has also published guidelines for the treatment of major depression (ApA, 2010). These guidelines recommend either therapy or pharmacotherapy for mild to moderate depression in adults with optional combined treatment for patients with contributing psychosocial factors. For adults with severe depression, with or without psychotic features, the American Psychiatric Association guidelines recommend either medication alone or a combined approach (ApA, 2010).

The American Psychological Association practice guidelines for the treatment of posttraumatic stress disorder (APA, 2017) also make specific recommendations for both therapy and psychopharmacologic treatment. The Veterans Affairs/Department of Defense (VA/DoD) guidelines for the treatment of posttraumatic stress disorder (PTSD) have specific recommendations for the use of therapy as first line treatment and medication as alternative or adjunctive treatment (US Department of Veterans Affairs, 2017). The VA/DoD Guidelines for the treatment of alcohol use disorders report strong evidence for the use of both psychotherapy and pharmacological intervention (US Department of Veterans Affairs, 2015).

The following section discusses how combined treatment approaches are utilized by the psychopharmacology specialist for a sample of specific psychological problems:

**Comorbid Medical and Mental Health Problems**

Patients with serious mental illness (SMI) have a significantly greater likelihood of having a comorbid medical condition compared to those without SMI (Bahorik et al., 2017). For example, the prevalence of obstructive sleep apnea (OSA) and comorbid depression has been found to be significantly greater than that found in the general public (BaHammam et al., 2015); comorbidity with depression for patients with multiple sclerosis is estimated by some to be 24% (Marie et al., 2015). Evidence suggests that the best treatment for many of the psychological disorders comorbid with medical disorders includes psychotherapy and psychotropic medication [e.g., Fiest et al., 2016 (multiple sclerosis); Pitman et al., 2018 (cancer); Holt et al., 2014 (diabetes)].

**Substance Use and Mental Health**

The association between mental illness and substance use disorders is well documented (e.g., American Psychiatric Association, 2013; Conway et al., 2016). We again see a unique niche in which prescribing psychologists possess the necessary skills in both prescribing medications and providing psychotherapy to treat a specific population according to recommended guidelines. Recent publications on addictions treatment highlight the importance of both psychotherapy and psychopharmacology for specific substance use disorders (e.g., Weaver, 2017). For example, the American Psychiatric Association’s clinical practice guidelines recommend both nonpharmacological and pharmacological treatments for patients with an alcohol use disorder (Reus et al., 2018). To illustrate, a prescribing psychologist working with a patient with a comorbid alcohol use disorder and major depression may use CBT, relapse prevention strategies, or motivational interviewing, as well as medication that can reduce alcohol cravings (e.g., naltrexone), and/or medication that can reinforce abstinence (e.g., disulfiram), and/or medication to treat an underlying depression (e.g., sertraline).

**Serious Mental Illness**

The treatment of those with serious mental illness (SMI) has predominantly been approached with medication-focused strategies. Indeed, antipsychotic medication use is nearly universally indicated in the management of psychoses. However, even in this population, professional guidelines, such as those developed by the American Psychiatric Association, recognize that adding psychosocial treatment to psychotropic management enables recovery and reduces
relapse (American Psychiatric Association, 2004; Dixon, Perkin, & Calmes, 2009). In fact, “Expert panels, consensus statements, and practice guidelines all suggest that schizophrenia be treated with a combination of medication and some form or forms of psychosocial/psychological intervention” (Shearer, Moore, & Brown, 2018, p. 31). Again, we find prescribing psychologists uniquely situated to provide the recommended combination of treatments.

References


3. Provide at least five psychological manuscripts published in refereed journals (or equivalent) that demonstrate the efficacy of the specialty's procedures and techniques when compared with services rendered by other specialties or practice modalities. Summarize and discuss the relevance of the findings of these studies, particularly their measures and outcome results and the comparisons to other specialties or modalities.

In the two sections above we have noted the efficacy of routine use of psychopharmacological agents and effectiveness of psychotherapy paired with psychopharmacology. In the following section we provide evidence that the psychopharmacology specialist in health service psychology, as compared to other health service providers, provides comparable, competent, and quality services.

**Psychiatrists and Psychiatric Nurse Practitioners vs Prescribing Psychologists**

Muse and McGrath (2010) have published the only comparison of prescribing psychologists’ training vs. physicians and nurse practitioners (APRNs). The authors compared the training of psychiatrists and psychiatric APRNs to that of prescribing psychologists in key areas including biochemistry and neuroscience; pharmacology; clinical practicum; research and statistics; behavioral assessment and diagnosis, including the use of psychometrics; psychosocial interventions, psychotherapy and other nonpharmacological therapeutic options; and foundations in mental health and the behavioral sciences. To conduct this comparison, they analyzed curriculum guidelines provided by national organizations and curricula in current use for training in each of these three professions. All comparisons were made based on the relative strengths and weaknesses in preparation to prescribe psychoactive medications at an entry level. Muse and McGrath reported that physicians received more didactic instruction in biochemistry and neuroscience than the other two professions. They went on to report that psychologists preparing for prescriptive authority have more training pharmacology than physicians and APRNs (4 times more and 6 times more, respectively), more preparation in diagnosis of mental health disorders, use of psychometrics, and behavioral health assessment than physicians or APRNs (15 times more and 8 times more, respectively), more training in non-medication therapeutic intervention than either (27 time more than physicians and 8 time more than APRNs), more training in the foundations of psychology and mental health (23 times more than physicians, three times more than APRNs), more training in research design and interpretation of research results (7 times more than physicians and 2 times more than APRNs), and 2.5 to 4 years more graduate instruction than the other entry level prescribing professions compared here. The authors concluded “…pharmacologically-trained psychologists have as much or more education in psychopharmacology as do other entry-level prescribers, including physicians” (Muse & McGrath, 2010, pg. 101).
Psychiatrists, Psychiatric Nurse Practitioners, and Psychiatric Physician Assistants vs Prescribing Psychologists

Linda and McGrath (2017) surveyed 22 medical providers who had worked with prescribing psychologists. These authors found that prescribing psychologists were overwhelmingly rated as safe prescribers and knowledgeable about psychotropic medication. Ninety-five percent of the medical providers surveyed rated prescribing psychologists as adequately trained to prescribe medication; 95% also rated them as having enough knowledge to prescribe safely. Further, and important to the issue of comparability, medical providers rated prescribing psychologists, as compared to other prescribers, as about the same (37%) or better than most (58%; Linda and McGrath, 2017). Other providers in this survey would include psychiatrists, psychiatric APRNs, and psychiatric physician assistants (PAs). Ratings by primary care providers are indirect, but powerful tools to assess efficacy. Primary care providers are, by definition, responsible for the total health of their patients. They are typically the “gate-keepers” for referrals to specialty providers and see patients frequently. Primary care providers are medical providers that are well-situated to assess if a prescribing psychologist (or any other psychiatric prescriber) is effective, causing harm, or failing to improve care.

Psychiatrists, Psychiatric Nurse Practitioners and Psychiatric Physician Assistants vs Prescribing Psychologists In a Primary Care Setting

In Shearer et al. (2012), forty-seven medical providers in a large Family Medicine department completed an anonymous survey assessing their impressions of the impact, safety, and utility of working directly with a prescribing psychologist in this integrated setting. Ninety-five percent of respondents reported that consultation with a prescribing psychologist is helpful; 93% were confident in the ability of the prescribing psychologist to make appropriate referral decisions; 95% were confident that the prescribing psychologist would prescribe appropriate medications and dosages; 87.2% reported the model had improved patient care; and 93.6% were confident it is safe to refer patients to a prescribing psychologist. This provides direct evidence that primary care providers determined that their patients received both safe and effective treatment from a prescribing psychologist. Furthermore, the data evaluating comparability of prescribing psychologists to other psychiatric prescribers were substantial. Greater than 93% of the primary care providers surveyed, most of them being physicians, indicated that prescribing psychologists are either similarly or more skilled than “other mental health prescribers” (Shearer et al., 2012, pg. 425). The category of “other mental providers” would include psychiatrists, psychiatric APRNs, and psychiatric physician assistants (PAs).

References


4. Provide at least five psychological manuscripts published in refereed journals (or equivalent) that demonstrate the efficacy of the specialty's services for dealing with the types of settings or organizational arrangements where this specialty is practiced. Summarize and discuss the relevance of the findings of these studies in relation to the specialty practice.

The data evaluating efficacy of psychopharmacology apply equally across specific prescribing disciplines. Data that support such equivalency are found in comparisons of training programs for different prescribing specialties (e.g., psychiatry, psychiatric nurse practitioners, primary care providers; Muse & McGrath, 2010) and the fact that prescribing psychologists are providing similar services in similar settings as other prescribing providers. Currently, the best data on psychologists that prescribe come from research that either independently evaluates psychotherapy and pharmacotherapy or evaluates the combination as provided by separate practitioners (prescribing and non-prescribing). Psychopharmacology is a practice that has a long and well-documented record of efficacy.

The research presented here, while not traditional EBPP RCT or effectiveness outcomes research, describes the various clinical practice venues and activities of prescribing psychologists to illustrate the ongoing history of Clinical Psychopharmacology and that the practice of Clinical Psychopharmacology is similar to other prescribing disciplines, is well accepted by the healthcare professions, and that practice is noted as successful.

**Primary Care**

Shearer (2012) describes advantages of embedding and integrating a prescribing psychologist into a primary care setting. In Shearer et al. (2012), the author proposes a model for integrating prescribing psychology into a primary care clinic setting called the Primary Care Prescribing Psychologist (PCPP) model. The key features of the PCPP model include shared office space, reception, charting system, and scheduling. There is an open-door policy to decrease barriers for primary care providers (PCPs) to access behavioral health and psychotropic medication consultation. The model employs a biopsychosocial approach to assessment and treatment. This approach emphasizes psychotherapeutic approaches first and prescribing capacities second, as the patient is considered in the broader context of biology, environment, and social interactions.

In the survey portion of the article forty-seven medical providers in a large Family Medicine department completed an anonymous survey assessing their impressions of the impact, safety, and utility of working directly with a prescribing psychologist in this integrated setting. Ninety-five percent of respondents reported that consultation with a prescribing psychologist is helpful, 93% were confident in the ability of the prescribing psychologist to make appropriate referral decisions, 95% were confident that the prescribing psychologist would prescribe appropriate medications and dosages, 87.2% reported the model had improved patient care, and 93.6% were confident it is safe to refer patients to a prescribing psychologist. This provides direct evidence that primary care providers determined that their patients received both safe and effective treatment from a prescribing psychologist. Furthermore, the data evaluating comparability of
prescribing psychologists to other psychiatric prescribers was substantial. Greater than 93% of the primary care providers surveyed, most of them being physicians, indicated that prescribing psychologists are either similarly or more skilled than “other mental health prescribers” (p 425).

**Indian Health Service**

*Sutherland and Tulkin (2012)* proposed a model for the integration of prescribing psychologists into different medical teams in the Indian Health Service (IHS). The authors describe both the health care discrepancies between American Indians/Alaska Natives and the general population. Patients in the IHS health system have higher rates than the general population of a variety of illnesses including diabetes, coronary heart disease, smoking, obesity, depression, and PTSD. An innovation proposed to address the comorbid medical and behavioral health issues facing this population is to integrate prescribing psychologists into different treatment teams. In this article, the authors discuss the integration of prescribing psychologists into three different medical teams: a family practice team, a chronic pain team, and a pediatric/child behavior team. The authors emphasize the scarcity of psychiatric providers and behavioral health professionals for this frequently underserved population and describe how a prescribing psychologist, who can both prescribe and provide psychotherapy, can address many behavioral health needs. Case studies are provided to illustrate how prescribing psychologists can provide effective, safe, and timely care to patients served in the IHS system.

**Private Practice**

*Levine and Wiggins (2010)* surveyed active prescribing psychologists licensed in New Mexico and Louisiana, the only two states at the time of the survey that credentialed psychologists to prescribe. Only prescribing psychologists in private practice were included in the study. Nine prescribing psychologists from New Mexico and eight from Louisiana participated in the survey for a total of 17 respondents, all of whom worked in a solo private practice setting. All had been prescribing for three years or less. Thirty-three percent were seeing between 21 and 30 patients per week and 44% were seeing more than 31 patients per week. Sixty-six percent of respondents were prescribing for more than 70% of their patients. Sixty-six percent of responders were providing combined psychopharmacological and psychotherapeutic treatment for more than 50% of their patients. More than half of respondents (55%) were providing medication-only treatment for 30% or fewer patients. The majority of respondents (89%) indicated that since they started prescribing their patient population was more complex psychologically and had more comorbid psychological and medical conditions. The rules and regulations in both New Mexico and Louisiana require a prescribing psychologist to at least collaborate, if not consult, with a primary care provider (PCP). The majority of respondents (89%) indicated that PCPs did not refuse to allow the prescribing psychologist to prescribe a medication they felt was most appropriate and, to the contrary, appreciated contact from the prescribing psychologist. Similarly, 100% of the respondents described their relationship with pharmacists as “excellent.” These results show that prescribing psychologists positively impact access by seeing a high number of patients per week and that they provide both combined treatment, as well as medication only and therapy only. This suggests that they are using all their skills with patients rather than becoming “mini-psychiatrists,” as some have feared. Additionally, there was an increase in the acuity and complexity that prescribing psychologists saw after gaining prescriptive authority. Finally, they reported very good working relationships with primary care providers and pharmacists; working relationships that are required to provide the best services to patients.
School Settings
McCormick (2010) describes the unique challenges and opportunities prescribing psychologists face when prescribing for children and adolescents. The author indicates that the driving consideration in prescribing for this population is the dual focus of safety and efficacy. The lack of clear guidelines when an approved medication fails is problematic. And because many medications used for behavioral health purposes with children are not FDA-approved for the intended use, the prescribing psychologist must be familiar with the current standard of practice and literature base. The pediatric population cannot be viewed as just small-sized adults; rather, they are biologically complex and require careful monitoring. Psychologists are in a good position to use objective rating scales and other forms of assessment to monitor patient progress and side effects. Additionally, laboratory tests, imaging, and other monitoring (e.g., EKG) are used according to guidelines to help the provider make safe decisions about medication choices and alternatives. The author goes on to conclude that being trained outside of the traditional medical culture, prescribing psychologists do not approach treatment by asking what medication should be used, but rather which of the many interventions available (of which medication is only one) would be safe and provide the most benefit.

Military
Sammons (2016) describes how prescribing psychology as we know it today had its beginning between 1991 and 1997 when the Department of Defense (DoD) launched a controversial and ambitious program called the Psychopharmacology Demonstration Project (PDP). There were four independent evaluations of the PDP, and each concluded that the Project psychologists were well-trained in the practice of prescribing psychotropic medication (Vector Research, 1996; American College of Neuropsychopharmacology 1998; U.S. Government Accountability Office 1997; U.S. Government Accountability Office 1999). The fact that there were four independent evaluations of the program and its participants reflects the significant controversy of this project and the repeated demands of opposition to find flaw with evaluations that consistently found the psychologists to be well trained in prescribing psychotropic medication. The success of the PDP, in the face of such scrutiny, formed the basis of modern prescribing psychology training and practice.

Today, prescribing psychologists are represented in three branches of the armed services: Army, Navy, and Air Force. Each service has its own regulations regarding the credentialing of prescribing psychologists, though some have encouraged the development of more uniform standards (Shearer, Moore, & Park, 2015). Evidence of the acceptance and efficacy of prescribing psychology in military settings can be seen in a post discussing the benefits of prescribing psychology in the official blog of the U.S. Navy Bureau of Medicine and Surgery (Rabinowitz, 2015). Finally, Shearer et al. (2012) and Shearer (2012) have described a model of practice for prescribing psychologists in primary care settings in a large Army hospital on the west coast.

References


Criterion X. Quality Improvement. A specialty promotes ongoing investigations and procedures to develop further the quality and utility of its knowledge, skills, and services.

Commentary: The public interest requires that a specialty provides the best services possible to consumers. A specialty, therefore, continues to seek ways to improve the quality and usefulness of its practitioners' services beyond its original determination of effectiveness. Such investigations may take many forms. Specialties promote and participate in the process of accreditation in order to enhance the quality of specialty education and training. Petitions describe how research and practice literatures are regularly reviewed for developments which are relevant to the specialty's skills and services, and how this information is publicly disseminated.

1. Provide a description of the types of investigations that are designed to evaluate and increase the usefulness of the skills and services in this specialty. Estimate the number of researchers conducting these types of studies, the scope of their efforts, and how your organization and/or other organizations associated with the specialty will act to foster and communicate these developments to specialty providers. Provide evidence of current efforts in these areas including examples of needs assessed and changed that resulted.

The Specialty of Clinical Psychopharmacology depends on a vast literature addressing the application of the specific expertise of its practitioners. The unique combination of psychological and medical applications required of Specialists in Clinical Psychopharmacology varies from differential diagnosis of behavioral health disorders, ruling out secondary health conditions that mimic or mask symptoms; incorporating the evaluation and use of psychological and pharmacological therapeutic strategies to intervene, manage and maintain successful outcomes; and addressing the reconciliation of medications prescribed to patients in order to minimize adverse reactions, maximize behavioral health outcomes, or eliminate pharmaceutical therapies if no longer appropriate. Specialists in Clinical Psychopharmacology also maintain an information base that facilitates communication with patients and other health care providers including primary care, nurse and medical practitioners.

The Specialty of Clinical Psychopharmacology depends on evidence-based practice from both psychological and medical disciplines. The types of investigations that are designed to evaluate and increase the usefulness of the skills and services in the Clinical Psychopharmacology Specialty are designed for assessment of the efficacy of psychotropic medications. Study design, which is taught as an essential component of didactic training in MSCP programs, can be summarized as follows:

- Clinical trials for testing potential new medications;
- Double-blind, placebo-controlled studies of medications for the treatment of a broad array of behavioral health disorders such as: Schizophrenia; Major depressive disorder; Bipolar disorder; ADHD; Anxiety disorders; PTSD; and Substance use disorders. This study design tests the efficacy of medications either against placebo alone and/or against other comparator drugs (non-inferiority trials). These studies may include a cross-over design in which patients receive both medication and placebo (or comparator medications) but in a randomized, double-blind fashion;
The development of clinical treatment guidelines by various organizations like APA, ApA, VA, American Geriatrics Society (Beers Criteria), FDA, CDC, SAMHSA, Canadian Network for Mood and Anxiety Treatments (CANMAT);

- The development of treatment algorithms that provide standardized approaches to clinical decision making and cite examples like the Texas Medication Algorithm Project (TMAP); Algorithms published in the Journal of Clinical Psychiatry; Psychopharmacology Algorithm Project at the Harvard Medical School; etc.;
- Treatment directives, alerts, and guidance from federal agencies like CDC and FDA;
- Publications of data analyses from large-scale, non-industry-funded clinical trials like STAR*D, CATIE, STEP-BD, etc.;
- Cochrane reviews of strength of and quality of research on treatment interventions for major behavioral health disorders

The number of researchers engaged in producing investigations in this area is enormous. Literally, there are thousands of prominent national and internationally recognized experts who publish a wide variety of articles involving clinical trials, comparability studies, clinical symptoms that are indications for treatment, personal characteristics that may predict to which treatments a person may likely respond, and others. They publish in journals such as: American Journal of Psychiatry; Experimental and Clinical Psychopharmacology; Journal of Clinical Psychiatry; Journal of Clinical Psychology; Journal of Clinical Psychopharmacology; Journal of Clinical Psychology in Medical Settings; Neuroscience & Biobehavioral Reviews; Psychiatric Services; Psychopharmacology).

Useful reviews of the literature pertaining to the examination, assessment, and treatment of patients using psychotropic medications are available in such circulars and online resources as: The Carlat Report: Psychiatry; NEJM Journal Watch: Psychiatry; Medscape Psychiatry; Current Opinion in Psychiatry; Psychiatry Online; among others. The National Library of Medicine lists over 1,800 articles using “Clinical Psychopharmacology” as a keyword in the last five years (PubMed listing 12/15/19).

Specialists in Clinical Psychopharmacology contribute to the psychological and medical literature in various ways as evidenced by the recent following publications by members of Division 55 and their colleagues:


Krakow, B., Moore, B. A. & Ullibarri, V. A. (2018). Sleep-disordered breathing and


The Division 55 Diversity Council conducted a survey of members in 2019. Preliminary findings based on a small sample of Division 55’s 671 current members (67 respondents) identified that over 98% of respondents cited being members of a professional society; APA and state psychological associations were the most common associations (86% and 76%, respectively). Moreover, 54% of respondents cited having a leadership role in a professional organization. Regarding scholarship, 32% of respondents cited having been an author or co-author of an article published in a professional/scientific journal in the last three years. Twenty-two percent reported having been an author or co-author of a book or chapter, and 68% cited having given a symposium in the last 3 years. Another 59% of members reported being engaged in pro bono social justice and/or advocacy activities. Sixty percent of respondents are currently providing clinical services to multicultural populations, with a smaller percentage (19%) providing services to the LGBT population.

In addition to Division 55’s current members, individual states that allow psychologists to prescribe have their own organizations. The Louisiana Academy of Medical Psychologists, Inc. (LAMP), New Mexico State Psychologist Association of New Mexico (SPA New Mexico) and The Illinois Association of Prescribing Psychologists ((IAPP, founded in October 2018) include hundreds of members.

Prescribing psychologists who practice in the military also contribute to research studies and local organizations depending upon where they are licensed to prescribe. These research studies include Advanced Medical Technology Initiative (AMEDD) Tele-behavioral Health Delivery of CBT-I with and without CBT-I Coach for the Treatment of Insomnia in Military Service Members (B. Moore, personal communication).

In addition, some of the organizations that represent Applied Clinical Psychopharmacologists in states with prescription privileges have a dedicated listserv that is used, in part, to share new research on topics related to the practice of the prescribing psychologist. The Division 55 DIV55DISCUSS listserv also serves this purpose on the national level. The DIV55ANNOUNCE listserv has an estimated 900 members who have signed up with APA to follow information pertaining to clinical pharmacotherapeutics.

Organizations representing current prescribing psychologists in Louisiana, New Mexico, and Illinois, as well as state associations across the country, offer regular live conferences/workshops that feature presentations focusing on current issues of importance to the assessment of individuals who may require treatment with psychotropic medications; clinical decision-making related to choosing the most appropriate psychotropic drug treatment, including medication reconciliation; detecting and treating adverse reactions to psychotropic medications; variation in treatment approaches based on age of the patient or on gender, ethnic or cultural differences; medical conditions and their influence on psychotropic drug treatment choices, among others. In 2018, Division 55 offered a half day CE course on physical assessment before the annual APA conference and plans to conduct a half day CE course on psychopharmacology practice through the APA convention in 2020.

Division 55’s contributions to the APA conference in 2019 were indicative of the movement’s
overall increase in interdivisional participation and continuing education. In addition, all of the MSCP programs offer CE credits for coursework and/or offer free CEs to students, graduates and Division 55 members.

The unique skills of Clinical Psychopharmacology Specialists include, of course, prescribing psychototropic medication. The efficacy of that treatment is broad and interprofessional, so estimating the exact number of researchers in the field of clinical psychopharmacology is difficult to calculate.

A Google Scholar search conducted for articles focused on “psychopharmacology” found some 42,600 articles listed and “clinical psychopharmacology” found 37,800 since 2014 alone. Thus, it is clear that both the basic and applied science of psychopharmacology is thriving and there is much data available to inform the education, training, and practice of clinical psychopharmacology. Division 55 utilizes its newsletter, The Tablet, to disseminate current information to members.

APA’s Experimental and Clinical Psychopharmacology journal publishes advances in translational and interdisciplinary research in psychopharmacology, including preclinical and clinical research. The President of Division 55 joined the editorial board of Experimental and Clinical Psychopharmacology in January 2019 and the incoming President-elect will join in January 2020. The basic research (laboratory-based), as well as controlled clinical trials in this APA journal provides a strong foundation for Specialists. Research based on the double-blind controlled clinical trial is the gold standard in understanding and improving the day-to-day practice of psychopharmacology. In addition, Archives of Medical Psychology is a peer-reviewed journal published electronically that is dedicated to the practice of medical psychology.

Reference


2. **Describe how the specialty seeks ways to improve the quality and usefulness of its practitioners' services beyond its original determinations of effectiveness.**

The Clinical Psychopharmacology specialty advances the quality and usefulness of its practitioners’ services through: continuing education; mentorship and leadership development; interprofessional collaboration; encouraging ASAP members to pursue steps towards licensure qualification such as taking the PEP and entering experiential training; public health education and advocacy; and professional development and outreach for early career psychologists.

Specialists who achieve the level of Applied Clinical Psychopharmacologist (ACP) are required
by the states in which they are licensed to earn continuing education credits annually or bi-
annually in topic areas that are directly related to clinical psychopharmacology and prescribing
practices. For example, the Louisiana Academy of Medical Psychologists (LAMP) and the New
Mexico Psychological Association offer weekend workshops several times per year on topics
that qualify for the CEU or CME credits required to renew the certificate or license to prescribe.
Some states also give credit for peer-review activities and prescribing psychologists can
participate in this peer review process to earn CE credit.

Candidates for the postdoctoral Master of Science in Clinical Psychopharmacology (MSCP)
degree are required to gain specialized training according to the organized sequence of studies
that meet the APA program designation requirements. Programs continually revise and update
their course content to remain current with the existing literature in the specific field of study in
order to retain their designated status. The Division 55 Training Director Council functions to
ensure that programs are kept current with APA requirements, as well as any state legislation,
that might affect the ability of designated programs to satisfy their specific legislative rules.

All potential prescribers must take and pass a standardized national examination, the
Psychopharmacology Examination for Psychologists (PEP), currently administered by the
Association for State and Provincial Psychology Boards (ASPPB). This ensures that candidates
who apply for Applied Clinical Psychopharmacology status have the requisite advanced
knowledge and the ability to apply that knowledge in clinical situations

The PEP exam was updated in 2018 and will continually be revised with new items that ensure
the exam will test current knowledge and application skills of prescribing psychologist
candidates. Practicing prescribing and medical psychologists had input into the quality control
and statistical rigor of the PEP exam. For example, Division 55 members served on the ASPPB
committees for the PEP and served as SMEs for item writing. The test blueprint was in part
constructed based on a survey of prescribing professionals within Division 55 to establish what
areas of practice should be included as part of the training, knowledge base, and competencies of
those seeking RxP privileges. Another review used SMEs to establish the minimum standards for
each test item necessary to meet the minimum level of competency for an entry level prescriber.

The LAMP listserv also is used to ask for consultation from fellow medical psychologists (as
they are titled in the State of Louisiana) on anonymized, individual cases. Medical psychologists
provide one another with advice, issues of concern, suggestions for alternative treatments, and
personal experiences with treatment of similar cases. This process enhances the knowledge and
skill of all members of the LAMP group and keeps everyone up-to-date on best practices.
Louisiana has three weekend-long conferences per year to provide ME/CE credits for its
members. Information is used to update members on current standards of practice based on the
recent literature and standards of care.

Workshops and other educational sessions at APA conventions are sponsored by APA Division
55 and are used to educate attendees about the latest issues in prescribing psychology, status of
states’ efforts to pass prescriptive authority legislation, and to encourage graduate students in
psychology to consider enrolling in the specialized training to become candidates for earning
prescription privileges.
Clearly, the response to question #1 immediately above illustrates the robustness of the research in clinical psychopharmacology and the study of effectiveness of psychopharmacological interventions. ASAP, for the Specialty, communicates to members of the Specialty the importance of life-long learning and quality improvement processes. ASAP has proven its commitment to ensuring that the quality and usefulness of practitioners’ services are continuously improving. ASAP provides a robust array of CE presentations at the APA annual convention. CE programs for 2019 and titles of programs accepted for CE in 2019 are attached. ASAP also sponsors or co-sponsors additional CE opportunities at its own yearly convention, as well as conventions or conferences of affiliated presenters. Listed in the attached Appendix VII are details of the above indicated CE presentations and over 70 web-based programs in topics pertinent to the clinical psychopharmacologist. ASAP’s website also hosts the Research Council, which meets twice a year and provides reviews of current literature and monitors significant articles and trends in clinical psychopharmacology. The division website also has a link to ASAP’s Continuing Education Committee and lists CE opportunities (https://www.apadivisions.org/division-55/research/continuing-education/index).

To continue and enhance the Clinical Psychopharmacology Specialty’s ongoing commitment to quality improvement, when this postdoctoral specialty is approved, we intend to join the Council of Specialties (CoS) and we will seek ABPP specialty board status by the American Board of Professional Psychology (ABPP) as a board certification as a quality improvement mechanism. This process requires a work sample and materials provided are reviewed by a committee of experts in the specialization, ensuring that practitioners are knowledgeable, qualified, and able to provide the most effective services possible. The petitioners have begun discussing both CoS membership and ABPP board certification with those organizations.

3. Describe how the research and practice literature are regularly reviewed for developments which are relevant to the specialty’s skills and services, and how this information is publicly disseminated. Give examples of recent changes in specialty practice and/or training based upon this literature review.

APA Division 55’s Research Council functions to review current literature for the Division members. One of the tasks for the Council is to keep abreast of the current literature related to the practice of prescribing clinical psychopharmacologists and to post relevant articles on the Division’s website as well as circulate the information on the Division’s listserv. In addition, several esteemed members of Division 55 such as Jack Wiggins and Joseph Comaty frequently post articles for discussion to the Division 55 DISCUSS listerv. Dr. Comaty serves as chair of the Division 55 Research Council and also as the Division 55 Liaison to CONA.

In addition to FDA-approved pharmacotherapeutic approaches to mental health care, the Research Council reviews other types of treatments of which clinical psychopharmacologists need to be aware. Examples include:

- The use of ketamine (off-label) to treat depression;
- The experimental evaluation of hallucinogenic drugs such as psilocybin to treat PTSD;
- Changes in the treatment of individuals with SSRIs who have risk for bleeds because
SSRIs increase bleeding risk (a concern associated with using SSRIs for those on Coumadin; or use in the elderly who are fall risks and may sustain head trauma secondary to intracranial bleed; etc.);

- Use of transcranial magnetic stimulation (rTMS) to treat resistant depression;
- Use of benzodiazepines in the elderly and those with existing cognitive problems;
- Moving away from using medications to treat occasional sleep problems in favor of behavioral approaches;
- More awareness of suicide risk and how to assess for it;
- The expanded understanding of how to treat pregnant women who may need to continue taking psychotropic medication during pregnancy;
- The increased awareness of the treatment of pain in light of the current opioid epidemic;
- New psychotropic treatments for transgender patients with PTSD
- New pharmacotherapeutic approaches to treating the elderly

The changes in current use of psychotropic medications and modifications in their application are often incorporated into the academic and clinical experiential components of the courses within the APA-designated clinical psychopharmacology training programs;

Further, changes in the use of psychotropic medications are disseminated in numerous professional journals and newsletters, including:

- FDA alerts;
- DEA alerts to those who hold a DEA license;
- CDC alerts;
- Cochrane library reviews;
- Information posted on federal websites like SAMHSA and NIMH;

Beers criteria, which are updated regularly by AGS
Clinical psychopharmacologists also are informed of current trends in treatments by reviewing literature summaries such as:

- Carlat Report: Psychiatry;
- NEJM Journal Watch: Psychiatry;
- Medscape email alerts;
- Psychiatry Advisor email alerts;
- Medpage Today email alerts.

4. **This criterion includes two components: one focusing on past activities around accreditation (X.4.a), and the other on future activities around accreditation (X.4.b).**

For X.4.a, describe how the specialty has promoted and participated in the process of accreditation in order to enhance the quality of specialty education and training. Also, indicate how many programs in this specialty have been accredited at the doctoral and/or postdoctoral level.

As described earlier, clinical psychopharmacology programs are involved in the APA designation program, rather than APA accreditation programs administered by the Commission on Accreditation (CoA).
This Specialty differs from other specialties in that prescribing psychologists, except in one state, receive specialized training after they are licensed health service psychologists (HSPs). So, all prescribing psychologists will have been trained at the doctoral level in programs that graduate clinical, counseling, clinical neuropsychology, and school psychologists. Many of those will be APA-accredited doctoral programs that also require a clinical internship. Following graduation, most prescribing psychologists will have traditional postdoctoral supervised training prior to licensure as an HSP.

Some prescribing psychologists have, in the past, or are currently site visitors for the APA CoA and have been members or chairs of site visit teams to doctoral programs, internship programs, and postdoctoral programs that are accredited by the APA.

There are four specialized postdoctoral training programs for clinical psychopharmacologists that have received designation from APA: Farleigh Dickinson University; New Mexico State University; California School of Professional Psychology at Alliant International University, and University of Hawai‘i Hilo Daniel K Inouye College of Pharmacy. These programs grant the postdoctoral Master of Science in clinical psychopharmacology degree that is required for clinical psychopharmacologists to qualify for prescription privileges. Clinical psychopharmacologists and members of Division 55 have served or currently serve as faculty of these training programs.

These four programs are reviewed by the APA RxP Designation Committee to determine if they meet the required level of training and experience that is consistent with the APA Model RxP Curriculum. The four programs have met these criteria and are what is referred to as “Designated” training programs for clinical psychopharmacology. Some prescribing psychologists and members of Division 55 have been or currently are members and chair of this APA RxP Designation Committee.

Prescribing psychologists and members of Division 55 recently served on a special committee of APA that oversaw updating of the policies and procedures for the RxP Designation Committee.

In addition, in those states where clinical psychopharmacologists come under the regulatory control of the state psychology licensing board, some clinical psychopharmacologists and members of Division 55 have served on those boards as members and/or chairs and preside over determinations of a candidate’s qualifications for licensure as a psychologist, but also licensure/certification as a prescribing psychologist.

Clinical psychopharmacologists and members of Division 55 served as members and in one case the chair of both the Job Task Analysis Committee (JTA) and the Examination Development Committee (EDC) of ASPPB, which was responsible for the revision and updating of the PEP. Many more prescribing psychologists, some of whom may have been members of Division 55, also served as subject matter experts (SMEs) and exam item writers contributing to the development of a new exam blueprint and updated exam.
items for the test. This is the national exam that all prescribing psychologists must pass to gain prescription privileges. By serving these important functions, prescribing psychologists directly ensure that this examination adequately tests the required entry knowledge necessary for safe and competent practice of prescribing psychologists.

Clinical psychopharmacologists and members of Division 55 have served as consultants to committees in states that are planning to submit legislation to establish prescriptive authority laws; some have testified before those legislatures or have submitted written testimony in support of such legislation.

For X.4.b, describe how the specialty will promote and participate in the process of accreditation in the future in order to enhance the quality and sustainability of specialty education and training. Also, explain how the future accreditation support activities will be consistent with the Education and Training Guidelines: A Taxonomy for Education and Training in Professional Psychology Health Service Specialties (see: http://www.apa.org/ed/graduate/specialize/taxonomy.pdf) and will be sustained (e.g., training CoA site reviewers with specialty expertise, sponsoring CoA self-study workshops, fostering the development or ongoing operation of a specialty training council, administrative agreements and protections, financial support, etc.). Explain how these activities will result in an increase in the number of specialty programs that are accredited at the doctoral and/or postdoctoral level.

Explain that the training model for prescribing psychologists is different from all other specialties:

- The Specialty will encourage members to serve on their state regulatory boards of psychology;
- The Specialty will encourage members to serve on the APA RxP Designation Committee;
- The Specialty will encourage members to serve as faculty to either teach or oversee practicum experiences for students in those designated training programs;
- The Specialty can serve as consultants to support development of additional RxP training programs in states that have recently passed RxP laws;
- The Specialty can continue to provide support and consultation to those states wishing to put forth new legislation for RxP laws;
- The Specialty will continue to provide volunteers to serve on ASPPB PEP exam committees and to continue to serve as SMEs and item writers to ensure that the exam remains current.

ASAP and the Specialty of Clinical Psychopharmacology are aware of the Education and Training Guidelines: A Taxonomy for Education and Training in Professional Psychology Health Service Specialties (APA, 2012). We have discussed throughout the petition that designated programs in the Specialty have a Major Area of Study at the postdoctoral level in Clinical Psychopharmacology. Consistent with our Taxonomy (see below), there is a graded progression from Exposure, Experience, Emphasis, and finally a Major Area of Study. The other two learning opportunities can occur at the doctoral or internship level. It is the Specialty’s intent to complete the taxonomy once a member of the CoS and disseminate that to all training councils.
to make certain that it is clear how the Specialty sees these learning opportunities and at what level. Below you will find the Taxonomy that describes the hierarchy of Clinical Psychopharmacology.

Reference


<table>
<thead>
<tr>
<th>LEVEL OF TRAINING</th>
<th>Doctoral Training</th>
<th>Internship</th>
<th>Post doctoral</th>
<th>Post-Licensure</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAJOR AREA OF STUDY</td>
<td>Not available at doctoral level</td>
<td>Not available at internship level</td>
<td>Clinical Psychopharmacology (100% of practicum cases in Clinical Psychopharmacology) based on having had at least two doctoral courses or two postdoctoral site courses in RX and Emphasis based preparation at the internship level. All cases are supervised and Rx prescribed by a licensed provider able to legally prescribe.</td>
<td>Applied Clinical Psychopharmacologist</td>
</tr>
<tr>
<td>EMPHASIS$^2$</td>
<td>At least 2 courses in psychopharmacology and six hours of practica involved in observing prescriptive activities including offering suggestions to prescriber regarding potential treatments or research paper</td>
<td>One rotation (at least three months or 20 clinical cases) based on two doctoral level courses in psychopharmacology or specialized supervision at the internship site</td>
<td>At least 50% of time working with patients receiving Rx and supervised by licensed provider able to legally prescribe …</td>
<td>Those already independently licensed in psychology may seek an Emphasis in Clinical Psychopharmacology by completion of the postdoctoral MSCP to prepare for consultation completing the requirements for an Emphasis as described at the postdoctoral level</td>
</tr>
<tr>
<td>EXPERIENCE$^3$</td>
<td>One Course in psychopharmacology</td>
<td>40 hours of practicum with</td>
<td>Postdoctoral fellows from other specialties may</td>
<td>Those licensed psychologists seeking the</td>
</tr>
</tbody>
</table>

$^2$ Emphasis is designed for level two preparation; the ability to consult and recommend medication but not prescribe

$^3$ Experience is designed to allow learner to prepare for discussion of medications but not consult or prescribe
<table>
<thead>
<tr>
<th>Exposure</th>
<th>Requirement</th>
<th>Description</th>
<th>Competencies Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1 course in psychopharmacology</td>
<td>Observation of Rx prescription with one course at the doctoral level or at the internship site</td>
<td>Postdoctoral fellows may spend up to 20% of their time observing Rx prescribing and have at least one course in Rx</td>
</tr>
</tbody>
</table>

4 Exposure prepares the learning to have an introductory knowledge base of information regarding psychotropic medication but to never consult or prescribe.
Criterion XI. Guidelines for Specialty Service Delivery. The specialty has developed and disseminated guidelines for practice in the specialty that expand on the profession's general practice guidelines and ethical principles.3

Commentary: Such guidelines are readily available to specialty practitioners and to members of the public and describe the characteristic ways in which specialty practitioners make decisions about specialty services and about how such services are delivered to the public.

1. Describe the specialty-specific practice guidelines for this specialty. Please attach. How do such guidelines differ from general practice guidelines and ethics guidelines? (In this context, professional specialty guidelines refer to modes of conceptualization, identification and assessment of issues, and intervention planning and execution common to those trained and experienced in the practice of the specialty. Such professional guidelines may be found in documents or websites including, but not limited to, those bearing such a title or as described in a variety of published textbooks, chapters, and/or articles focused on such contents.)


In response to a series of articles describing the professional challenges faced by psychologists as they become prescribers (e.g., Antonuccio, Danton, & McClinton, 2003; Buelow & Chafetz, 1996; DeLeon, Robinson Kurpius, & Sexton, 2001; McGrath et al., 2004), it was recognized in discussions among members of the American Psychological Association (APA) Division 55, the American Society for the Advancement of Pharmacotherapy, that the implications of the APA (2002b) Ethical Principles of Psychologists and Code of Conduct (the Ethics Code) specifically for psychologists’ involvement in pharmacotherapy merited clarification. Beth Rom-Rymer, president of the division at that time, convened a task force to explore the issue. Three of seven task force members were psychologists with prescriptive authority in the civilian or military sector. The task force also included representation from Division 18 (Psychologists in Public Service). The Practice Guidelines Regarding Psychologists’ Involvement in Pharmacological Issues were published in 2011 (See Appendix B; http://www.apa.org/pubs/journals/features/pharmacological-issues.pdf).

Members of the task force reviewed relevant literature and participated in formulating the content of the guidelines. The literature review began with a document entitled “Policies of Other Organizations and Background Materials: Pharmaceutical Marketing, Gifts, and Financial Support” (APA, 2002c), which provided primary sources addressing the relationship between prescribing professionals and the pharmaceutical industry. This document was updated with more recent publications on the topic. Medicine, nursing, pharmacy, and the pharmaceutical industry have all generated guidelines relevant to the objective practice of pharmacology. These were reviewed as well. Finally, the task force considered specific implications of the APA’s (2002b) Ethics Code for psychologists’
involvement in the practice of pharmacotherapy.

The guidelines presented in this document are intended to provide a resource to psychologists interested in the issue of what represents optimal practice in relation to pharmacotherapy. They are not intended to apply to those psychologists who may choose not to become directly or indirectly involved in medication management regardless of their level of competency. As background to these guidelines, it may be noted that psychologists’ activities reflect three different levels of involvement in pharmacotherapy. The first level occurs when the psychologist serves as the prescriber. As indicated above, psychologists currently can only prescribe in the U.S. military and in two states. The population of psychologists with prescriptive authority is therefore small, but is one that is sure to increase in size in the coming years, as 3 additional states now have statutes granting psychologists prescriptive authority. It should be noted that some psychologists prescribe only through a second license, for example, as a nurse practitioner or physician. Such individuals determine for themselves the degree to which the guidelines presented here for prescribing are relevant to their activities.

The second level occurs when psychologists actively collaborate in medication decision-making. The psychologist is not ultimately responsible for the decision that is made in these circumstances, but does play a substantive role in the decision-making process. VandenBos and Williams (2000) found that 87% of their sample of practicing psychologists reported they had been involved in the decision to prescribe medication for at least one of the patients on their caseloads. However, it is unclear what role they played in the decision, especially since over 80% also indicated this was not a frequent occurrence. On the other hand, 7% of respondents indicated they participated in the decision to prescribe for more than half their patients, suggesting that they were consistently and perhaps formally involved in decisions about the appropriateness of medications for their patients. This might for example include making recommendations concerning specific classes of medications to be used or even specific medications, dosing, or other aspects of the treatment regimen, though the prescribing professional maintains ultimate responsibility for the decision.

The third, and probably most common, level of involvement occurs when psychologists provide information that may be relevant to pharmacotherapy decision-makers. The information-providing psychologist may offer opinions relevant to the pharmacotherapy, but does not play a formal role in the decision-making process. Examples of providing information include reporting concerns about the treatment to the prescribing professional, referring patients for a medication consultation, pointing patients to vetted referral or information sources, or discussing with patients how to address their concerns about the medication with the prescriber. It is likely that many of those psychologists who indicated to VandenBos and Williams (2000) that they were infrequently involved in the decision to prescribe did so in an information-providing role. Table 1 summarizes the characteristics of the three roles.

Some of the guidelines presented in this document are targeted specifically at the population of psychologists with prescriptive authority. Others are considered relevant in any case where the psychologist is actively involved in decision-making, whether as a prescriber or
collaborator. Still others are considered applicable any time a psychologist is involved in the practice of pharmacotherapy whether as a prescriber, collaborator, or information-provider. Given the unique elements of the population of psychologists who can prescribe on the one hand, and the frequency with which psychologists participate in collaborative and information-providing activities on the other, it was considered important to provide guidelines appropriate to each set of activities. However, it is important to recognize that a principle of optimal practice may have different implications in the context of active participation versus providing information.

Technology-based alternatives to face-to-face contact with patients are proving particularly useful in the conduct of pharmacotherapy (Hyler, Gangure, & Batchelder, 2005). The telephone and internet have dramatically affected the nature of interactions with patients; videoconferencing can expand these options even further, particularly in rural areas. E-prescribing and e-mail correspondence between patients and providers regarding medication will be used more and more as a mechanism for service delivery. For example, prescription renewal can often be safely and efficiently accomplished without face-to-face contact between the prescribing professional and the patient. These guidelines can be considered relevant across all modalities of contact.

The Practice Guidelines regarding psychologists’ involvement in pharmacological issues differs from general practice guidelines and ethics guidelines in that they have to do with general professional conduct in a professional domain of psychological practice. Practice guidelines refer to statements that suggest or recommend general principles of optimal behavior or conduct for psychologists. Guidelines differ from general practice guidelines and ethics guidelines because they are specifically designed for a particular psychological specialization. Given the degree to which involvement in pharmacotherapy represents a new activity for psychologists, and the level of controversy that has surrounded the use of psychotropic medications in general and the prescriptive authority movement for psychologists in particular, it is tempting to proscribe or mandate certain behaviors or professional practices associated with pharmacotherapy. This is not the intention of these specialty guidelines. Nothing in these guidelines is intended to contravene any limitations set on psychologists’ activities based on ethical standards, federal or local statutes or regulations, or – for those psychologists who work in agency and public settings – the policies of those agencies in which they provide services.

As in all other circumstances, psychologists must be aware of the standards of practice for the jurisdiction or setting in which they function and comply with those standards. In particular, psychologists who participate in collaboration and providing information should be aware of local statutory and regulatory language or opinions by the state board of psychology concerning their involvement in pharmacotherapy and the use and interpretation of laboratory tests. Fourteen jurisdictions have explicitly identified certain activities related to medication management as within the scope of practice of psychology—California, District of Columbia, Florida, Louisiana (for psychologists without prescriptive authority), Maine, Massachusetts, Missouri, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Tennessee, and Texas—though the description of permitted activities and circumstances under which they are permitted varies. In contrast, several states have passed legislation
prohibiting discussion of medication by school personnel (including psychologists employed by schools). Even so, the legal status of involvement in pharma-therapy for psychologists who cannot prescribe remains an open question in other jurisdictions.

Guidelines for the Clinical Psychopharmacology Specialty differ from those created for other APA-governed organizations in that prescribing medications is unique to this practice. For this reason, the specialty looks to practice guidelines used by other professions that prescribe including psychiatry (See https://www.psychiatry.org/psychiatrists/practice/clinical-practice-guidelines) and nursing (See https://www.ncsbn.org/campaign-for-consensus.htm). Nurse practitioners are in the process of seeking a consensus amongst different states to create uniformity in prescribing practices; as prescribing psychology expands to different states, the national guidelines will be expanded for Clinical Psychopharmacology Specialists as well.

Reference

2. How does the specialty encourage the continued development and review of practice guidelines?

The Specialty encourages the continued development and review of practice guidelines by hosting workshops at state and APA annual conventions. As more and more states permit prescribing psychologists to practice, Division 55 serves the function of keeping membership up to date on new rules and how they intersect with overall guidelines and practices. In Illinois, for example, Dr. Beth Rom-Rymer speaks, on a weekly basis, on the 2014 law, that gives prescriptive authority to licensed clinical psychologists with specialized training in clinical psychopharmacology and medicine. In these talks, Dr. Rom-Rymer discusses the practice guidelines and encourages further development. Other states that have passed legislation over the last few years have developed similar outreach and educational efforts for psychologists and the community at large. In Hawai‘i, where efforts to pass legislation continue, members of the state association and neighbor island communities and Division 55 educate potential prescribers and work with legislators and the state board of psychology to ensure that legislation matches current APA guidelines. In 2019, the Practice Guidelines will be formally reviewed by Division 55 and submitted for APA approval. A task force is being developed by the Division Board of Directors and discussions are being planned for the 2019 APA convention.

3. Describe how the specialty's practitioners assure effective and ongoing communication to members of the discipline and the public as to the specialty's practices, practice enhancements, and/or new applications.

The specialty’s practitioners assure effective and ongoing communication to members of the
discipline and the public as to the specialty’s practices, practice enhancements, and/or new applications, through books and articles and monthly and annual workshops and symposia.

4. **How does the specialty communicate its identity and services to the public?**

The Specialty communicates its identity and services to the public by lobbying for prescriptive authority legislation in various states. There are 178 prescribing psychologists in the United States and at least that many who have taken and passed the Psychopharmacology Exam for Psychologists (PEP). Currently, there are five states that have achieved prescriptive authority: New Mexico (2002), Louisiana (2004), Illinois (2014), Iowa (2016), and Idaho (2017). Many additional states are currently lobbying their state legislatures for prescriptive authority legislation and/or are organizing their state’s psychologists in preparation for a major lobbying effort. These states include, but are not limited to: Hawai‘i, California, Ohio, Oklahoma, Texas, Nebraska, Florida, Connecticut, and Vermont. In those states in which psychologists have gained prescriptive authority, the prescribing psychologist network, with the support of its interested community partners, are steadfastly working to provide comprehensive mental health services to the most underserved citizens in our country. Division 55 and its members conduct outreach in various ways, including through participation in community healthcare events, working with local medical providers, publishing articles about clinical psychopharmacology and giving presentations at APA conferences and local CE events.

The specialty also is served by upwards of five hundred non-prescribing, licensed clinical psychologists who specialize in clinical psychopharmacology in their consulting work. These pharmacological consultants live and work in every state around our nation and communicate their specialty status with marketing materials and a presence in social media.

References


Criterion XII. Provider Identification and Evaluation. A specialty recognizes the public benefits of developing sound methods for permitting individual practitioners to secure an evaluation of their knowledge and skill and to be identified as meeting the qualifications for competent practice in the specialty.

Commentary: Identifying psychologists who are competent to practice the specialty provides a significant service to the public. Assessing the knowledge and skill levels of these professionals helps increase the ability to improve the quality of the services provided. Initially practitioners competent to practice in the specialty may simply be identified by their successful completion of an organized sequence of education and training. As the specialty matures it is expected that the specialty will develop more formal structures for the recognition of competency in practitioners.

1. Describe the formal peer review-based examination process of board certification including its use of a review and verification of the individual’s training, licensure, ethical conduct status, and a peer assessment of specialty competence.

*If this is a new petition for recognition describe a) current methods by which individual practitioners can secure an evaluation of their knowledge and skill and be identified as meeting the qualifications for competent practice in the specialty and b) efforts to establish a formal peer review-based examination process of board certification including a detailed plan and timeline.

Clinical Psychopharmacology is unique amongst other psychological specialties. It is unique because to attain the specialty, the major area of study, as described above in Criterion X of the Education and Training Guidelines taxonomy (APA, 2012), a fully licensed psychologist must attain an additional license to prescribe in addition to their license as a psychologist in their state, territory, Indian Health Service, or branch of the military. This unique status forces the specialist in Clinical Psychopharmacology at the level of a major area of study to use the professional title accepted and created by their state, territory, or licensing legislation and regulations. Notwithstanding this practical limitation, the specialty has worked to differentiate the specialist and proposed board-certified practitioner as having a board certification in Applied Clinical Psychopharmacology (ACP). This title clearly defines the practice of clinical psychopharmacology by highlighting its applied status, clearly differentiating the prescribing psychologist who applies, by prescribing, clinical psychopharmacology, from a psychologist who has attained a Master of Science in Clinical Psychopharmacology (MSCP), but has not attained prescribing privileges. ASAP supports creating and clearly delineating the levels of training needed to attain licensure and seeks to have the specialty of clinical psychopharmacology recognized with a board certification. ASAP, through its advocacy efforts, works to support legislation to enable specialists in clinical psychopharmacology to prescribe and works toward uniformity of license title. The following are the titles used in the states where psychologists have been granted the right to prescribe: New Mexico – Prescribing Psychologist; Louisiana - Medical Psychologist/Advanced Practice Medical Psychologist; Illinois – Prescribing Psychologist; Idaho – Prescribing Psychologist*; and Iowa – Prescribing
Psychologist*; in the military and the Indian Health service – Prescribing Psychologist. The territory of Guam also uses the title “Prescribing Psychologist.”

*Due to the recent passage of the enabling legislation allowing psychologists to prescribe, there are no active prescribing psychologists in these states at the present time.

Clinical psychopharmacology is currently seeking formal recognition as a specialty by the APA CRSPPP to act as a step towards the creation of board certification in Applied Clinical Psychopharmacology by ABPP. Preliminary contact has been made with the American Board of Professional Psychology in furtherance of this process (Evers, 2018). In response to this contact, ASAP has begun a review of the American Board of Professional Psychology Specialty Board and Subspecialty Affiliation Application Manual (ABPP, 2017). The importance of attaining board certification in clinical psychopharmacology cannot be over-stressed. It is an important requisite step, as is acceptance by APA CRSPPP of the Specialty of Clinical Psychopharmacology in establishing a consistent credential that denotes the advanced level of training and experience. Both processes work to improve public safety by identifying experts in the field (Kaslow, Graves, & Smith, 2012; Rozensky, 2014).

A summary of the enacted legislation that allows psychologists to prescribe is listed below and has been described in this petition. While state laws vary in some details as the result of the legislative process, the requirements for licensure for prescribing psychologists have a similar basic structure.

Consistent in the requirements for prescribing psychologist is that they have successfully completed doctoral level training and experience that has allowed them to become a licensed psychologist in their state or territory. Beyond this doctoral level training and appropriate professional licensure to practice psychology, the prescribing psychologist must attain a postdoctoral master’s degree in clinical psychopharmacology, successfully pass the Psychopharmacology Examination for Psychologists (PEP) administered by the Association of State and Provincial Psychology Boards (ASPPB; https://www.asppb.net/page/PEPEXam), and then complete a clinical practicum as defined by state law. In furtherance of the goals of creating both quality and consistency in postdoctoral training in clinical psychopharmacology, APA has created a designation process indicating educational programs that fulfill APA standards in training in this specialty (APA, 2012). In addition to the above indicated structured training, each state where specially trained psychologists can prescribe has mandated a defined number of CE credits to maintain their license. CE credit requirements are detailed in Criterion VIII.

Details on the requirements for the PEP examination and individual state requirements are indicated below:

The following ASPPB applicant requirements have been established for admission to the PEP:

1. Applicant must hold an active license for independent practice as a psychologist at the doctoral level with demonstrated training and experience as a health service provider as defined in the ASPPB Model Act.
2. Applicant must submit an attestation that the psychologist's licensure is in good standing with no current or pending disciplinary actions.
3. Applicant must present a transcript demonstrating successful completion of a postdoctoral psychopharmacology training program from a regionally accredited institution in the U.S. or a provincially- or territorially-chartered institution in Canada. The psychopharmacology program must be APA-designated or demonstrate coursework that meets the criteria outlined for designation.
4. Applicant must submit an attestation verifying that the applicant has been a health service provider for a period of at least two years.

A final component of licensure to prescribe is experiential or practicum training. The number of hours of training and number of patients required varies by state law and thus identification of a given provider is dependent on documentation of required hours by state.

For New Mexico:

- 80-hour practicum in clinical assessment and pathophysiology
- 400-hour supervised practicum treating no fewer than 100 patients

For Louisiana:

- Three years of experience practicing as a medical psychologist. For those individuals licensed under R.S.37:1360.55(A), such experience shall be deemed to have commenced with the issuance of the original certificate of prescriptive authority issued by the Louisiana State Board of Examiners of Psychologists.

- Treatment of a minimum of one hundred patients including twenty-five or more involving the use of major psychotropics and twenty-five or more involving the use of major antidepressants which demonstrate the competence of the medical psychologist.

For Illinois:

- A full-time practicum of at least 14 months and not more than 28 months of supervised clinical training totaling at least 1,620 hours, including a research project.
- During the clinical rotation phase, students complete rotations in Emergency Medicine, Family Medicine, Geriatrics, Internal Medicine, Obstetrics and Gynecology, Pediatrics, Psychiatry, Surgery, and one elective of the student’s choice.

For Idaho:

- Clinical experience of at least 400 hours/100 separate patients.
- A minimum of 2000 hours under supervision in not less than 24 months and not more than 48 months.

For Iowa:
• 600 patient contacts for clinical experience.
• A practicum of at least 400 hours/100 individual patients.

For the Military and Indian Reservations:

• Clinical psychologists need to participate in a psychopharmacology practicum for eight (8) hours per week for at least one year. The total amount of hours per year is at least 400 hours.
• A minimum of 100 separate patients.

Based upon a count of current prescribing psychologists, at least 178 individuals will qualify to apply for board certification in clinical psychopharmacology once the specialty is recognized.

2. Describe how the specialty educates the public and the profession concerning those who are identified as a practitioner of this specialty. How does the public identify practitioners of this specialty?

The specialty of clinical psychopharmacology is identified by its unique status of the only psychological specialty that allows an appropriately trained psychologist to prescribe psychopharmacological agents. It is also unique because it requires a special license beyond the license to practice psychology. Each state that has passed prescription privileges for psychologists has issued an additional license indicating a prescribing psychologist’s ability to prescribe medication differentiating them from other licensed psychologists and mental health providers. Division 55: The American Society for the Advancement of Pharmacotherapy (ASAP) maintains a website that provides the public and other psychologists information about the field of clinical psychopharmacology and the practice of clinical psychopharmacology. ASAP also publishes a newsletter that is available to Division 55 members and online to the public http://www.apa.org/about/division/div55.aspx. Individual state psychological associations, especially in states where prescribing authority has already been granted, are actively involved in disseminating information about prescribing psychology with specific understanding of their state and population. Information about the profession is disseminated primarily by the American Psychological Association (APA).

The “Taxonomy of Clinical Psychopharmacology,” included in this petition in Criterion X, outlines the levels of knowledge of clinical psychopharmacology and clearly delineates the levels of knowledge to the public and the profession.

• Practicing licensed psychologists who have reached the first level of training in clinical psychopharmacology (‘exposure’) have limited understanding of the field and as such can act to guide their patients to appropriately trained medical providers and identify side effects that may need to be followed up by a medical provider.
• Practicing licensed psychologists who have reached the level of experience through education and supervision are still limited in their knowledge of clinical psychopharmacology, but can make more informed referrals for the patients under their care and be more aware of the potential side effects of medications.
- Psychologists who have completed their post-doctoral master’s degree in clinical psychopharmacology (MSCP) either in states with or without prescriptive authority have been specially trained in effectively consulting and collaborating with a prescribing provider. This level of ‘emphasis’ is indicated by the psychologist adding the initials “MSCP” after their doctoral degree credential (e.g., PsyD, PhD, EdD).

- Applied Clinical Psychopharmacologists have post-doctoral master’s degree in clinical psychopharmacology, passed the PEP examination and completed the experiential experience as required by their state granting them the ability to prescribe and discontinue pharmacological agents. States that have granted prescriptive authority to psychologists have use different titles identify them. In Louisiana New Mexico, Illinois, Idaho, the Indian Health Service and the Military they are called Prescribing Psychologist and in Louisiana the are called Advanced Practice Medical Psychologist. and

Clinical Psychopharmacology (public definition) The field of psychology that addresses the psychological, pharmacological, and social factors that relate to the diagnosis and treatment of psychological disorders across diverse populations and settings.

The American Society for the Advancement of Pharmacotherapy (ASAP) maintains an active website that disseminates information about clinical psychopharmacology to both the public and other professionals. ASAP supports and sponsors CE programs on clinical psychopharmacology at national, state, and local psychological conventions. A listing of these programs can be found in Appendix VII. ASAP also sponsors CE presentations through other groups and providers that provide training not only for psychologists, but also other related medical professions. These activities act to educate other professions about clinical psychopharmacology. Psychologists trained in clinical psychopharmacology are often invited to present at meetings sponsored by affiliated professionals.

ASAP also provides information on its website that is designed to educate the public and other professionals about clinical psychopharmacology. The website https://www.apadivisions.org/division-55/index includes information on clinical psychopharmacology, including links to legislative and advocacy activities and resources, Continuing Education Committee, Research Council, Diversity Council, and postdoctoral Training Council. ASAP also publishes an electronic newsletter, “The Tablet,” which includes professionally-oriented material of interest to prescribing psychologists and those interested in prescriptive authority for the profession. ASAP also provides the download of a Quick Reference to Psychiatric Medications, https://www.apadivisions.org/division-55/resources/quick-reference. ASAP educates the public and other professionals via active social media presence on both Facebook and Twitter. ASAP educates the public and other professionals via active social media presence on both Facebook and Twitter.

3. Estimate how many practitioners there are in this specialty (e.g., spend 25% or more of their time in services characteristic of this specialty and provide whatever demographic information is available) and how many are board certified through the process described in item 1.
Psychologists have been writing prescriptions since 1995 when, after graduating from the first Psychopharmacology Demonstration Project (PDP) class in 1994, Cmdr. John Sexton, PhD, began working at the Naval Medical Center in Portsmouth, Virginia. Sexton became the nation's first independent prescribing psychologist when he wrote his first prescription on February 10, 1995 (APA, 2003). Since that time, with the passage of enabling legislation in 5 states and Guam and regulations allowing prescribing in the military and in the Indian Health Services, over a

There is no single, centralized mechanism for identifying all psychologists who identify themselves as practicing clinical psychopharmacology. The best way to estimate the number in practice who devote 25% or more of their time in working with the specialty is to look at the states and areas where psychologists can prescribe and count the total number of prescribing psychologists. That number, established by recent survey, is 178. Additionally, those psychologists who have received their MSCP and act as consultants in psychopharmacology in states where prescriptive privilege has yet to be passed and/or have taken the Psychopharmacology Exam for Psychologists (PEP) exam is estimated to be 498.

An ABPP board certification in clinical psychopharmacology has yet to be formally established. There is clear data presented in this document that illustrates the robustness of the specialty, including APA-designated postdoctoral education programs, practice guidelines presented earlier in the petition, an independently administered and scored content examination (PEP), and APA model legislation. There are more than 140 psychologists currently enrolled in postdoctoral master’s degree programs in clinical psychopharmacology and that number grows yearly. There are more than 900 graduates of postdoctoral master’s degrees in clinical psychopharmacology and there are 498 MSCP graduates who have taken the PEP examination. There are 178 licensed prescribing psychologists across 5 states, Guam, and the military and Indian Health Service. Prescribing psychologists have written over 1 million prescription since 1995 with no serious adverse events.

Clinical psychopharmacology has been practiced for over 23 years. It has solid scientific underpinnings, education and training guidelines, practice guidelines, and organizational oversight (ASAP). ASAP also provides ongoing monitoring of current research trends, maintains a training council that guides the evolution of the postdoctoral master’s degree in clinical psychopharmacology education and both offers and supplies ongoing information about CE offerings in clinical psychopharmacology and related topics to provide for career development for the clinical psychopharmacologist. ASAP is also beginning the process of applying to create a board certification in clinical psychopharmacology.
References
Dittmann, M. (2003). Psychology’s first prescribers: DoD-trained psychologists have been paving the way so that other might one day prescribe. *Monitor on Psychology, 34*(2), 36.


Appendices
D & E-2019
Appendix D
Practicum Manuals
New Mexico State University
CSPP- Alliant International University
Fairleigh Dickinson University
UH Hilo
Appendix D
Practicum Manuals
New Mexico State University
CSPP- Alliant International University
Fairleigh Dickinson University
UH Hilo
Manual for Training Prescribing Psychologists
Southern New Mexico Family Medicine Residency
Memorial Medical Center Las Cruces - New Mexico

Premier Training for Prescribing Psychologists – More Services for New Mexico

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# Table of Contents

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IX. Appendix
1. Mission and Vision

The Mission and Vision Statements of the Southern New Mexico Family Medicine Residency Program (SNMFMRP) are as follows:

**Mission**

We teach, collaborate, lead, and inspire to transform the education and health of our whole community.

**Vision**

To transform health care education and delivery to be socially responsible and eliminate health disparities in New Mexico.

The Mission Statement above commits the Southern New Mexico Family Medicine Residency (SNMFMRP) to health care education broadly defined. As a consequence of this commitment, the SNMFMRP has been and remains a primary site of education and training for licensed clinical psychologists who are receiving post-doctoral Masters in Clinical Psychopharmacology, a Physical Assessment Practicum, and a Residency in Prescribing Psychology through New Mexico State University. This training in the management of psychotropic medications prepares the student to obtain a Prescription Certificate in New Mexico. Additionally, licensed psychologists from other jurisdictions have also been accepted for training in the past. Some have then elected to stay and practice either part or full time in New Mexico.

The SNMFMRP’s is dedicated to inter-professional patient centered care is, therefore, an ideal setting for the collaboration of prescribing psychologists (RxP’s) in training with family physicians and other professionals including clinical pharmacists, advance practice nurses, psychiatrists, and primary care behavioral providers in training. Because the scope of the interprofessional training and interprofessional collaborative practice within the residency is so broad, the RxP is trained within the context of the interprofessional team’s collaboration enabling the RxP student to learn from, benefit from and contribute to the healthcare provided by other team members.

The SNMFMRP adheres to the standards of the Accreditation Council for Graduate Medical Education (ACGME) which promulgates standards for all residency education. Therefore the RxP is exposed to highest standard of care which is the current “state of the art” in medicine. Additionally, the RxP’s education is, at a minimum, adherent to the standards for the training of and the practice of RxP’s as mandated by the rules of the State of New Mexico under the New Mexico Board of Psychologist Examiners (Attachment #1), and to those promulgated by American Psychological Association (APA) (Attachment #2 & #3).

The SNMFMRP provides an opportunity for the RxP to train while providing care in both inpatient and outpatient settings. A majority of the RxP trainee’s experience occurs in the outpatient setting at the Family Medicine Center. However, the RxP trainee has an opportunity to participate in patient care in collaboration with the Family Medicine Inpatient Service in most of the units of the hospital.
The training of the RxP occurs under the supervision of the Residency Director, John Andazola, MD, FAAFP with the collaboration of the other residency faculty, resident physicians and representatives of other specialties. The training is coordinated by the Behavioral Science Faculty (Daubney Harper-Boland, PhD, Prescribing Psychologist Mentor Donna Winslow, PhD, MA, and the Residency Administrator (John Kutinac, MA).
2. Background

Three Types of Practicum Experiences for Prescribing Psychologist Trainees

The Model Curriculum of the American Psychological Association, and the laws and regulations of the State of New Mexico require that there be two practicum experiences. Additionally, the laws and regulations of the State of New Mexico require that there be a third training experience. The first is termed the 80 Hour Physical Assessment Practicum and the second is named the 400 Hour Residency in Prescribing Psychology which is comprised of a training experience that involves the management of psychotropic medications for a minimum of 100 patients. This second experience is named the “400 Hour/100 Patient Prescribing Practicum” elsewhere.

Each of these hour specifications (80 hours and 400 hours) indicates the minimum number of hours to be spent in the training experience and the amount of time can be increased based on the training needs of the RxP trainee or desire of the trainee for additional training. The third type is the Fellowship in Prescribing Psychology (2 year Conditional Prescription Certificate) period during which the RxP trainee is licensed to manage medication using his/her own signature, National Provider Identification Number (NPI), Drug Enforcement Agency number (DEA) and Controlled Substances License (New Mexico State Board of Pharmacy) while remaining under the weekly supervision of a primary (and secondary supervisor, if named) and while collaborating with the patient’s primary care provider (PCP). A trainee may apply and be accepted for any or all of these opportunities which are completed in the sequence above.

These training experiences are conducted under the direction of the Residency Director of the SNMFMRP, and the experiences provided meet the APA’s and State of New Mexico requirements for the Conditional Prescribing Psychologist and Prescribing Psychologist licensure but are structured so that they provide an additional depth of experience which enhances the RxP’s readiness to practice upon the completion of the training. At this time these training experiences also appear to meet the educational requirements of the states of Louisiana, Iowa and Idaho. Since licensure as a Prescribing Psychologist in New Mexico qualifies the RxP for a scope of practice that includes the management of psychotropic medications, the trainee may use this training to enable practice in the Indian Health Service (HIS), Uniformed Services of the United States, and Public Health Service at the current time. The applicant is responsible for determining whether these training experiences meet the needs and requirements of the trainee’s anticipated professional setting and activities.

80 Hour Physical Assessment Practicum

There is little specific guidance given to training programs regarding the specific skills and goals that are sufficient for training Prescribing Psychologists (RxP’s) in the Model Curriculum of the APA or in the laws and regulations of the State of New Mexico. The attached documents include a the American Psychological Association’s (APA) guidelines as well as an accounting of the State of New Mexico’s rules and regulations which consist of one brief reference and an evaluation form permitting a deduction of expectations from the questions included on the form. The spirit of the expectations are that the RxP will be trained in pathophysiology and physical assessment at a level sufficient to enable the RxP to participate with the patient’s other providers in providing healthcare to the patient and that the patient’s health is not compromised by treatments provided by the RxP. The RxP must be competent to provide the set of assessments of a patient’s health status which are part of the routine management of psychotropic medications (e.g. taking vital signs, complete a review of systems, reconcile the patient’s medications, order appropriate laboratory and other diagnostic tests, etc.)

Although the RxP will be collaborating with the patient’s Primary Care Provider (PCP) in initiation, adjusting and/or discontinuing psychotropic medication, it is essential that the RxP have a sufficient breath of knowledge and
experience to understand the effects of the medications and treatments provided on the health status of the patient. Therefore, education regarding physical assessment and monitoring is important and will enhance the RxP’s understanding of the impact of psychotropic medications on the functioning of the patient’s body. With this training is the RxP will better able to provide a second perspective on the health status of the patient as a member of the healthcare team and to provide the PCP with data as to the patient’s health status as well as to actively monitor the patient’s response to psychotropic medication and use that information in decision making regarding the initiation, adjusting, switching and discontinuation of medications.

The State of New Mexico’s Board of Psychologist Examiner’s regulations regarding the specific necessary content of the 80 Hour Physical Assessment Practicum are contained only on the evaluation form provided by the board for reporting the completion of the practicum. (See Attachment # 4) That form stipulates that the practicum should insure that the RxP has learned and can demonstrate the following skills or has gain these experiences:

a. Assessing a diverse and significantly ill medical population?
 b. Observing the progression of illness and continuity of care of individual patients?
 c. Adequately assessing vital signs?
 d. Demonstrating competent laboratory assessment?
 e. Demonstrating competence in physical and health assessment techniques?

Thus far, RxP’s licensed in New Mexico have been certified by their practicum supervisors to have completed at a satisfactory level the amount of the above that can be experienced and demonstrated in 80 hours. Most have “followed” PCP’s and participated to some degree in the assessment of patients. (see the letter attached from the SIAP/NMSU curriculum which was developed to be given to potential PCP supervisors to educate them regarding the expectations for the experience (Attachment # 5). While much can be gained by “following” and “observation,” this experience is enriched by at the SNMFMRP by focusing the 80 hour experience to prepare the RxP for real practice by focusing on those skills that the RxP will need and use in practice. Therefore we provide more structure to this experience in order to enhance its usefulness. A further explanation of the specific content of the 80 Hour Practicum experience are detailed below.

400 Hour Residency in Prescribing Psychology

Compared to the physical assessment practicum, there is more specific guidance available regarding the content of the 400 hour/100 patient practicum. The following questions are drawn from the evaluation form promulgated by the New Mexico Regulation and Licensing Department (see Attachment #6) for a copy of the evaluation form):

a. The practicum must meet the following requirements:
   i. A minimum of 100 separate patients
   ii. A range of disorders listed in the DSM
   iii. Both acute and chronic conditions?
   a. The 400 hours includes only time spent with patients to provide evaluation and pharmacotherapy and time spent in collaboration with treating healthcare providers
   b. As much as is possible given the RxP’s focus of practice, the patients must be sufficiently diverse including such factors as gender, ages throughout the life-cycle, various ethnicities, socio-cultural backgrounds, & various economic backgrounds.
   c. The primary or secondary supervisor is onsite
   d. The applicant consults with the primary or secondary supervisors, before making decisions about the pharmacological treatment of patients
   e. The primary/secondary supervisor(s) review the charts & records
   f. There is at least one hour of supervision for every eight hours of Patient contact
g. The applicant keeps a log of the dates & times of supervision
h. The practicum is completed in no less than 6 months and no more than three years
i. The practicum completed within the 5 years preceding this application
j. The applicant, during the initial contact with patients or legal guardians, adequately explained his/her status as a licensed psychologist receiving specialized training in psychopharmacology and being under supervision (Please enclose copies of any printed material)
k. The applicant is to maintained a log, without patient ID, which included basic identifying data
l. The supervisor wrote at least two formal evaluations of the applicant, preferably at the midpoint and at the end of the practicum, assessing progress, competence, and description of any deficiencies where competency had not been achieved
m. The supervisor, submitted copies of these evaluations to the applicant & the training director
n. The supervisor and any secondary supervisors were in consultation regarding the applicant’s progress, competence, and any deficiencies
o. The primary supervisor certifies that the applicant has successfully completed the 400-Hour/100-Patient practicum, as specified in the Prescribing Psychologist Act and is competent to obtain a conditional prescription certificate, all other requirements being satisfactorily completed?

These regulations were established to structure the training in a manner that insured the sufficiency of the training and the adequacy of the supervision. The model suggests a model of RxP training with a minimum of one licensed physician solely responsible for the training of the RxP. It is unclear whether the regulators who promulgated this model anticipated that an RxP might be trained formally in a family medicine residency with multiple collaborating physicians and supervising physicians available and sharing the responsibilities for the training of the RxP. The model of supervision and collaboration at the SNMFMRP is designed to meet and exceed the expectations for collaboration with physicians and supervision experiences as anticipated by the rules of the State of New Mexico. At this time all those psychologists who have trained through the SNMFMRP have had training that is accepted as sufficient by the Psychology Licensing Board of the State of New Mexico.

This training during the 80 and 400 hour experiences at the SNMFMRP also meet the required elements of the supervised clinical experience from the American Psychological Association which are as follows:

**Supervised Clinical Experience**

The supervised clinical experience should be an organized sequence of education and training that provides an integrative approach to learning as well as the opportunity to assess competencies in skills and applied knowledge. The intent of the supervised clinical experience is two-fold:

i. To provide ongoing integration of didactic and applied clinical knowledge throughout the learning sequence, including ample opportunities for practical learning and clinical application of skills.

ii. To provide opportunity for programs to assess formative and summative clinical competency in skills and applied knowledge.

In addition to the didactic hours, the number of hours needed to achieve mastery of clinical competencies is expected to be substantial and will vary across individuals.

The supervised clinical experience is intended to be an intensive, closely supervised experience. The range of diagnostic categories, settings and characteristics such as development across the lifespan, gender, health status, and ethnicity reflected in the patients seen in connection with the supervised clinical experience should be appropriate to the current and anticipated practice of the trainee. It should allow the practitioner to gain exposure to acute, short-term, and maintenance medication strategies.
The trainee gains supervised clinical experience with a sufficient range and number of patients in order to demonstrate threshold performance levels for each of the competency areas. In order to achieve the complex clinical competency skills required for independent prescribing, a sufficient number of supervised patient contact hours must be completed. The supervised clinical training experiences must be approved by the training director prior to commencing that placement. The program must document the total number of supervised clinical experience hours that students experience. These must be broken out by face-to-face patient contacts versus other clinical experiences, and the clinical competencies employed.

In addition, the method and appropriate benchmarks for assuring each clinical competency must be described. These methods may include, for example, performing physical examinations and presenting cases based on actual and simulated patients. The trainee recommends/prescribes in consultation with or under a designated supervisor(s) with demonstrated skills and experience in clinical psychopharmacology and in accordance with the prevailing jurisdictional law.

The program is responsible for the approval and oversight of each supervised clinical experience. Final approval of the supervised clinical experience must be provided by the program prior to initiation.

The supervised clinical experience may be integrated into each level of education and training, provided in a final summative practical experience or a combination of both according to the design of the program. The last item in Domains of Instruction, Sections III-VI, encompasses areas where clinical experience can be integrated with didactic instruction.

In either event, the trainee must demonstrate competency in his or her ability to integrate didactic learning and applied clinical skill in a capstone competency evaluation.

There is also a responsibility to maintain competency through continuing education over the lifespan of maintaining and practicing in prescriptive authority or collaborative activities with prescribing professionals.

The clinical competencies targeted by this experience include the following:

1. PHYSICAL EXAM AND MENTAL STATUS
   Knowledge and execution of elements and sequence of both comprehensive and focused physical examination and mental status evaluation, proper use of instruments used in physical examination (e.g., stethoscope, blood pressure measurement devices, etc.), and scope of knowledge gained from physical examination and mental status examination

2. REVIEW OF SYSTEMS
   Knowledge and ability to systematically describe the process of integrating information learned from patient reports, signs, symptoms, and a review of each of the major body systems

3. MEDICAL HISTORY INTERVIEW AND DOCUMENTATION
   Ability to systematically conduct a patient clinical interview producing a patient’s medical, surgical and psychiatric (if any) history as well as a family medical and psychiatric history, and to communicate the findings in written and verbal form
4. ASSESSMENT: INDICATIONS AND INTERPRETATION
   Ability to order and interpret appropriate tests (e.g., psychometric, laboratory and radiological) for the purpose of making a differential diagnosis and for monitoring therapeutic and adverse effects of treatment

5. DIFFERENTIAL DIAGNOSIS
   Use of appropriate processes, including established diagnostic criteria (e.g., ICD-10, DSM-V), to determine primary and alternate diagnoses

6. INTEGRATED TREATMENT PLANNING
   Ability to identify and select, using all available data, the most appropriate treatment alternatives and to sequence treatment within the larger biopsychosocial context

7. CONSULTATION AND COLLABORATION
   Understanding of the parameters of the role of the prescribing psychologist or medical psychologist and working with other professionals in an advisory or collaborative manner to effect treatment of a patient

8. TREATMENT MANAGEMENT
   Application, monitoring and modification, as needed, of treatments and the writing of valid and complete prescriptions

3. Required Skills and Abilities – Basis of Training at the SNMFMRP

The following are skills and abilities required at a minimum for routine safe practice. The RxP’s training should encompass all of these activities which the RxP must be able to engage in skillfully. Therefore, training in and an opportunity to demonstrate competence at each of the activities below should take place in either the 80 Hour Physical Assessment Practicum, or during the 400 Hour Residency in Prescribing Psychology.

Below is a comprehensive list of tasks and competencies which may be required a skilled RxP who is evaluating and treating a patient who is establishing care with the RxP for the first time. This first set is the focus of the 80 Hour Physical Assessment Practicum. At some time during the practicum, all of the following should be practiced:

   a. Obtain a current complaint and problem list.
   b. Take a comprehensive health history.
   c. Reconcile the patient’s medication list.
   d. Document the patient’s personal, developmental, social, academic and family history.
   e. Complete and document a Review of Systems.
   f. Take, document and review vital signs.
   g. Evaluate cranial nerve function, basic reflexes, balance and coordination.
   h. Evaluate and document the patient’s mental status.
   i. Demonstrate the ability to examine the results of laboratory, radiological, physical assessment and consultation reports to identify abnormal results which can then be reviewed in collaboration with an appropriate medically trained professional to consider the limits, additional risks and implications they present for psychotropic treatment planning.
   j. Propose and order appropriate laboratory assays and additional physical evaluations necessary for determining the appropriateness of the patient for treatment with psychotropic medication and other alternative treatment recommendations.
During the 400 Hour Medication Management Practicum in addition to the above the RxP will develop skills and demonstrate competencies in the following in:

l. Assess and document the patient’s psychological and psychiatric functioning including developing a differential diagnosis with a plan for clarifying the diagnosis when appropriate.

m. Review the patient’s medical and psychiatric problem list and formulate hypotheses regarding the impact of the patient’s medical status on choices for the treatment of their medical and psychological conditions.

n. Evaluate all potential beneficial and adverse interactions among the patient’s medical and psychotropic medications, assessment procedures and potential treatments.

o. Identify appropriate treatment options including psychopharmacological agents including the most appropriate alternative choices and provide the rationale underlying this medical decision making.

p. Formulate and document a treatment plan that demonstrates consideration of the above and takes into consideration the patient’s history, economic and social status and conditions, cultural factors and the results of the current medical and psychological examinations that takes the current best evidence and recommended treatment protocols into consideration.


r. Prepare treatment plans that include strategies for evaluating the patient response to medication, monitoring for adverse effects of the medication and anticipated adjustments to, changes to, and discontinuation of medication based on the patient response.

s. Demonstrate knowledge of and sensitivity to the ethical and legal issues raised by the provision of psychotropic medication as part of a treatment plan.

t. In addition to the above, a skilled RxP will need to demonstrate the following when providing ongoing care for an established patient when there is an onset of new physical symptoms. These skills should be demonstrated effectively in the 400 Hour Medication Management Practicum.

i. The ability to take a focused history and to generate data on current complaints

ii. Complete a review of those systems relevant to the new complaint

iii. Development of a differential diagnosis

iv. Proposing the necessary elements for a thorough physical assessment including a physical exam, laboratory and other studies completed by the patient’s primary care provider(s)

v. Incorporate data from the history, ROS, physical assessment and other studies into a treatment plan with coordination regarding which team member will manage which elements of the treatment

vi. Consider potential complications resulting from treatment

vii. Establish the elements of an effective evaluation of the results impact of the treatment

All of the above have been incorporated during the three levels of training of RxP’s at the SNMFMRP

Following the 80 hour and 400 hour practica, the RxP may become licensed as a Conditional Prescribing Psychologist and continue in training through the SNMFMRP. The RxP will continue to perform assessment and treatment under the direction of the primary supervisor and secondary supervisor (if any) in the same manner as is required of the RxP completing training during the 400 Hour Medication Management Practicum. However, as the RxP is now a Conditional Prescribing Psychologist, the RxP is able to generate prescriptions under the RxP’s own New Mexico state licenses and DEA number following the appropriate consultations and under the supervision of the supervisor or the supervisor’s delegate.
4. Documentation

80 Hour Physical Assessment Practicum

a. Although the RxP will not be documenting in the patient’s chart during the 80 hour Physical Assessment Practicum, the RxP will prepare and maintain documentation of each examination during which the RxP observed or participated (See Attachment 4). The RxP will retain a copy and prepare a Documentation Dossier which will be made available to the supervisor at the end of the practicum.

b. The Documentation Dossier will be retained as part of the RxP’s training file.

c. The RxP’s Documentation Dossier will provide the supervisor with the data which confirms that the trainee satisfied the requirements of the State of New Mexico for satisfactory completion of the 80 Hour Physical Assessment Practicum.

d. At the end of the 80 hour training period the RxP will generate and submit to the supervisor a summary of learning objectives for the practicum which have been achieved and a statement regarding the RxP’s future goals for continuing education regarding the physical assessment of patients presenting for psychological treatment. This summary will be included in the Documentation Dossier.

e. The supervisor will review the Documentation Dossier and complete the appropriate evaluation of the RxP’s practicum performance.

400 Hour Medication Management Practicum

a. During the medication management practicum, the RxP will be documenting patient encounters in the electronic medical records used at the SNMFMRP’s Family Medicine Clinic and in the electronic medical record utilized in inpatient settings at Memorial Medical Center (MMC).

b. The documentation of outpatient encounters showing the management of patients in the outpatient clinic must conform to the standard of care for clinical psychologists and for prescribing psychologists.

   i. The documentation for clinical psychologists have been established by CMS that mandate the minimum documentation required both for initial encounters and for other encounters for established patients.

   ii. The additional documentation required of prescribing psychologists includes all of the above but can include thorough documentation of the patient’s health history, a review of systems, medication reconciliation at each encounter, laboratory and imaging findings, new laboratory and imaging findings, and medical decision making leading to a treatment plan that includes both non-biological (psychotherapeutic, etc.) and biological interventions. The encounter note must also include documentation of physician consultation and medical clearance for management of medication. (See Model Encounter Notes for Initial Encounters and Encounters for Established Patients (Attachment #8))

   iii. The encounter document must be signed by the RxP, and cosigned by a prescribing psychologist mentor and finally signed by the physician supervisor or the supervisor’s delegate.
5. Supervision

Overview of Rules and Regulations for Supervision of Prescribing Psychologist Trainees

The SNMFMRP is a center for interprofessional education with a central mission of training Family Physicians for the region. It is, therefore, an ideal setting for the training of RxP’s because it includes many primary care providers (interns, residents, senior residents, attending physicians at MMC) with whom to collaborate and many licensed physician faculty who are experienced in the management of psychotropic medications consistent with the rules of the State of New Mexico. During training at the SNMFMRP, all licensed physicians may act in the capacity of collaborating physician for the patient. The role of Primary or Secondary Supervisor is fulfilled by the residency director and physician faculty of the residency. The program also provides a Prescribing Psychologist Mentor as an advisor to and consultant for the RxP Practicum Student or Fellow.

The practice model mandated by the State of New Mexico is that RxP’s will obtain “medical clearance” for prescribing psychotropic medication(s) from the patient’s primary care physician. All interns, residents, senior residents as well as many attending physicians are primary care providers with whom the RxP Resident and Fellow can practice collaboration and obtaining medical clearance. During the training period, the RxP trainee will, under the supervision of the Primary or Secondary Supervisor, consult with the patient’s primary care provider regarding the proposed treatment plan to obtain concurrence from the PCP that the plan meets the standard of care for insuring the medical appropriateness of the medication plan.

Specific State Regulations

All physician faculty of the SNMFMRP meet the standards set by the rules of State Board of Psychologists Examiners as they have “sufficient expertise, competence, and credentials in the areas in which they teach or supervise” (16.22.23.8 B, R,). At the SNMFMRP, all physician supervisors “hold an active, unrestricted license in their field of practice in the jurisdiction in which the program resides or where the supervision is being provided,” and are “experienced and skilled in the prescription of psychopharmacological drugs.”

The primary supervising physician is “responsible for the overall supervision of the applicant; however, training may be assigned to other licensed physicians, i.e., secondary supervisors, as designated by the primary supervising physician and the training director of the program.”

Other rules promulgated by the State Board of Psychologist Examiners governing the supervision of the RxP Resident and Fellow include the following:

“Supervision by the primary supervising physician shall be provided on a one-to-one basis for at least four hours a month and should total at least forty-six (46) hours of one-to-one supervision per year.”

“Each supervising physician shall maintain a supervision log containing the dates, duration, and place or method of supervision, the same identification code for patients as used by the psychologist with a conditional prescribing certificate in the summary reports, and a brief description of the content of supervision. The log shall be submitted to the board upon request.”

Supervising physicians shall supervise no more than 3 conditional psychologists during the same supervisory period.

Federal Regulation Regarding Physician Supervision

The model of supervision at the SNMFMRP must conform to the requirements of the Center for Medicaid Services (CMS) which oversees the model supervision of primary care physicians. Under the Primary Care Exception of
CMS, a physician Preceptor may supervise no more than 4 physician interns or residents at a time. The Preceptor, however, is supervising the practice of physician interns who are, as part of their training, learning to collaborate in care with other team members including, in this case, RxP Residents and RxP Fellows. The RxP collaborates with the patient’s Primary Care Provider, and consults with a Secondary Supervisor (resident physician supervised by the Physician Preceptor.) By this chain of supervision, the RxP is being supervised by a licensed physician who meets the criteria set forth by the State Board of Psychologist Examiners. Additionally the RxP obtains medical clearance for the treatment plan by consultation with the patient’s designated PCP who is, in turn, supervised by the Physician Preceptor.

**Chain of Supervisory Responsibility at the SNMFMRP**

As reviewed above specific roles mandated by rules of the state and CMS are fulfilled by faculty and residents of the SNMFMRP:

a. **Primary Supervisor** – A Specific Designated Physician Faculty Member
b. **Secondary Supervisor(s)** - Physician Preceptors Through Supervision of Residents as they Collaborate with the RxP Trainee
c. **Collaborating Primary Care Physician** – Physicians (Faculty and Residents) Providing Direct Patient Care

Supervision and Documentation Requirements for the three types of RxP Trainees:

a. During the 80 Hour Physical Assessment Practicum, the RxP’s participation will be monitored by Collaborating Primary Care Physicians and the documentation of the participation will be reviewed by a Primary or Secondary Supervisor who will certify the successful completion of the Practicum.
b. During the 400 Hour Residency in Prescribing Psychology supervision will be provided by a Primary or Secondary Supervisor and medical clearance for specific treatment management will obtained from the Collaborating Primary Care Physician.
c. During the Fellowship in Prescribing Psychology supervision will be provided by a Primary or Secondary Supervisor.
6. **Summary of Specific Requirements - 80 Hour Physical Assessment Practicum**

The 80 Hour Practicum is organized into two 5 day parts. During the first part, the RxP Practicum Student will observe the assessment and treatment of a diverse population of patients by primary care physicians, both residents and faculty. During the second part, the RxP Practicum Student will be assigned to begin the assessment of patient

**Specific Expectations – Part 1 of the 80 Hour Practicum:**

a. Arrive at the Family Medicine Center by 7:45 am in order to gain entry
b. Be present at the morning huddle (7:55 am) and the afternoon huddle (12:55 pm) in order to register presence and availability to follow physicians and obtain an assigned physician to follow from the physician preceptor and managing nurse
c. Have needed tools (stethoscope, reflex hammer etc.) as well as form for documenting visits
d. Follow physician as patients are treated
   i. Review the patient’s chart with the physician prior to the examination of the patient when possible
   ii. Upon entering the encounter room, introduce yourself to the patient: (“My name is Dr. __________ and I’m a psychologist. I’m learning more about physical health and how people are treated medically so that I can learn to prescribe mental health medications.)
   iii. Collaborate with the physician in obtaining informed consent from the patient for the RxP Practicum Student’s observation and participation in the exam: (“Is it alright with you if Dr. Student is here during your exam? Can Dr. Student also look in your ear?)

  e. Participate in the physical assessment as coordinated by the physician and as appropriate to the patient’s condition wishes and needs
  f. Review laboratory and other studies with the physician as appropriate
  g. Discuss the physician’s findings and treatment plan following the examination while being sensitive to the physician’s time constraints
  h. Share any observations regarding the patient’s psychological status with the physician while remaining sensitive to the physician’s time constraints
  i. Follow the physician if the physician consults with the preceptor in order to observe the physicians summary of the patient’s health status and proposed treatment plan
  j. Document the patient encounter using the documentation form (see Attachment #7)
  k. Continue to follow the physician in the treatment of the next patient (if appropriate) or seek reassignment to another physician from the nurse or physician as needed
  l. Remember hygiene protocol: cleans hands prior to entering the encounter room and upon leaving the encounter room

**Specific Expectations – Part 2 of the 80 Hour Practicum**

a. Continue the routines of arrival and departure times as above
b. Request an assignment to a senior resident who will act as a physical assessment teacher
c. Once daily for 5 days (minimum)
   i. Remind physician that you need the experience of doing the initial assessment of a patient in order to be assigned a patient who is presenting with an acute complaint or establishing care for the first time
   ii. Obtain a patient assignment and review any patient records (prior encounters, laboratory tests and other studies, etc.)
   iii. Follow the MA or Nurse as the patient is being roomed and participate in the taking of vital signs
   iv. Introduce yourself (as above) and obtain the patient’s informed consent (as above) for your participation in the interview and examination
v. Participate in the completion of screening questionnaires (e.g. PHQ 2, PHQ 9, whatever we call those CMS mandated questions)
vi. Obtain detail on the patient’s Current Complaint
vii. Obtain and Health History
viii. Review the Patient’s Medications and reconcile the medications as appropriate
ix. Complete a Review of Systems
x. Report your findings to the physician including your conclusions regarding the systems which need to be examined further, which laboratory tests and other studies might be ordered, and any preliminary hypotheses regarding the patient’s diagnoses
xi. Follow the physician as s/he enters the room and examines the patient – participate as described above
d. Document the encounter using the form provided and indicate your role in the examination on the document

Specific Expectations – Documentation of the 80 Hour Practicum

Prepare a dossier documenting the 80 Hour Practicum. Include a summary of the patient encounters during the 80 hours to which the patient encounter forms (described above) should be appended. Provide documentation that:

a. A diverse and significantly ill medical population was seen during the practicum
b. The progression of illness and continuity of care of individual patients were observed
c. That vital signs were assessed
d. That laboratory findings were assessed

Present the dossier detailed above to the supervising physician with a blank copy of the State of New Mexico’s Verification by Supervisor of 80-Hour Practicum in Primary Health Care form [Attachment #4] for completion and provide the supervisor with an addressed envelope and so that the completed form can be sent to the training director of the New Mexico State University’s Masters in Clinical Psychopharmacology Program (or the training director of another program) with 2 copies made available to you so that a copy may be submitted to the State Board of Psychologist Examiners at the time of application for a Conditional Prescription Certificate.

7. Summary of Specific Expectations – 400 Hour 100 Patient Prescribing Practicum

The 400 Hour Residency in Prescribing Psychology requires presence at the SNMFMRP a minimum of four days per month. It is usual that the RxP trainee will be present for a minimum of one full day each week, it is possible for an RxP trainee to be present for two days every other week in order to provide sufficient opportunity for follow-up with patients who are being treated with psychotropic agents in combination with other psychological interventions.

a. Arrive at the Family Medicine Center by 7:45 am in order to gain entry
b. Review personal schedule of patients
c. Be present at the morning huddle (7:55 am) and the afternoon huddle (12:55 pm) in order to register presence and availability for referrals from providers
d. Review each scheduled patient to examine
   i. New patients – review background information including treatment history, problem list, medication list, laboratory and other studies and the reason the patient has been referred
ii. Established patients – review any new information regarding patient progress/problems occurring since previous session.
e. Review laboratory and other studies with a physician as appropriate
f. Meet with patient as scheduled
   i. New patients -
      1st. Examine the patient’s age to determine whether the patient or a parent or guardian must provide informed consent for treatment by you.
      2nd. Upon entering the encounter room, introduce yourself to the patient: (“My name is Dr. __________ and I’m a psychologist who is learning to treat patients with medication as well as other psychological treatments. I am working with your medical doctor to help you. Do you have any questions about that?”) After you have responded to the patient’s questions, obtain informed consent of the patient (or from the appropriate individual) for treatment. (“Are you willing to work with me?”)
   ii. Returning patients – assess the patient for any new acute CC.
   iii. Obtain and document the history of the CC.
   iv. Reconcile the patient’s medications – include OTC’s and other substances – check for potential interactions and ADE’s (e.g. sedation, agitation, dizziness)
   v. Complete a Review of Systems
   vi. Complete a current examination of the patient including an evaluation of the patient’s mental and neurological status as appropriate
   vii. Establish a working differential diagnosis or confirm diagnosis(es)
   viii. Formulate a treatment plan
   ix. Report your findings to a collaborating physician including a plan for a further examination (e.g. lab orders, EKG, other studies)
   x. Once agreement about the treatment plan has been obtained, request that the physician place orders for additional studies and medications as indicated by the follow up plan
   xi. Document the agreement of the collaborating physician with the treatment plan
   xii. Provide education to the patient regarding the potential risks and benefits of alternatives in the treatment plan.
   xiii. Obtain consent from the patient for the proposed treatment plan
   xiv. Establish a plan for follow-up with the patient with an assessment of the impact of the treatment on the patient occurring no more than two weeks after the plan has been initiated
   xv. Provide the patient with all contact information and specific instructions regarding how and when to obtain assistance with adherence to the plan or management of acute changes in health status (e.g. onset of side-effects/adverse effects, increase in suicidal ideation)
   xvi. Document the encounter, completing the documentation on the same day that the encounter takes place (see Attachment #8)
   xvii. Forward the encounter note to the prescribing psychologist mentor for an endorsement who will then forward the note, once it is complete, to the collaborating physician for signature

g. Prepare a Supervision Log that includes:
   i. Days in clinic and times of supervision by the supervising and/or collaborating physician and the amount of time spent in consultation
   ii. A log of patient’s treated (without patient ID) with “basic identifying data” to include primary diagnosis, age, gender, ethnic background
   iii. Request that the supervising physician review your patient care notes to provide formative education and summative performance evaluations
   iv. Monitor personal time in collaboration and supervision to insure being in compliance with the regulations of the State of New Mexico regarding 400 hour practicum students
h. Provide the supervising physician with an evaluation form (see Attachment #4) and request that it be completed after 50 patients are treated and retain copies for personal records and for the academic file.

i. Provide the supervising physician with the Verification by Supervisor of 400-Hour Practicum Treatment a Minimum of 100 Patients with Pharmacotherapy (Attachment #6) at the end of the practicum for submission to the State Board of Psychologist Examiners when applying for a Conditional Prescription Certificate and retain copies for personal records and for the academic file as well as for submission to the State Board.

8. **Summary of Specific Expectations – Fellowship in Prescribing Psychology (2 Year Conditional Prescription Certificate)**

The expectations for patient care provided by the Conditional Prescribing Psychologist Fellow are similar to those of the Prescribing Psychology Resident (400 Hour Practicum above) with the exception that the Fellow will have prescriptive authority through the Conditional Prescription Certificate (CPC) enabling the Fellow to write medical orders including laboratory orders and other studies and to execute prescriptions. The requirements governing the scope of practice, collaboration with the patient’s primary care provider, and documentation of patient care remain the same.

The candidate for the Fellowship in Prescribing Psychology will provide the physician supervisor with the Proposed Supervisory Plan (see Attachment #10, pp. 12 – 16). This form will be submitted along with the completed CPC application to the State Board of Psychologist Examiners in order to obtain the CPC license.

In Order to Practice as a Conditional RxP Fellow at the SNMFMMP the Fellow must:

a. Hold a Conditional Prescription Certificate (CPC) from the State of New Mexico Regulation and Licensing Department (see complete application Attachment #10)

b. Hold a Controlled Substances License from the State of New Mexico Board of Pharmacy

c. Hold a DEA License from the Drug Enforcement Authority of the United States

d. Be admitted to the Medical Staff of Memorial Medical Center as an Allied Health Provider

e. Be credentialed as a provider in the Department of Family Medicine at Memorial Medical Center

f. Be established as an employee or contracted provider for Memorial Medical Center

g. Code encounters for the appropriate billing for services (time based or E & M as appropriate)

h. Maintain standards of practice that are consistent with the expectations of Prescribing Psychologists for safe and effective practice

i. Fulfill the duties and roles expected of a Prescribing Psychologist including patient care, teaching, collaboration with other providers, services on SNMFMMP committees as assigned, and participation in the appropriate department and hospital meetings

j. Provide the physician supervisor with the appropriate form for documentation of the Fellow’s two years of service (or part thereof) for submission to the State Board of Psychologist Examiners in application for a Prescription Certificate for psychologists

The Fellow in Prescribing Psychology will usually be an employed provider at the SNMFMMP through employment by Memorial Medical Center. The exact duties assigned to the Fellow shall be specified in the employment or engagement contract with Memorial Medical Center.

It is the responsibility of the Fellow to insure that the rules for the practice of psychologists with the CPC are met including: the number of patients seen, conditions treated, interventions and medications used, and collaboration and supervision documented. It is also the responsibility of the Fellow to maintain standards of practice that adhere to the ethical guidelines Memorial Medical Center, the Accreditation Council for Graduate Education and the New Mexico Psychological Association and the American Psychological Association.
9. **Summary of Specific Expectations for Supervision**

In order to efficiently facilitate documentation of collaboration, supervision including supervision logs, and preparation of supervisory plans and verification of performance evaluations the RxP is responsible to be familiar with all of the requirements for documentation and to complete the documentation for which the RxP is directly responsible and to prepare drafts of all other documents for review and completion by the Primary and Secondary Supervisors. The details of documentation for the 80 Hour Physical Assessment Practicum are detailed above. RxP’s completing the 400 Hour Residency in Prescribing Psychology and the Fellowship in Prescribing Psychology must document collaboration with the Primary Care Provider in the patient encounter form and to prepare a draft of the supervision log for review by the Primary Supervisor and provide the Primary and Secondary Supervisor with the necessary forms for evaluation of and verification of the RxP’s training.
Dear Student:

Congratulations on completing the didactic portion of the Master of Science in Clinical Psychopharmacology (MSCP) program and you are now ready for your experiential skill development. There are two practica that will help you synthesize what you have learned and bring you to a new depth of understanding about psychopharmacology. In addition, the medical supervisors of previous MSCP graduates have indicated that they achieved a greater appreciation of the biopsychosocial model of intervention from practicum students. As you participate in the practica, you will be helping to create a new model of interdisciplinary care as well as establishing new interprofessional relationships.

**You will complete one practicum as part of the Alliant MSCP program.** The first practicum is eighty hours in a primary care setting to be supervised by a primary care provider in which you will practice basic assessment skills. **Should you seek to acquire prescriptive privileges, you will likely need to complete an additional practicum or clinical rotation as required by the state from which you would be licensed to prescribe and which would be a requirement to qualify as a prescribing or medical psychologist.** The second practicum will be defined by the state regulations for psychologists seeking prescriptive authority. For example, New Mexico requires a minimum of 400 hours of your treatment of 100 patients with psychotropic medication along with psychotherapy. In the sections of this manual that follow, the description of the 80-hour practicum with a primary care provider and forms related to it are discussed.

While you are a clinical psychopharmacology student at the Postdoctoral MS in Clinical Psychopharmacology Program of CSPP-Alliant International University, your activities will be covered by the Alliant International University insurance (relevant forms to document this to your supervisors are provided in later sections of this manual). However, now is a good time for you to determine if your liability insurance carrier will cover you as a prescribing psychologist once you receive your conditional prescribing license and full prescribing license. The APA Insurance Trust is presently covering prescribing and medical psychologists and has given their commitment to continue to do so. However, not all insurance carriers are willing to cover prescribing psychologists. If your insurance carrier is not open to covering you for the minimum of $100,000 / $300,000 liability, you will need to consider alternate coverage.
WHAT YOU MUST REMEMBER WHEN SETTING UP YOUR 80-HOUR PRACTICUM WITH A PRIMARY CARE PROVIDER

To complete Practicum Training, each student is required to obtain eighty hours of clinical experience, which is aimed at practicing physical assessment skills and integrating pathophysiological knowledge into clinical thinking. Students will need to make arrangements with a provider who agrees to allow them to accompany the provider as patients are seen for primary care. A letter to the supervising provider is attached that describes the objectives of this eighty-hour practicum to aid you in setting up the appropriate experience.

With the permission of the primary care provider, the student and the primary care provider explain to patients that you are in a postdoctoral program studying to improve skills in physical assessment and request the patient’s permission to review health history records and participate to the extent the primary health care provider deems appropriate. Most patients are interested in this process and happily cooperate with the practice.

Included here are forms to be used with the eighty-hour practicum in primary care. As explained above, there is a letter you may give to the provider explaining the purpose of the practicum. The second form is an evaluation form to be completed by your primary care provider following each session (day) of your eighty-hour practicum. This form may be used either as your primary means of recording your practicum experience or as backup if you are utilizing practicum tracking software specified by the MSCP program. A copy of this completed form must be returned to the Director of the Postdoctoral MS in Clinical Psychopharmacology Program (via paper, fax or electronic attention psychopharmacology@alliant.edu). Keep a copy of this signed form for your own records to submit to the state for which you may be applying for a Prescribing Psychology License.

Some institutions require a contract between Alliant International University and the institution (hospital, clinic, etc.). The third form, a Memorandum of Understanding (MOU), can be used in that way and can be signed by the Director of the institution and Alliant International University, if necessary.

Some institutions may want proof that the clinical psychopharmacology students are covered by the Alliant International University insurance. Such information can be provided by request to document that you are covered by university insurance.
Form A

Letter to the Primary Care Provider or Agency
Dear Dr.:

I am a psychologist pursuing an 80-hour practicum in a primary care setting as part of the training requirements for the Postdoctoral Master Degree Program in Clinical Psychopharmacology (PMDPCP) of the California School of Professional Psychology at Alliant International University. This program is one of four designated programs approved by the American Psychological Association to provide core education in clinical psychopharmacology to licensed psychologists and meets requirements of those states that have approved prescriptive authority to psychologists that have completed all of the requirements of that particular state. While most states still do not recognize psychologists as independent prescribers, the advanced postdoctoral training and experiential practicum will improve their knowledge to work collaboratively with physicians and improve patient care.

The purpose of this practicum is to gain practical experience with a physician within a primary care setting. I am expected to "shadow" the physician, read records, ask appropriate questions, and learn and practice basic physical assessment skills as determined by the supervising primary care physician. Specifically, I will gain experience in the following areas:

A. Students will demonstrate the ability to take a complete biopsychosocial history.
B. Students will demonstrate their ability to assess vital functions.
C. Students will demonstrate the ability to conduct a basic physical examination including a basic neurological examination.
D. Students will demonstrate the ability to identify appropriate laboratory tests for the assessment of general physical functioning and to interpret the results and findings from those examinations, with an emphasis on basic liver, thyroid, kidney, blood and cardiac/pulmonary labs.
E. Students will demonstrate the ability to identify appropriate medications to improve psychological functioning and treatment of diagnosed mental disorders.
F. Students will demonstrate the ability to review laboratory findings, symptoms and medication side effects as part of monitoring the response to psychopharmacological intervention and for the purpose of modifying such interventions to promote efficacy and minimize side effects or adverse effects.
G. Students will demonstrate the skill to write a basic prescription (not a real prescription) and their understanding of ethical, legal and regulatory mandates of practice involving medications and behavioral interventions.
H. Students will learn appropriate medical charting consistent with practice standards of pharmacotherapy.

At the end of 5-6 hour clinic day and at the end of the eighty-hour practicum, the primary care physician is asked to complete a short evaluation form. These forms will provide a brief evaluation of training and experience in each competency area.

In preparation for this practicum, I have completed the required 450 hours of academic coursework, including training core classes in basic science, basic pharmacology, clinical medicine, pathophysiology, and clinical psychopharmacology. I have a valid and current license as a psychologist in this state and have coverage through my university insurance for my clinical work within the practicum (and if appropriate
malpractice liability insurance through Company, Insurance policy number).

I would greatly appreciate your willingness to supervise my practicum experience in your primary care setting. Not only would this experience be invaluable to me and my patients, I believe that it may benefit your practice, as I have excellent knowledge of (list your areas of specialty and provide a CV) and other conditions that may impact your practice.

I would be happy to answer any questions that you may have. Thank you so much for your consideration.

Sincerely yours,

Licensed Psychologist
Email address
Phone
Eighty-Hour Practicum Evaluation Form

SUPERVISOR VERIFICATION OF 80-HOUR PRACTICUM IN PRIMARY HEALTH CARE

Applicant Name: ________________________________________________________________
Mailing Address: ________________________________________________________________
City, State Zip: _________________________________________________________________
Telephone No. __________________________________________________________________

To be completed by the supervisor

SUPERVISOR

Name: _______________________________________________________________________
Mailing Address: ________________________________________________________________
City, State Zip: _________________________________________________________________
Telephone No. __________________________________________________________________

Describe the area of practice in which you are formally trained and/or certified/licensed? If you are not a psychiatrist, please indicate your experience and training in prescribing psychotropic medications:

LICENSURE

Is your license current and unrestricted? Yes No

Date medical license was issues: _________________________________________________
License Number and Type of License: _____________________________________________
If you hold any other professional licenses in this or any other jurisdiction list below:

License No. Type State Status (Active/Inactive)

Name and Address of Applicant’s Training Director: ________________________________
________________________________________________________

Date Practicum Began: _________________________________________________________
Date Practicum Ended: _________________________________________________________
SUPERVISOR VERIFICATION OF 80-HOUR PRACTICUM IN PRIMARY HEALTH CARE

Have you sent an evaluation form about this applicant to the Director of Training discussing the student’s adequate development of skills in:

a. Assessing a diverse and significantly ill medical population? Yes  No

b. Observing the progression of illness and continuity of care of individual patients? Yes  No

c. Adequately assessing vital signs? Yes  No

d. Demonstrating competent laboratory assessment? Yes  No

e. Demonstrating competence in physical and health assessment techniques? Yes  No

Has the student successfully completed the eighty-hours of supervised experience with you as specified in the Prescribing Psychologist Act? Yes  No

The Board would appreciate any comments you might have regarding this applicant’s practicum. Please include any information you consider relevant regarding this applicant.

_____________________________________________________________________________________

As the Clinical Supervisor of the 80-Hour Practicum, I certify that all of the statements made in this document are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

___________________________________
Signature of Clinical Supervisor

___________________________________
Date
March 2, 2019

RE: Professional Liability Insurance

TO WHOM IT MAY CONCERN:

Alliant International University students who are participating in supervised practicum are covered by xxx for professional/medical liability up to the limits of the California Tort Claims Act. Coverage limits are:

- $300,000 Each Person for Bodily Injury
- $100,000 Property Damage
- $500,000 Aggregate
- $2,000,000 Excess Coverage (Out of State or Federal)

Sincerely,

__________________________
Director of Purchasing
& Risk Management
GENERAL AGREEMENT FOR AGENCIES AFFILIATED
WITH ALLIANT INTERNATIONAL UNIVERSITY, INC. AS APPROVED
TRAINING SITES FOR CLINICAL PSYCHOPHARMACOLOGY
STUDENTS

This Memorandum of Understanding (the “Agreement”) is entered into by and between Alliant
International University, Inc. (the “University”), and
___________________________________________ (the “Agency”).

RECITALS

WHEREAS, the Agency has clinical training opportunities available in the field of
physical assessment;

WHEREAS, clinical training experience is a required and integral component of
the University’s Postdoctoral MS Program in Clinical Psychopharmacology curriculum;

WHEREAS, the University desires the cooperation of the Agency in the development and
implementation of the clinical training experience phase of its curriculum;

WHEREAS, the Agency recognizes its professional opportunity and responsibility
to participate in the education of students in the field; and

WHEREAS, the Agency wishes to join the University in the development and
implementation of a clinical training program at the Agency (the “Program”) for the University’s
students.

NOW, THEREFORE, in consideration of the mutual agreements set forth herein, the
University and the Agency enter into this Agreement on the terms and conditions set forth below.
The University and the Agency mutually agree:

1. The University agrees to select and assign Students to the Program.

2. The Agency reserves the right to interview any Student selected by the University prior to
accepting that Student for training in the Program. Subject to the foregoing, Students selected
for assignment shall be assigned to the Agency for a period of time mutually determined in
advance by the parties, which may be altered by (a) the University with 30 days written
notice or (b) the Agency after the end of a term of the University, but prior to the beginning
of the next term of the University with 60 days written notice, in each case, with
consideration given to the staff and space availability.

3. The parties acknowledge that many student educational records are protected by the Family
(“FERPA”) and that the permission of students must be obtained before student data can be
released to anyone.

4. Students will be bound by all American Psychological Association or the American
Counseling Association confidentiality policies and procedures, and all applicable Federal,
State, and local laws and ordinances concerning the confidentiality of patient and intern/trainee records.

5. Unless the Student specifically enters into a written employment agreement with the Agency, the individual maintains student status and is not an employee of either the Agency or the University.

AGREEMENT

The University agrees:

1. To designate a Liaison or Coordinator, hereinafter referred to as the “Office of Professional Training Director and/or Liaison of the Institution,” to administer the University’s responsibilities related to the Program.

2. To establish and maintain, as necessary for the implementation and performance of this Agreement, ongoing communication between the Office of Professional Training Director and/or Liaison of the Institution of the University and the Training Coordinator (as defined below) of the Agency on items pertinent to education and supervision in the field.

3. To assume responsibility for assuring the Program’s compliance with the educational standards established by the appropriate state professional licensing board or any other relevant authority.

4. To refer to the Program only those students who have satisfactorily completed the prerequisite academic portion of the curriculum.

5. To direct the assigned students to comply with the existing pertinent rules and regulations of the Agency and all reasonable directions given by qualified Agency personnel.

6. To supply the Training Coordinator at the Agency with the appropriate forms to be used in evaluating the performance of the assigned student.

The Agency agrees:

1. To establish the educational objectives for the Program, devise methods for their implementation and continually evaluate to determine the effectiveness of the Program; provided that it is understood that the Program will provide the Student basic training in the following: (1) observe medical and clinical histories, (2) observe physical examinations, (3) instructed and trained to take vital signs including heartrate, respiration rate, blood pressure, temperature, height and weight, (4) review recommendations for laboratory assessments including urine, blood, ECG, EEG, neuroimaging, and physical examinations. Students will learn to apply the biopsychosocial model of clinical assessment, diagnosis and intervention. They will learn to (1) recognize medical conditions that present with various psychological symptoms; (2) recognize psychological conditions that may be effectively treated with medications and/or behavioral therapies; (3) recognize potential medication interactions and side effects; (4) recognize how medical conditions affect medication efficacy, side effects, and dosing considerations; (5) learn how to assess the effects of medications on laboratory findings; (6) learn approaches to titrate dose, switch or augment medications to improve clinical outcomes; and (7) learn appropriate approaches to writing prescriptions, working within legal and ethical practice parameters involving the use of medications and behavioral interventions, and appropriate charting and documentation.

2. To provide the physical facilities and equipment necessary to conduct the Program.

3. To designate a Training Coordinator, hereinafter referred to as the “Training Coordinator,” who
will be responsible for organizing and coordinating the planning and implementation of the Program.

4. To designate each Student with appropriate supervision by a licensed primary care provider, hereinafter referred to as the “Clinical Supervisor.” The Clinical Supervisor must have a current license to practice medicine in the State and County of the Agency and also have a valid DEA number. The Clinical Supervisor will have the ability to designate appropriate practicum experiences for the Student to other qualified professionals who function within the Agency, but will retain the responsibility to complete and sign the weekly practicum evaluation forms which will be provided by the Student.

5. To advise the University of any changes in personnel, operation or policies that may affect the Program.

6. To determine the number of Students which it can accommodate during a given period of time.

7. To inform the Students and the University of the Agency’s requirements (i.e., health status, criminal background) for acceptance into the Program.

8. To provide the assigned Student with a copy of the Agency’s existing pertinent rules and regulations with which the Student is expected to comply.

9. To make available, whenever possible, emergency health care for the assigned Student. (The Student will otherwise be responsible for his or her own health care, including maintaining his or her own medical insurance.)

10. To advise the University of any serious deficiency noted in the ability of an assigned Student to progress toward achievement of the stated objectives of the Program. It will then be the mutual responsibilities of the assigned Student, the Training Coordinator, the Clinical Supervisor, and the Office of Professional Training Director and/or Liaison of the Institution to devise a plan by which the Student may be assisted to achieve the stated objectives.

11. To have the right to terminate any Student whose health, as permitted by law, or performance, is a detriment to patient well-being or to achievement of stated objectives of the Program after conferring with the Office of Professional Training Director and/or Liaison of the Institution.

12. To restrict Student’s access to any patient or client records except in the course of the Student’s duties under the Program. Students will be bound by all confidentiality policies and procedures as set forth in paragraph 3 of the General Terms and Conditions of this Agreement (see below), and all applicable Federal, State, and local laws and ordinances concerning the confidentiality of patient and student records.

13. To comply with all Federal, State, and local laws and ordinances concerning human subject research if Students participate in such a research program.

GENERAL TERMS AND CONDITIONS

1. The Agreement shall be the governing legal document between the parties.

2. The Agency’s Training Coordinator may complete and sign training agreement documents (electronic) that are submitted by the University that specify ‘students’ or ‘interns’ or ‘trainees’ planned educational/internship program details. Completion of these training agreement documents is for informational purposes only.
3. **Confidentiality**. The parties’ mutual understanding on the treatment of Confidential Information (as defined below) is as follows:

A. The Agency and the University shall not, and shall not permit any of their respective employees, agents or contractors to, use, reproduce, distribute, publish, disclose, transmit or otherwise transfer, directly or indirectly, to any other person, organization or entity, any Confidential Information of the other party (or any portion thereof), except (i) to the extent necessary to perform its obligations to the other party in connection with this Agreement; or (ii) with the prior written permission of the other party. Each party agrees to disclose the Confidential Information of the other party solely to those of its employees, agents and contractors having a good faith need to know such information. Each party shall protect the Confidential Information of the other party by exercising at least the same measures that such party uses to protect its own confidential information of like character, which shall be no less than a reasonable standard of care. Each party shall be held responsible for any and all breaches of this Section 3 by or through any employees, agent or contractor of such party. Each party shall (x) inform all employees, agents and contractors having access to any or all of the Confidential Information of the other party of the existence of this Agreement and the confidentiality obligations set forth herein; and (y) take sufficient steps to cause such employees, agents and contractors to observe the confidentiality obligations set forth herein. If either party or one of their employees, agents or contractors is compelled (by deposition, interrogatory, request for documents, subpoena, civil investigation demand or similar process) to disclose any of the Confidential Information of the other party, that party shall provide the other party with prompt prior written notice of such compulsion so that the other party may seek, at its own expense, a protective order or other appropriate remedy or, if appropriate, waive compliance with the terms of this Agreement.

B. As used herein, “Confidential Information” means all confidential information in documents or other tangible materials clearly marked as proprietary or confidential about, or disclosed by, either party to this Agreement, including knowledge, technical and business information relating to such party’s products, research and development, production, costs, engineering processes, artwork, designs, computer software, formulas, methods, ideas, concepts, contemplated new services, improvements, associations with other organizations, profit or margin information, finances, customers, suppliers, marketing, and past, present or future business plans and business arrangements, information concerning employees (including, in the case of the University, faculty) and students or prospective students (provided any disclosure relating to any student or prospective student is permitted by and carried out in accordance with FERPA) and the existence, terms and conditions of this Agreement. Notwithstanding the foregoing, no information shall be deemed Confidential Information if such information: (i) is generally known to the public on the date of disclosure of same or becomes generally known to the public after such date through no breach of this Agreement or any other obligation of confidentiality; (ii) was known by the party receiving such information under this Agreement (the “Receiving Party”) without any obligation to hold it in confidence at the time of disclosure; (iii) is received by the Receiving Party after the date of disclosure by the other party (the “Disclosing Party”) hereunder from a third party without imposition, knowledge or breach of any obligation of confidentiality; (iv) is independently developed by the Receiving Party after the date of disclosure by the Receiving Party without access to Confidential Information of the Disclosing Party; or (v) is approved for release by written authorization of the Disclosing Party.

C. The Agency and the University acknowledge that the University’s use of the Programs may be subject to the privacy regulations outlined in FERPA, for the handling of such information. The
Agency shall not knowingly disclose Confidential Information to any third party in violation of FERPA. The Agency represents and warrants that it will comply with FERPA to the extent applicable and will instruct its employees handling student information provided by the University of its obligations under FERPA. The Agency further agrees that it will prohibit its employees from accessing any records of any student or prospective students at the University without a valid business reason to access such records.


The Agency and the University agree not to discriminate in their enrollment and employment practices, and will render all services under this Agreement without regard to an individual’s age, race, color, religion, creed, sex (including pregnancy, childbirth, breastfeeding, and related medical conditions), sexual orientation, gender, gender expression, gender identification, national origin, ancestry, genetic information, military or veteran status, political affiliation, disabilities, or any other legally protected status. The Agency and the University will not permit harassment against individuals based on any of the aforementioned characteristics, nor will they permit retaliation against any individual who makes a good faith complaint regarding discrimination or harassment. Any act of discrimination, harassment, or retaliation committed by the Agency or the University or failure to comply with these statutory obligations when applicable shall be grounds for termination of this Agreement.

5. Indemnification. Each party shall be indemnified by the other party (the “Indemnifying Party”) against any and all losses, judgments, liabilities, expenses (including, but not limited to reasonable attorneys’ fees) or amounts paid in settlement of any third party claims sustained by it that arise out of any breach of representation or any act or omission of the Indemnifying Party in connection with this Agreement, but only in proportion in and to the extent that such liability, loss, expense, attorneys’ fees or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of the Indemnifying Party, its officers, employees and agents. The insurance requirements of this Agreement will not be construed as limiting the scope of this indemnification.


A. Except for the indemnifying party’s obligations pursuant to Section 5 above or the other party’s gross negligence or willful misconduct: neither party shall be liable to the other party for any special, incidental, consequential, indirect or punitive damages (including loss of (anticipated) profits,) and/or reasonable attorneys’ fees and costs, arising in any way out of this Agreement, however caused and on any theory of liability.

B. Subject to Section 5 above, a party shall have no liability to the other party for any loss suffered which arises out of any action or inaction if, in good faith, it is determined that such course of
conduct was in the best interests of the parties involved and such course of conduct did not constitute gross negligence or intentional misconduct.

C. The parties to this Agreement hereby assert that no liability is assumed by either party for damages or injuries which arise from Program participants independently traveling to or from service sites.

7. **Insurance.** Without limiting the indemnification obligations stated above, each party to this Agreement shall provide and maintain at its own expense a program of insurance covering its activities and operations hereunder. Such program of insurance shall include, but not be limited to, commercial general liability and professional liability coverage from an insurance carrier with an AM Best rating of A- VII or better. The Agency’s commercial general liability insurance shall have minimum coverage of $1,000,000 per occurrence and $2,000,000 in the aggregate. The University’s student professional liability insurance shall carry a single limit of not less than $1,000,000 per claim and $3,000,000 in the aggregate.

8. **Representations and Warranties.**

A. Each party represents and warrants to the other party that: (i) it has all requisite power and authority to execute this Agreement and to perform its obligations hereunder; (ii) the execution, delivery and performance of this Agreement have been duly authorized and approved by each party, and will not conflict with any agreement of, or law applicable to, such party; (iii) this Agreement is a valid and binding agreement of each party enforceable in accordance with its terms.

B. In addition to its representations in paragraph (a) above, the Agency represents and warrants to the University that:

(i) it is and will continue to be in compliance all applicable federal, state, and local laws, including without limitation all privacy, data protection, advertising and marketing laws, and contracts;

(ii) neither it nor any of its affiliates has been debarred or suspended, or engaged in any activity that is cause for debarment or suspension, pursuant to applicable state law; and

(iii) it shall take any and all actions, or refrain from or cease such actions, as is necessary to maintain the University’s reputation, accreditation, state approvals, Title IV eligibility, and academic integrity, including, but not limited to, adherence with the U.S. Department of Education’s misrepresentation regulations provided at 34 C.F.R. Part 668 Subpart F.

9. **Independent Contractor.** University faculty, staff, and students are not officers, agents, or employees of the Agency. Each party shall be solely liable for its own debt, obligations, acts, and omissions, including the payment of all liability, withholding, social security, worker’s compensation, or other taxes or benefits on behalf of its employees. Neither party hereto is to be considered the agent of the other party for any purpose whatsoever and neither party has any authority to enter into any contract or assume any obligation for the other party or to make any warranty or representation on behalf of the other party.

10. **Worker's Compensation Insurance.** It is understood and agreed that the University’s Students are not to be considered employees of the University and therefore Students are not eligible for worker’s compensation insurance and the University does not maintain worker’s compensation insurance for Student coverage. If the Student enters into an employment relationship with the Agency, the Agency is solely responsible for procuring workers’ compensation insurance to
cover the individual.

11. **Term.** This Agreement shall be effective for a period of one year from the date of signature when executed by both parties. This Agreement will automatically renew unless otherwise indicated in writing by one of the parties at least sixty (60) days prior to the end of the term; provided that if the Agency is terminating pursuant to this clause, such termination may only be effective after the end of a term of the University and prior to the beginning of the next term of the University. It is expected that the field training experience will be ___ months at ___ hours/week.

12. **Effective Date.** The effective date of this Agreement is the date on which the agreement was duly executed.

13. **Termination.**
   
   A. **Termination of the Agreement:** Any party may terminate this agreement in accordance with Section 11. Any termination of the Agreement by either party shall not affect the status of any Student who has been placed with the Agency prior to the effective date of termination.
   
   B. **Termination of a Student’s Participation:** The expectation of all parties is that the Student will complete the term of this Program. Termination of the Student with cause shall be in accordance with the employment or volunteer policies of the clinical training setting.
   
   C. Termination of the Student or supervisor's employment or this Agreement must take into account the clinical necessity of an appropriate termination or transfer of clients.

14. **Notices.** All notices required to be given under this Agreement shall be sufficient if sent by electronic mail, electronic documentation or U.S. Mail as follows:

   For University:

   ______________________________________________

   ______________________________________________

   Tel: ________________  Fax: ________________
   Email: ____________________________

   For Agency:

   ______________________________________________

   ______________________________________________

   Tel: ________________  Fax: ________________
   Email: ____________________________

15. **Modification.** This Agreement contains all of the terms and conditions between the parties. This Agreement may be revised or modified only by mutual agreement and written amendment signed by both parties.

16. **Severability.** Each paragraph of this Agreement is severable from all other paragraphs. In the event any court of competent jurisdiction determines that any paragraph or subparagraph of the
Agreement is invalid or unenforceable for any reason if same should occur by operation of law, all remaining paragraphs and subparagraphs will remain in full force and effect.

17. **Waiver.** The failure or delay of either party to exercise any right, power, or privilege under this shall not operate as a waiver of any such right, power, or privilege.

18. **Assignment.** Nothing in this Agreement shall be construed to permit the assignment by either party of any rights or obligations hereunder, and such assignment is prohibited unless evidenced by the written consent of each of the parties, except that a party may assign its rights or obligations to a third party in connection with the merger, reorganization or acquisition of stock or assets affecting all or substantially all of the properties or assets of the assigning party.

19. **Governing Laws and Jurisdiction.** This Agreement shall be governed by and construed pursuant to the laws of the State of California. In the event that a dispute arises in relation to this Agreement, all parties agree to submit to the jurisdiction in the courts of the State of California.

20. **Dispute Resolution.** All disputes between the parties which are not resolvable within the day-to-day working relationship of the parties may be assigned by either party to the coordinators for resolution in accordance with procedures to be agreed upon by the parties. The coordinators will meet to consider the issues not later than ten (10) business days after assigned to do so. Such meetings may be telephonic. In the event the coordinators are unable to resolve the dispute within fifteen (15) business days of their first meeting concerning such dispute (or such other period mutually agreed by the parties), either party may seek such other relief as may be available at law or equity. Notwithstanding anything to the contrary in this section, neither party shall be prevented from immediately seeking injunctive or other equitable relief in the event of any breach or alleged breach of Section 3 of the General Terms and Conditions hereof.

Except for ancillary measures in aid of arbitration and for proceedings to obtain provisional or equitable remedies and interim relief, including, without limitation, injunctive relief, any controversy, dispute or claim arising out of or in connection with or relating to this Agreement, or the breach, termination or validity thereof or any transaction contemplated hereby (any such controversy, dispute or claim being referred to as a “Dispute”), shall be finally settled by arbitration administered by Judicial Arbitration & Mediation Services, Inc. ("JAMS"), pursuant to its Comprehensive Arbitration Rules & Procedures (the "JAMS Rules"). The parties understand and agree that, by signing this Agreement, they are expressly waiving, to the fullest extent permitted by law, any and all rights to a trial before a judge or jury or hearing before an adjudicative agency, regarding any disputes and claims which they now have or which they may in the future have that are subject to arbitration under this Agreement. There shall be one neutral arbitrator that shall be mutually agreed to by the parties or, if the parties do not agree, then one shall be appointed pursuant to JAMS's procedures, in each case, within 30 business days of receipt of the demand for arbitration by the respondent(s) in any such proceeding. An arbitration pursuant to this paragraph shall take place in Sacramento, California. A final award shall be rendered as soon as reasonably possible. The Arbitrator shall permit both parties to engage in reasonable pre-hearing discovery to obtain information to prosecute or defend the asserted claims. The arbitration decision or award shall be in writing. The arbitrator shall have the authority to award any relief authorized by law in connection with the asserted claims or disputes. Judgment on the decision or award rendered by the arbitrator may be entered and specifically enforced in any court having jurisdiction thereof. All arbitrations commenced pursuant to this Agreement, or any other related agreement or document, shall be consolidated and heard by the initially appointed arbitrator. The arbitration award or ruling shall provide for
payment by the losing party of the fees and costs of the arbitration, including without limitation, the reasonable attorneys’ fees and attorneys’ costs incurred by the prevailing parties.

21. Counterparts; Facsimile. This Agreement may be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument and, each of which may be executed by less than all parties, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument.

22. No Third-Party Rights. Nothing in this Agreement shall be construed as creating or giving rise to any rights to any third parties or any persons other than the parties hereto.

23. Survival. Sections 3, 5, 6, 9 and 11 through 23 of the General Terms and Conditions shall survive the termination of this Agreement.

IN WITNESS WHEREOF, the authorized representatives of the parties have executed this Agreement to be effective as of the day specified below.

FOR THE “UNIVERSITY”

________________________________________  _________________
Tracy Heller, Ph.D.                          Date
Provost and Provost and Senior Vice President for Academic Affairs

FOR THE “AGENCY”

________________________________________  _________________
NAME                                      Date
TITLE
AGENCY NAME
SUPERVISED CLINICAL EXPERIENCE MANUAL

M.S. Program in Clinical Psychopharmacology

April 2018
THE SUPERVISED CLINICAL EXPERIENCE

Background

The American Psychological Association (APA) document, *Recommended Postdoctoral Education and Training Program in Psychopharmacology for Prescriptive Authority* (APA Council of Representatives, August 9, 2009), summarizes guidelines for a supervised clinical experience (SCE) the APA deems appropriate in preparation for prescriptive authority. It is recommended that the student interested in completing the SCE read the complete description of the SCE in that document, which is available at http://www.apapracticecentral.org/advocacy/authority/training-authority.pdf. Those guidelines can be summarized as follows:

1. The SCE should begin in conjunction with coursework but can continue after coursework is completed.
2. Goals of the SCE include:
   a. Ongoing integration of didactic and applied clinical knowledge.
   b. Providing the opportunity to assess formative and summative clinical competency.
3. Characteristics of patients seen in connection with the SCE should be appropriate to the current and anticipated practice of the trainee.
4. The SCE involves a sufficient range and number of patients to achieve minimum competence appropriate for independent practice as a prescriber in each of the following competency areas:
   a. Physical exam and mental status
   b. Review of systems
   c. Medical history interview and documentation
   d. Assessment: indications and interpretation
   e. Differential diagnosis
   f. Integrated treatment planning
   g. Consultation and collaboration
   h. Treatment management
5. The SCE must be approved by the training director. The program must document the total number of patient contacts broken out by face-to-face patient contacts versus other clinical experiences and the clinical competencies employed.
6. The SCE culminates in a capstone competency evaluation. This is distinct from the qualifying examination completed in conjunction with awarding the master’s degree.

The Fairleigh Dickinson University (FDU) SCE is designed so that it begins in conjunction with advanced coursework, but continues upon completion of coursework. Note that completion of the latter portion after coursework is NOT a requirement for receiving the master’s degree. It is an option available after the completion of courses, and is intended for those who would like a clinical experience that cements their mastery of the material and/or those who are seeking prescriptive authority.

Note the APA guidelines do not identify an expectation in terms of number of patients or number of hours. New Mexico statute requires a minimum of 400 hours spend treating 100 patients, and we treat that as a reasonable goal for the practicum. However, in our practicum application, you can request variations from that standard with sufficient justification based on prior experience.
The FDU Supervised Clinical Experience

The SCE for the M.S. Program in Clinical Psychopharmacology consists of four components:

1. The SCE begins with the case conferences conducted through the weekly chats. In the last two semesters of coursework, which are devoted to clinical psychopharmacology, the instructor completes the formal evaluation found in Appendix A addressing early-stage clinical competence.

2. Upon completion of coursework, you are eligible to participate in a five-day clinical laboratory that involves basic training and evaluation in clinical competencies. Details of this laboratory will be provided as the student nears completion of coursework. The evaluation materials used in this laboratory may be found in Appendix B. You can waive the clinical laboratory with the permission of the training director if you have completed equivalent training under other circumstances (e.g., completion of a nursing degree).

3. Upon completion of the clinical laboratory you can participate in a practicum under the supervision of a licensed prescribing professional. Sometimes a practicum opportunity becomes available that does not permit delay. You can begin the practicum prior to completion of the clinical laboratory, and can even begin the practicum during the final semester of coursework, with the permission of the training director.

4. After meeting requirements for completion of the practicum experience you can participate in the capstone experience.

Upon completing all four components you will receive a certificate indicating completion of the APA curriculum in preparation for prescriptive authority. The certificate cannot be awarded until all components are completed, including the capstone experience. Note that verification of completion of the APA curriculum may be required for licensure under some proposed bills.

These represent minimum conditions for completion of the SCE, though your learning is likely to be enhanced the more you exceed these requirements. The remainder of this document will be largely devoted to discussing these conditions in greater detail.

States authorizing psychologists to prescribe may set their own clinical requirements for licensure. If you anticipate licensure in one of those states, the state requirements supersede the guidelines outlined in this document. You are expected to inform the training director of any such inconsistencies. As we become aware of such inconsistencies, we will add them to this document.

Upon completion of the SCE the training director will complete paperwork mandated by the state for purposes of licensure. You will not receive the standard certificate for completion of the SCE unless you complete the requirements for the SCE outlined in this document, though the requirements may be modified slightly (e.g., substitution of state-generated forms that are essentially equivalent to those in this document).

The Practicum

1. If possible, it is desirable to identify multiple primary preceptors to allow exposure to multiple perspectives on treatment.
2. Preceptors must be a doctoral-level prescribing professional, either a residency-trained physician (M.D. or D.O.), a psychologist licensed to prescribe in your state, or a Doctor of Nursing Practice with prescriptive authority. Though other professionals such as nurse practitioners and physician assistants may be helpful during the practicum, they cannot serve as the preceptor. The preceptor’s area of expertise should be consistent with the types of patients you are likely to see in practice. A psychiatrist is in most cases the optimal choice; however, general practitioners, internists, pediatricians, physiatrists, and gynecologists may be equivalent or superior choices based on your circumstances. Psychologists specializing in behavioral medicine in particular may consider a psychiatrist a poor choice for a preceptor. It is important to choose someone who is knowledgeable in the use of psychotropic medications. It is not necessary that the preceptor has the same level of expertise in psychotropic medications as psychiatrists, but knowledge and regular use of psychotropics in practice is appropriate. The preceptor you choose must be willing to spend time with you weekly in both supervision and training.

3. You are required to submit a proposal outlining the practicum. This document should include the following information:
   a. A description of the nature of your practice. Characterize the types of patients you see in terms of typical diagnoses, setting (inpatient, outpatient, residential, correctional, etc.), age range, ethnicity, and socioeconomic status. If you work in several settings with varying characteristics, describe each setting and your relative allocation of time to each.
   b. If the preceptor is not a psychiatrist, provide information about the preceptor's use of psychotropic medications in his or her practice and any specialty training received in the use of psychotropic medications.
   c. Describe your expectations concerning the amount of time dedicated to the practicum each week, the source of referrals, the nature of your contacts with patients in connection with the practicum (e.g., individually or in groups, with or without the preceptor present), and the number of patients you anticipate seeing during the course of the practicum. In this section you should indicate you will inform each patient that you are not a prescribing professional, that you are under the supervision of a licensed prescriber, and that you will be discussing his or her care with the preceptor. As noted above, if you want to request some variation from the standard of 400 hours spent serving 100 patients, provide justification for the variation based on prior experience.
   d. If you have not completed the clinical laboratory offered by the program, you must either request waiver of the clinical laboratory for prior experience (e.g., completion of a nursing degree), or demonstrate engagement in clinical experiences equivalent to those covered in the clinical laboratory. This includes identifying a supervisor who will oversee your work and evaluate you on the rubrics provided in Appendix B.
   e. You can be exempted from several of the conditions listed below under certain circumstances. If you would like to be exempted from one or more of those conditions you should provide a justification in your proposal.
   f. If consultations with patients will be completed without the preceptor present, indicate the availability of the preceptor should you need their assistance in an emergent situation (e.g., they will be in the building, there is a telephone number available for making immediate contact).
   g. The proposal should be signed by you and the preceptor(s). It should be submitted with a completed copy of the Initial Preceptorship Agreement (Appendix C), a copy of the preceptor's vita and license, and a current copy of your license.
h. If during the course of the Practicum you replace or add a preceptor, the same materials should be submitted for the new preceptor.

4. The university offers Spring (January-April), Summer (May-August), and Fall (September-December) semesters. If you anticipate seeing patients for the practicum during these months, you should enroll in PSYC7960 Practicum for the corresponding semester. You must enroll in the Practicum course for at least two semesters. PSYC7960 is a zero-credit course graded on a pass-fail basis for which you pay a fee determined by the university. Unfortunately, we are not permitted to provide continuing education credits for supervisory experiences such as the practicum.

5. For each case seen through the practicum, you should submit an Initial Preceptorship Session Form (Appendix D).

6. Unless you can demonstrate that such a requirement is impractical, inappropriate, or dangerous given the nature of the practicum setting, in at least 10% of cases, you must document having seen the patient until subsequent monitoring indicated the medication regimen was stabilized (“long-term cases”), for purposes of monitoring issues of response, compliance, and side effects. You must provide documentation for each long-term case (Appendix E).

7. Unless you can demonstrate that such a requirement is impractical, inappropriate, or dangerous given the nature of the practicum setting, you must demonstrate involvement in at least two physical examinations completed during this period. The level of this involvement is completely dependent upon the nature of your practice, what you consider most appropriate, and your practical limitations. Ideally, it would be desirable for you to perform physical exams under the supervision of an appropriate health care provider upon individuals you will be seeing for medication management. At the other extreme, this requirement can be met if you observe and can question the examiner on two physical examinations completed by another health care professional on patients with substantive medical issues, though not necessarily psychiatric issues. Your plan for fulfilling the physical exam requirement should be outlined in your proposal for the practicum. Whatever you consider appropriate, you must document your level of involvement, and complete a report summarizing the results of the examination using the format for case reports used in the courses PSYC7945 and 7955.

8. The practicum continues until all current preceptors are willing to verify mastery of competencies at a level appropriate for independent practice as a prescriber on the Outcome Assessment Form (Appendix F).

Given that formal practicum settings generally do not as of yet exist for psychologists interested in psychopharmacological treatment, you are awarded a great deal of latitude in establishing such a setting. Though combined settings are to be preferred (e.g., one that allows contact with both inpatients and outpatients) they are not required. The only condition for the practicum setting at this time is the presence of a substantial population of individuals traditionally treated with psychotropic medications. It is preferred that these represent individuals who are presently part of your caseload, and are also patients of your preceptor’s. At a minimum, they should be consistent in significant ways with the types of patients you and your preceptor normally see in clinical practice.

Until psychologists have prescriptive authority, responsibility for the medication management of the case remains in the hands of the preceptor. Patients should be made aware of this condition unless circumstances determine it is not appropriate for some reason. At all costs, it is important to avoid situations in which the patient could potentially feel caught in the middle of disagreements between you and your preceptor.
Supervision Requirements

Supervision will include the following components:

1. For each patient, the supervisee will be responsible for an oral case presentation to the preceptor. This should include the following elements:
   - Presenting problem
   - A medical history
   - Appropriate additional medical tests, with recommendations for modification of treatment depending on outcomes
   - Diagnostic impression
   - Recommendation for medication selection and dosing with rationale
   - Plan for ongoing monitoring of treatment compliance and effectiveness
   - Side effect profile for the recommended medication and plan for management of side effects
   - Plan for further action in the case of treatment failure (including time frames for determining whether treatment has failed)

2. For ongoing monitoring of long-term cases, supervision will include:
   - Evaluation of response to treatment
   - Evaluation of additional medical data
   - Evaluation of side effects
   - Review of treatment modifications based on the preceding factors

If the preceptor is the patient’s physician, the preceptor will be responsible for actually writing prescriptions and orders for additional tests, though the preceptor may involve you in that process to the extent allowed by local regulations and the setting. If the preceptor is not the patient’s physician, then the supervisee will, having obtained the patient’s permission as mandated by local regulations, provide consultation to the patient’s physician concerning the results of the evaluation/monitoring. Remember that the physician may choose an alternative course of action than to what you recommended based on your assessment. In many instances there is more than one correct approach, but it is important to evaluate whether your recommendations were appropriate.

A substantial portion of supervision should take place in face-to-face meetings. Once each semester the preceptor is required to submit a performance evaluation concerning progress in the practicum (Appendix G). Upon completion of the practicum, or their role as preceptor, all preceptors must complete a practicum Outcome Assessment (Appendix F).

Physical Examination Requirement

If you are able to complete the physical examination requirement, you should submit a report of the results co-signed by the individual who served as supervisor for the requirement. This need not be your preceptor. However, it must be someone who meets professional qualification to serve as an appropriate guide to physical examinations (e.g., a registered nurse, credentialed physician’s assistant, or a different physician than your preceptor).
Summary of Record-Keeping Requirements for the Practicum

- Before the practicum can be initiated, you must submit a proposal for the practicum signed by the preceptor(s), and a completed Initial Preceptorship Agreement and vita for each preceptor.
- To document each new case, the supervisee must complete an Initial Case Supervisory Session Form. Notice there is no identifying information required for this form, and none should be provided.
- A Long-Term Case Supervision Form should be completed for 10% of cases unless exempted.
- In April, August, and December of any semester in which you enroll in the practicum course, you must submit a completed Semester Evaluation Form. If there are multiple preceptors, each must submit an evaluation.
- Unless exempted, for at least two cases you must submit a report of a physical exam. This report can be formatted according to case report guidelines provided in course materials. It must be co-signed by an appropriate supervising health care professional who supervised the procedure. This supervisor need not be the preceptor.
- Upon the completion of the practicum, at the point where all preceptors indicate competence appropriate for independent prescribing, each preceptor must submit an Outcome Assessment Form. This can be submitted in lieu of a final Semester Evaluation Form.

*All materials must be submitted electronically; a flash drive is recommended (although other alternatives can be considered, please email Farraran@fdi.edu to discuss options). It is important that these materials be sent on a regular basis and submitted as a packet at the end of each semester (April, August, and December), along with a Semester Summary Form (Appendix H). All forms should be mailed to the Academic Director:

Anne Farrar-Anton, Ph.D., MSCP
School of Psychology T-WH1-01
Fairleigh Dickinson University
Teaneck NJ 07666

If there are reasons for doing so, individual forms can be faxed to the Director at (201) 692-2304. It is recommended that you e-mail the Director whenever you submit materials to provide a record that material has been faxed, and the number and type of forms sent.

**Ethical/Legal Issues**

The practicum represents an unusual situation. Although you are a licensed healthcare provider, you are not the legally responsible individual in this situation, and it is important that you clarify your role to the patient. The following should be expressed to the patient in some form, preferably in writing:

My activities represent a consultation to your referring physician at the request of that physician. Any recommendations, including medication or dosing recommendations and recommendations regarding medical and invasive/surgical procedures, are for medical consideration only. Ultimately the referring physician is responsible for all medical and surgical decisions and your treatment.
It is inappropriate for you to in any way represent yourself as the individual responsible for deciding the individual’s medical course of treatment. Your role is to serve solely as a consultant to the physician.

**The Capstone Experience (Optional)**

The capstone experience consists of a two-hour oral examination. To schedule the exam please provide the Administrative Assistant to the program with multiple 2-hour blocks when you would be available to participate. You should provide at least 4 time slots per week for at least 3-4 weeks.

This examination is conducted via conference call with two members of the program faculty. Expected length of the oral examination is 2 hours. You will not be informed of the identity of the evaluators prior to the call. There is a $300 fee for the exam to cover costs of the exam. Please send a check to the Administrative Assistant made out to “Fairleigh Dickinson University” prior to the examination. You will not receive results of the examination until the fee is paid.

The evaluators are expected to confer prior to the examination to discuss contents. The evaluators will provide you with case material prior to the exam. This material will serve as the basis for the questioning, but will be used to explore your understanding of the full domain of clinical competencies (physical exam and mental status, review of systems, medical history interview and documentation, assessment indications and interpretation, differential diagnosis, integrated treatment planning, consultation and collaboration, and treatment management).

The format will involve questions that move from principles of general clinical management for common mental disorders, to specifics of psychopharmacology for drugs used in each class, i.e., beginning with presentations of patients with diagnoses of depression with comorbid conditions, which will allow you to demonstrate knowledge of various classes of ADPs, as well as other principles of general clinical use. Cases will involve some medical conditions to allow you the opportunity to demonstrate knowledge of drug interactions and issues pertinent to particular medical conditions.

You should be fairly fluent about common or less common but significant metabolic or synergistic interactions, dose schedules, initiation and maintenance side effects, and principles of neuropharmacology, pharmacokinetics and pharmacodynamics for major drugs in each class. It is understood that this guidance is quite broad, and you should be prepared to discuss all classes of drugs used in treating common mental disorders.

The members of the evaluation team can adjourn the examination for a later date due to unusual circumstances, such as technical problems.

The content of the examination is open to any material the evaluators consider reasonable for such an examination. Upon completion of the examination, the evaluators will confer and come to a consensus judgment about whether you have demonstrated the minimum performance needed to merit completion of the SCE. Appendix I provides the rubrics used in determining the outcome of the examination. The examiners will review your performance and come to a consensus conclusion on each rubric and the overall outcome.
Students completing the practicum have asked whether it is necessary to complete the capstone experience as well. That is a personal decision you must make, but here are the considerations. Any semester for which you register for the PSYC7960 Practicum course will appear on your transcript with a grade of P (Pass) whether you complete the capstone examination or not. Also, we will document patients seen during those semesters so long as we have received the appropriate paperwork on each case, and will complete any paperwork required by your state about the clinical experience for licensure to prescribe. However, we cannot provide you with a certificate verifying completion of the American Psychological Association guidelines for the supervised clinical experience in preparation to prescribe unless you successfully complete the capstone experience.
Additional Requirements for New Mexico

If you would like your practicum experience to apply for licensure as a conditional prescribing psychologist in New Mexico, you must address the following additional issues. Note that the following are additional requirements. All requirements listed above must still be fulfilled unless the following specifically indicates otherwise:

- The forms needed for the application as a Conditional Prescribing Psychologist are available at http://www.rld.state.nm.us/boards/Psychologist_Examiners_Forms_and_Applications.aspx. Please complete your personal identifying information and submit to the Director of the M.S. Program to review, finalize, and submit.
- We need the vita and license for supervisors of both the 80-hour Practicum in Primary Health Care and the 400-hour Practicum Treating a Minimum of 100 Patients with Pharmacotherapy.
- Since supervision of 80 hours of practice in physical exam under the supervision of a physician is required for licensure as a conditional prescribing psychologist in New Mexico, individuals pursuing prescriptive authority in New Mexico are not expected to complete the clinical laboratory offered by the program. However, your practicum proposal must address both how the 80-hour and 400-hour practica will be completed. In addition, for the 400-hour practicum the proposal must indicate the practicum will meet the following conditions. Note that some overlap with existing requirements of the practicum proposal and do not need to be addressed again in the proposal:
  - A minimum of 100 separate patients will be seen, involving a range of disorders listed in the most recent DSM and both acute and chronic conditions
  - Includes time spent with patients to provide evaluation and pharmacotherapy, and time spent in collaboration with treating healthcare practitioners
  - Diversity of patients, including gender, ages throughout the life cycle, various ethnicities, socio-cultural background, various economic backgrounds as much as possible within the psychologist’s area of practice
  - Primary or secondary supervisor will be on-site
  - Primary/secondary supervisor(s) will review charts and records
  - At least one hour of supervision will be provided for every eight hours of direct service
  - A log of dates & times of supervision will be maintained
  - The practicum will be completed in no less than 6 months and no more than three years
  - During the initial contact with patients or guardians, the status of applicant as a licensed psychologist receiving specialized training in psychopharmacology and who is under supervision will be fully explained
- Your 80-hour practicum supervisor must complete the form contained in Appendix J below and submit it upon completion. You do not need to submit the form contained in Appendix B.
- For the 400-hour practicum, forms found in Appendices C-H must still be submitted at the appropriate times.
- We update this section as we become aware of changes in the materials required by New Mexico, but do not guarantee the currency of this information. Please check the current New Mexico forms for apparent discrepancies with these instructions, and let us know if you find any.
Appendix A
Assessment of Performance in Weekly On-Line Didactics
## Assessment of Performance in Weekly On-Line Didactics

Student: ______________________________ Courses: ___________________________

Semester: Spring  Summer  Fall  Year: _______

### Use of physical exam results:
Evaluate the student’s understanding of PE and use of the results in treatment
- ○ Little understanding
- ○ Basic understanding
- ○ Intermediate understanding
- ○ Sophisticated understanding
- ○ Not/observed

### Use of body systems information:
Evaluate the student’s knowledge of body systems and when to consider each in treatment
- ○ Little knowledge
- ○ Basic knowledge
- ○ Intermediate knowledge
- ○ Sophisticated knowledge
- ○ Not observed

### Use of medical history:
Evaluate the student’s ability to use medical history in treatment planning
- ○ Little ability
- ○ Basic ability
- ○ Intermediate ability
- ○ Sophisticated ability
- ○ Not observed

### Selection and interpretation of tests:
Evaluate the student’s ability to select and interpret appropriate tests, and apply the results to treatment planning
- ○ Little ability
- ○ Basic ability
- ○ Intermediate ability
- ○ Sophisticated ability
- ○ Not observed

### Differential diagnosis:
Evaluate the student’s ability to identify primary/secondary medical and mental disorders
- ○ Little ability
- ○ Basic ability
- ○ Intermediate ability
- ○ Sophisticated ability
- ○ Not observed

### Integrated treatment planning:
Evaluate the student’s ability to integrate biological and psychosocial interventions as warranted into a coherent treatment plan
- ○ Little ability
- ○ Basic ability
- ○ Intermediate ability
- ○ Sophisticated ability
- ○ Not observed

### Consultation with other professionals:
Evaluate the student’s understanding of when it is appropriate to consult with other professionals and how to manage that consultation
- ○ Little understanding
- ○ Basic understanding
- ○ Intermediate understanding
- ○ Sophisticated understanding
- ○ Not observed

### Treatment management:
Evaluate the student’s ability to identify obstacles to treatment and establish a plan for remediation
- ○ Little ability
- ○ Basic ability
- ○ Intermediate ability
- ○ Sophisticated ability
- ○ Not observed

**Comments** (in particular, any weaknesses should be detailed):

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Instructor Signature ___________________________ Date ___________________________
Appendix B
Clinical Laboratory Evaluation Form
## Grading Rubric: Health History

<table>
<thead>
<tr>
<th>Criteria</th>
<th>EE</th>
<th>ME</th>
<th>NI</th>
<th>Inadequate</th>
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<tbody>
<tr>
<td><strong>Chief Complaint (CC)</strong></td>
<td>Consistently demonstrates ability to obtain the CC with no instructor assistance</td>
<td>Demonstrates ability to obtain the CC. Requires moderate instructor feedback</td>
<td>Inconsistently demonstrates ability to obtain the CC. Requires maximum instructor feedback</td>
<td>Not able to demonstrate ability to obtain the CC</td>
</tr>
<tr>
<td><strong>History of the Present Illness (HPI)</strong></td>
<td>Consistently demonstrates ability to elicit a complete HPI, utilizing all aspects of the “OPQRST or Old Carts” format. Able to do so with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to elicit a complete HPI including most aspects of the “OPQRST or Old Carts” format. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to elicit a HPI including most aspects of the “OPQRST or OLD CARTS” format. Requires maximum instructor assistance and cueing</td>
<td>Not able to demonstrate ability to elicit a HPI</td>
</tr>
<tr>
<td><strong>Past Medical and Surgical History (PMH, PSH)</strong></td>
<td>Consistently demonstrates ability to obtain a complete PMH and PSH with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to obtain a complete PMH and PSH. Requires moderate instructor assistance and cueing.</td>
<td>Inconsistently demonstrates ability to obtain a complete PMH and PSH. Requires maximum instructor assistance and cueing.</td>
<td>Not able to demonstrate ability to obtain a complete PMH and PSH.</td>
</tr>
<tr>
<td><strong>Family History (FH)</strong></td>
<td>Consistently demonstrates ability to obtain a FH including at least three generations utilizing a genogram with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to obtain a FH including at least three generations utilizing a genogram. Requires moderate instructor assistance or cueing</td>
<td>Inconsistently demonstrates ability to obtain a FH including at least three generations utilizing a genogram. Requires maximum instructor assistance or cueing.</td>
<td>Not able to demonstrate ability to obtain a FH including three generations utilizing a genogram</td>
</tr>
<tr>
<td><strong>Allergies</strong></td>
<td>Consistently demonstrates ability to elicit a list of allergies to food, medicine and environment, including type of reaction with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to elicit a list of allergies to food, medicine and environment, including type of reaction. Requires moderate instructor assistance or cueing</td>
<td>Inconsistently demonstrates ability to elicit a list of allergies to food, medicine and environment including type of reaction. Requires maximum instructor assistance or cueing.</td>
<td>Not able to demonstrate ability to elicit a list of allergies to food, medicine and environment.</td>
</tr>
<tr>
<td><strong>Medications</strong></td>
<td>Consistently demonstrates ability to obtain a list of both prescribed and over the counter (OTC) medications, vitamins, and supplements, including dose and frequency with minimal or no instructor assistance</td>
<td>Demonstrates ability to obtain a list of both prescribed and OTC medications, vitamins, and supplements, including dose and frequency. Requires moderate instructor assistance or cueing</td>
<td>Inconsistently demonstrates ability to obtain a list of prescribed and OTC’s, vitamins and supplements. Requires maximum instructor assistance or cueing.</td>
<td>Not able to demonstrate ability to obtain a list of prescribed and OTC’s.</td>
</tr>
<tr>
<td>Criteria</td>
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<tr>
<td>Psychosocial History</td>
<td>Consistently demonstrates ability to elicit a complete psychosocial history that includes tobacco, alcohol and drug use, occupation, partner status, members of household, living arrangements, and any particular cultural needs or beliefs that may affect medical care and treatment</td>
<td>Demonstrates ability to elicit a complete psychosocial history that includes tobacco, alcohol and drug use, occupation, partner status, members of household, living arrangements, and any particular cultural needs or beliefs that may affect medical care and treatment. Requires moderate instructor assistance or cueing.</td>
<td>Inconsistently demonstrates ability to elicit a complete psychosocial history that includes tobacco, alcohol and drug use, occupation, partner status, members of household, living arrangements, and any particular cultural needs or beliefs that may affect medical care and treatment. Requires maximum instructor assistance or cueing.</td>
<td></td>
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</tbody>
</table>

| Review of Systems (ROS) | Consistently demonstrates ability to elicit a complete ROS and a ROS appropriate to the CC when indicated including pertinent positives and negatives with minimal or no instructor assistance or cueing. | Demonstrates ability to elicit a complete ROS and a ROS appropriate to the CC when indicated including pertinent positives and negatives. Requires moderate instructor assistance or cueing. | Inconsistently demonstrates ability to elicit a complete ROS and a ROS appropriate to the CC when indicated including pertinent positives and negatives. Requires maximum instructor assistance or cueing. |

| Documents findings | Consistently documents all elicited health history data in a clear, concise format with minimal or no instructor feedback | Documents all elicited health history data in a clear, concise format. Requires moderate instructor feedback | Inconsistently documents all elicited health history data in a clear, concise format. Requires maximum instructor feedback |

EE=Exceeds Expectations  ME=Meets Expectations  NI=Needs Improvement  Inadequate=Failed
<table>
<thead>
<tr>
<th>Criteria</th>
<th>EE</th>
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<tr>
<td>Applies principles of asepsis throughout the examination</td>
<td>Consistently demonstrates knowledge of asepsis. Washes hands before beginning exam and maintains asepsis throughout with no instructor reminders or cueing.</td>
<td>Demonstrates knowledge of asepsis. Washes hands before exam and maintains asepsis throughout with moderate instructor reminders or cueing.</td>
<td>Inconsistently demonstrates knowledge of asepsis. Requires maximum instructor reminders and cueing about asepsis.</td>
<td>Inconsistently demonstrates knowledge of asepsis. Does not wash hands before exam and does not maintain asepsis throughout exam.</td>
</tr>
<tr>
<td>Demonstrates accurate use of equipment</td>
<td>Consistently demonstrates ability to accurately utilize equipment needed to conduct a physical exam with minimal or no instructor assistance or cueing.</td>
<td>Demonstrates ability to accurately utilize equipment needed to conduct a physical examination. Requires moderate instructor assistance or cueing.</td>
<td>Inconsistently demonstrates ability to accurately utilize equipment needed to conduct a physical examination. Requires maximum instructor assistance and cueing.</td>
<td>Unable to demonstrate ability to accurately utilize equipment needed to conduct a physical examination.</td>
</tr>
<tr>
<td>General Survey</td>
<td>Consistently demonstrates ability to verbalize and assess the components of a General Survey with minimal or no instructor assistance or cueing.</td>
<td>Demonstrates ability to verbalize and assess the components of a General Survey with moderate instructor assistance and cueing.</td>
<td>Inconsistently demonstrates ability to verbalize and assess the component of a General Survey. Requires maximum instructor assistance and cueing.</td>
<td>. Not able to verbalize and assess the components of a General Survey.</td>
</tr>
<tr>
<td>Vital Signs Pulse, Respiration and Blood Pressure</td>
<td>Consistently demonstrates ability to accurately assess vital signs with minimal or no instructor assistance or cueing.</td>
<td>Demonstrates ability to accurately assess vital signs. Requires moderate instructor assistance and cueing.</td>
<td>Inconsistently demonstrates ability to accurately assess vital signs. Requires maximum instructor assistance and cueing.</td>
<td>Not able to accurately assess vital signs.</td>
</tr>
<tr>
<td>Skin, Hair and Nails</td>
<td>Consistently demonstrates ability to accurately perform skills related to assessing the Skin, Hair and Nails with minimal or no instructor assistance or cueing.</td>
<td>Demonstrates ability to accurately perform skills related to assessing the Skin, Hair and Nails. Requires moderate instructor assistance and cueing.</td>
<td>Inconsistently demonstrates ability to accurately perform skills related to assessing the Skin, Hair and Nails. Requires maximum instructor assistance and cueing.</td>
<td>Not able to accurately perform skill needed to assess the Skin, Hair and Nails.</td>
</tr>
<tr>
<td>Head, Face and Neck</td>
<td>Consistently demonstrates ability to accurately perform skills related to assessing the Head, Face and Neck with minimal or no instructor assistance or cueing.</td>
<td>Demonstrates ability to accurately perform skills related to assessing the Head, Face and Neck. Requires moderate instructor assistance and cueing.</td>
<td>Inconsistently demonstrates ability to accurately perform skills related to assessing the Head, Face and Neck. Requires maximum instructor assistance and cueing.</td>
<td>Not able to accurately perform skill needed to assess the Head, Face and Neck.</td>
</tr>
<tr>
<td>Criteria</td>
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<tr>
<td>Eyes</td>
<td>Consistently demonstrates ability to accurately perform skills related to assessing the Eyes with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to accurately perform skills related to assessing the Eyes. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to accurately perform skills related to assessing the Eyes. Requires maximum instructor assistance and cueing</td>
<td>Not able to accurately perform skills needed to assess the Eyes</td>
</tr>
<tr>
<td>Ears</td>
<td>Consistently demonstrates ability to accurately perform skills related to assessing the Ears with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to accurately perform skills related to assessing the Ears. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to accurately perform skills related to assessing the Ears. Requires maximum instructor assistance and cueing</td>
<td>Not able to accurately perform skills needed to assess the Ears</td>
</tr>
<tr>
<td>Nose, Mouth and Throat</td>
<td>Consistently demonstrates ability to accurately perform skills related to assessing the Nose, Mouth and Throat with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to accurately perform skills related to assessing the Nose, Mouth and Throat. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to accurately perform skills related to assessing the Nose, Mouth and Throat. Requires maximum instructor assistance and cueing</td>
<td>Not able to accurately perform skills needed to assess the Nose, Mouth and Throat</td>
</tr>
<tr>
<td>Thorax, Lungs and Axillae</td>
<td>Consistently demonstrates ability to accurately perform skills related to assessing the Thorax, Lungs and Axillae with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to accurately perform skills related to assessing the Thorax, Lungs and Axillae. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to accurately perform skills related to assessing the Thorax, Lungs and Axillae. Requires maximum instructor assistance and cueing</td>
<td>Not able to accurately perform skills needed to assess the Thorax, Lungs and Axillae</td>
</tr>
<tr>
<td>Heart</td>
<td>Consistently demonstrates ability to accurately perform skills related to assessing the Heart with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to accurately perform skills related to assessing the Heart. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to accurately perform skills related to assessing the Heart. Requires maximum instructor assistance and cueing</td>
<td>Not able to accurately perform skills needed to assess the Heart</td>
</tr>
<tr>
<td>Peripheral Vascular</td>
<td>Consistently demonstrates ability to accurately perform skills related to assessing the Peripheral Vascular System with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to accurately perform skills related to assessing the Peripheral Vascular System. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to accurately perform skills related to assessing the Peripheral Vascular System. Requires maximum instructor assistance and cueing</td>
<td>Not able to accurately perform skills needed to assess the Peripheral Vascular System</td>
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<tr>
<td>Abdomen</td>
<td>Consistently demonstrates ability to</td>
<td>Demonstrates ability to</td>
<td>Inconsistently demonstrates ability to</td>
<td>Not able to accurately</td>
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<td>Criteria</td>
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<td>ability to accurately perform skills related to assessing the Abdomen with minimal or no instructor assistance or cueing</td>
<td>accurately perform skills related to assessing the Abdomen. Requires moderate instructor assistance and cueing</td>
<td>ability to accurately perform skills related to assessing the Abdomen. Requires maximum instructor assistance and cueing</td>
<td>perform skills needed to assess the Abdomen</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>Consistently demonstrates ability to accurately perform skills related to assessing the Musculoskeletal System with minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to accurately perform skills related to assessing the Musculoskeletal System. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to accurately perform skills related to assessing the Musculoskeletal System. Requires maximum instructor assistance and cueing</td>
<td>Not able to accurately perform skills needed to assess the Musculoskeletal System</td>
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<tr>
<td>Professional</td>
<td>Consistently demonstrates ability to perform exam in a logical sequence, positioning and draping patient properly and performing techniques properly with minimal or no instructor assistance or cueing.</td>
<td>Demonstrates ability to perform exam in a logical sequence, positioning and draping patient properly and performing techniques properly. Requires moderate instructor assistance and cueing.</td>
<td>Inconsistently demonstrates ability to perform exam in a logical sequence, positioning and draping patient properly and performing techniques properly. Requires maximum instructor assistance and cueing.</td>
<td>Not able to demonstrate ability to perform exam in a logical sequence, positioning and draping patient properly and performing techniques properly.</td>
</tr>
</tbody>
</table>

EE=Exceeds Expectations  ME=Meets Expectations  NI=Needs Improvement  Inadequate = Failed
<table>
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<tr>
<th>Criteria</th>
<th>EE</th>
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<tbody>
<tr>
<td>Reviewed ROS pertinent to the Neurological</td>
<td>Consistently demonstrates</td>
<td>Demonstrates knowledge of the</td>
<td>Inconsistently demonstrates</td>
<td>Not able to demonstrate knowledge of the history related to the Neurological System</td>
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<tr>
<td>System</td>
<td>knowledge of the history related to the Neurological System with minimal or no instructor assistance or cueing</td>
<td>knowledge of the history related to the Neurological System. Requires moderate instructor assistance or cueing</td>
<td>knowledge of the history related to the Neurological System Requires maximum instructor assistance and cueing</td>
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<tr>
<td>Mental Status</td>
<td>Consistently demonstrates</td>
<td>Demonstrates ability to</td>
<td>Inconsistently demonstrates</td>
<td>Not able to accurately perform skills related to assessing Mental Status</td>
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<td>ability to accurately perform</td>
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<td>skills related to assessing</td>
<td>related to assessing the Mental Status. Requires moderate instructor assistance and cueing</td>
<td>skills related to assessing the Mental Status Requires maximum instructor assistance and cueing</td>
<td>Not able to accurately perform skills related to assessing Mental Status</td>
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<td>Mental Status</td>
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<td>with minimal or no instructor</td>
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<td>assistance or cueing</td>
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<tr>
<td>Cranial Nerves</td>
<td>Consistently demonstrates</td>
<td>Demonstrates ability to</td>
<td>Inconsistently demonstrates</td>
<td>Not able to accurately perform skills related to examining Cranial Nerves</td>
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<td>ability to accurately perform</td>
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<td>related to examining Cranial</td>
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<td>Cranial Nerves with minimal</td>
<td>Nerves. Requires moderate</td>
<td>Motor System</td>
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<td>or no instructor assistance or</td>
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<td>Motor System</td>
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<td>Demonstrates ability to</td>
<td>Inconsistently demonstrates</td>
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<td>skills related to examining</td>
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<td>with minimal or no instructor</td>
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<td>Sensory</td>
<td>Consistently demonstrates</td>
<td>Demonstrates ability to</td>
<td>Inconsistently demonstrates</td>
<td>Not able to accurately perform skills related to examining the Sensory System</td>
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<tr>
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<td>ability to accurately perform</td>
<td>accurately perform skills</td>
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<td>skills related to examining</td>
<td>related to examining the Sensory System. Requires moderate instructor assistance and cueing</td>
<td>skills related to examining the Sensory System Requires maximum instructor assistance and cueing</td>
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<td>Sensory System</td>
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<td>Reflexes</td>
<td>Consistently demonstrates</td>
<td>Demonstrates ability to</td>
<td>Inconsistently demonstrates</td>
<td>Not able to accurately perform skills related to assessing Reflexes</td>
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<td>ability to accurately perform</td>
<td>accurately perform skills</td>
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<td>skills related to assessing</td>
<td>related to assessing Reflexes.</td>
<td>skills related to assessing the</td>
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<td>Reflexes with minimal or no</td>
<td>Requires moderate instructor</td>
<td>Reflexes. Requires</td>
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<td>instructor assistance or cueing</td>
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<td>and cueing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EE** = Exceeds Expectations  **ME** = Meets Expectations  **NI** = Needs Improvement  **Inadequate** = Failed
<table>
<thead>
<tr>
<th>Criteria</th>
<th>EE</th>
<th>ME</th>
<th>NI</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Values</td>
<td>Consistently demonstrates ability to differentiate normal from abnormal lab values with minimal or no instructor assistance</td>
<td>Demonstrates ability to differentiate normal from abnormal lab values. Requires moderate instructor assistance or cueing</td>
<td>Inconsistently demonstrates ability to differentiate normal from abnormal lab values. Requires maximum instructor assistance and cueing</td>
<td>Not able to differentiate normal from abnormal lab values.</td>
</tr>
<tr>
<td>Lab Analysis</td>
<td>Consistently demonstrates ability to correlate abnormal lab values with impaired physiological systems. Requires minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to correlate abnormal lab values with impaired physiological systems. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to correlate abnormal lab values with impaired physiological systems. Requires maximum instructor assistance and cueing</td>
<td>Not able to accurately correlate abnormal lab values with impaired physiological systems.</td>
</tr>
<tr>
<td>Adverse Drug Reactions</td>
<td>Consistently demonstrates ability to identify adverse drug reactions. Requires minimal instructor assistance or cueing</td>
<td>Demonstrates ability to identify adverse drug reactions. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to identify adverse drug reactions. Requires maximum instructor assistance and cueing</td>
<td>Not able to identify adverse drug reactions</td>
</tr>
<tr>
<td>Clinical Indicators</td>
<td>Consistently demonstrates ability to identify lab data and physical signs indicating adverse drug reaction. Requires minimal or no instructor assistance or cueing</td>
<td>Demonstrates ability to identify lab data and physical signs indicating adverse drug reactions. Requires moderate instructor assistance and cueing</td>
<td>Inconsistently demonstrates ability to identify lab data and physical signs indicating adverse drug reactions. Requires maximum instructor assistance and cueing</td>
<td>Not able to identify lab data and physical signs indicating adverse drug reactions.</td>
</tr>
</tbody>
</table>

EE= Exceeds Expectations  ME=Meets Expectations  NI=Needs Improvement  Inadequate=Failed
Appendix C
Initial Preceptorship Agreement
Initial Preceptorship Agreement

In signing this agreement, I am agreeing to the following statements:

1. I have agreed to serve as the preceptor for ____________________________, a participant in the Fairleigh Dickinson University Psychopharmacology Postdoctoral Training Program.

2. I am a licensed physician in the state(s) of _________________, License #______________, DEA #______________.

3. I agree to the following: 1) I am sufficiently familiar with the use of psychotropic medications to oversee this individual’s practicum experience up to the point at which he or she is competent to practice independently, 2) I am willing to meet with this individual for supervision within one week of each patient contact except for vacations and other unavoidable delays, 3) I am willing to be available to this individual on an emergency basis as necessary, 4) I am willing to meet the supervision requirements outlined in the Supervised Clinical Experience Manual for the FDU M.S. Program in Clinical Psychopharmacology, and 5) I will complete all necessary paperwork verifying completion of the practicum requirements.

________________________________________________________________________________________________________________________
Preceptor Name and Degree (printed) Date

________________________________________________________________________________________________________________________
Preceptor Signature Supervisee Signature

Preceptor Information:

Business Address: _____________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

Business Phone: _______________ Fax: _______________ Pager: _______________

E-mail: ____________________________________________

Specialty areas/board certifications:

___________________________________________________________________________

___________________________________________________________________________

Please include a copy of your vita or resume.
Appendix D
Initial Case Supervisory Session Form
Initial Case Supervisory Session Form

This form should be completed for the supervision session of a new case. Complete the following information prior to meeting with preceptor. The Client ID is an arbitrary identifier.

Client ID: _____________________________ Supervision Date: _________________

Client Presenting Complaint:

Client Demographic Information (age, race, marital status, patient population, inpatient/outpatient):

Medical History:

Diagnostic Impression:
Axis I: 
Axis II: 
Axis III: 
Axis IV: Legal Support group Economic Occupational Access to Services Spiritual Medical
Axis V: GAF (current):

Proposed Treatment Plan (SEE REVERSE SIDE):

The following should be completed by the preceptor during/after supervision.

Check one of the following:
_____ I found the proposed treatment plan appropriate without revision
_____ I modified the proposed treatment plan as follows:*

Comments on supervisee’s performance:

Preceptor Signature _____________________________________________ Psychologist Signature _____________________________________________

*A treatment plan should include but is not limited to recommendations for additional tests (with implications of outcomes for treatment plan), appropriateness of medication, proposed medication regimen (including dosing, monitoring plan, side effect management plan, and a plan for dealing with treatment resistance/failure), and alternative/ancillary treatments proposed.
Rx Psychology Treatment Plan

Current Medications: ________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

Additional Tests Recommended: __________________________________________________________

Rationale for Additional Tests: __________________________________________________________

1) ________________________________________________________________ Dose & ROA: __________ Frequency: ______ Quantity/Duration: ______ #Refills

2) ________________________________________________________________ Dose & ROA: __________ Frequency: ______ Quantity/Duration: ______ #Refills

3) ________________________________________________________________ Dose & ROA: __________ Frequency: ______ Quantity/Duration: ______ #Refills

Rationale for Medication: ______________________________________________________________

________________________________________________________________________________

Check all that apply:

Risks/Benefits/Limitations Explained to Patient: Yes No

_ Pt satisfied with explanation
_ Pt requested more information
_ Pt given additional Educational Materials
_ Pt referred to other resource for more information

Medication Monitoring/Follow Up Plan Discussed: Yes No

_ Pt will f/u with PCP
_ Pt will f/u with RxP
_ Pt will seek support as needed

Adverse Events Management Plan Discussed: Yes No

_ Pt informed of likely Side Effects
_ Pt will report AE to Health Care Provider
_ Pt aware of indications requiring IMMEDIATE medical attention
_ Pt acknowledged understanding of plan

Alternative Treatment Options Proposed: Yes No

_ Discussed Other Medications
_ Discussed Non-pharmacologic Options
_ Discussed other Available Providers
_ Pt expressed his/her Preference of Treatment Options
_ Pt collaboratively concurred with current plan

Resistance/Failure Options Proposed: Yes No

_ Discussed importance of compliance
_ Discussed consequences of non-compliance
_ Discussed signs of Treatment Failure
_ Discussed potential changes to Treatment
Appendix E
Long-Term Case Supervision Form
Long-Term Case Supervision Form

This form should be completed in instances where the supervisee has monitored a case until the medication regimen is considered to be stable.

Client ID: _______________________________ Date: ________________

Client Presenting Complaint:

Client Demographic Information (age, race, marital status, patient population, inpatient/outpatient):

Medical History:

Diagnostic Impression:

Total number of contacts between supervisee and patient:

I verify that the supervisee for whom I serve as preceptor has monitored this case until stabilization of the medication regimen. During that period the supervisee has monitored treatment progress, and consulted in any appropriate modifications of the medication plan.

_________________________________________ _______________________________
Preceptor Signature Supervisee Signature
Appendix F
Outcome Assessment Form
Outcome Assessment Form

This form must be completed upon termination of the supervisory relationship with each preceptor.

Supervisee’s Name: __________________________________ Date: _________________

Name of site where service was provided: ______________________________________

Please complete all items on the following scale:

1. Able to function independently as a prescriber
2. Approaching level appropriate for independent practice
3. In need of additional close supervision
4. Did not supervise

Your ratings should take account of the level of competence you consider appropriate for the practicing prescriber. For example, this may require competency in certain physical exam skills and ability to use physical exam results but not require mastery of all elements of a physical exam.

1. Physical exam.........................................................................................................................................1 2 3 4
2. Mental status exam ................................................................................................................................1 2 3 4
3. Review of body systems.........................................................................................................................1 2 3 4
4. Medical history taking.............................................................................................................................1 2 3 4
5. Medical history documentation/reporting............................................................................................1 2 3 4
6. Selection of appropriate medical tests/procedures ................................................................................1 2 3 4
7. Interpretation of medical tests/procedures .............................................................................................1 2 3 4
8. Diagnosis ................................................................................................................................................1 2 3 4
9. Knowledge of psychotropic medications, dosages, and side effects .....................................................1 2 3 4
10. Ability to develop an appropriate medication treatment plan ...............................................................1 2 3 4
11. Ability to anticipate and plan for potential obstacles to treatment ..........................................................1 2 3 4
12. Skill at monitoring treatment progress ....................................................................................................1 2 3 4
13. Flexibility in applying a treatment plan ...................................................................................................1 2 3 4
14. Awareness of patient variables that are important for treatment planning .........................................1 2 3 4
15. Effectiveness in collaborating/consulting with other professionals......................................................1 2 3 4
16. Ability to communicate effectively with patients about treatment .....................................................1 2 3 4
17. Ability to integrate medical, psychiatric, and psychological issues in formulation..............................1 2 3 4

Overall, do you consider this supervisee ready to operate as an independent prescriber of medications appropriate to the practice of psychology?

Yes No

Comments:

_____________________________________________ _________________________________
Preceptor Signature Supervisee Signature
Appendix G
Semester Evaluation Form
Semester Evaluation Form

This evaluation form should be completed at the end of each semester in which the supervisee participates in the practicum (April, August, and December).

Supervisee’s Name: __________________________________ Date: _________________

Name of site where service was provided: ______________________________________

Please complete all items on the following scale:

1 2 3 4 5 6

Excellent Very Good Satisfactory Some Concerns Serious Concerns Did not supervise

You should consider the supervisee’s stage in the practicum. For example, after 75 patients a supervisee should meet a higher standard than one who has seen 10 patients.

1. Physical exam................................................................................................................................ 1 2 3 4 5 6
2. Mental status exam .......................................................................................................................... 1 2 3 4 5 6
3. Review of body systems ................................................................................................................ 1 2 3 4 5 6
4. Medical history taking .................................................................................................................... 1 2 3 4 5 6
5. Medical history documentation/reporting ....................................................................................... 1 2 3 4 5 6
6. Selection of appropriate medical tests/procedures ........................................................................... 1 2 3 4 5 6
7. Interpretation of medical tests/procedures ..................................................................................... 1 2 3 4 5 6
8. Diagnosis ........................................................................................................................................ 1 2 3 4 5 6
9. Knowledge of psychotropic medications, dosages, and side effects ............................................ 1 2 3 4 5 6
10. Ability to develop an appropriate medication treatment plan ........................................................ 1 2 3 4 5 6
11. Ability to anticipate and plan for potential obstacles to treatment ................................................. 1 2 3 4 5 6
12. Skill at monitoring treatment progress .......................................................................................... 1 2 3 4 5 6
13. Flexibility in applying a treatment plan .......................................................................................... 1 2 3 4 5 6
14. Awareness of patient variables that are important for treatment planning .................................... 1 2 3 4 5 6
15. Effectiveness in collaborating/consulting with other professionals ................................................. 1 2 3 4 5 6
16. Ability to communicate effectively with patients about treatment .................................................. 1 2 3 4 5 6
17. Ability to integrate medical, psychiatric, and psychological issues in formulation ......................... 1 2 3 4 5 6

Areas of strength:

Skills in need of further development:

Overall effectiveness in the combined medical/psychological management of patients:

Preceptor Signature _______________________________ Supervisee Signature _______________________________
Appendix H
Semester Summary Form
# Semester Summary Form

Supervisee’s Name: ___________________________ Date: _________________

Semester:
Year: 20___

☐ Fall ☐ Spring ☐ Summer

<table>
<thead>
<tr>
<th>Materials Submitted:</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Case Supervisory Session Forms</td>
<td></td>
</tr>
<tr>
<td>Long-Term Case Supervision Forms</td>
<td></td>
</tr>
<tr>
<td>Semester Evaluation Forms</td>
<td></td>
</tr>
<tr>
<td>Physical Exam Reports</td>
<td></td>
</tr>
<tr>
<td>Outcome Evaluation Forms</td>
<td></td>
</tr>
</tbody>
</table>
Appendix I

Capstone Examination Evaluation Form
<table>
<thead>
<tr>
<th>Criteria</th>
<th>EE</th>
<th>ME</th>
<th>NI</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Exam/Mental Status (PE, MS)</td>
<td>Accurately describes conduct and interpretation of PE and MS appropriate to the case with minimal or no prompting</td>
<td>Accurately describes conduct and interpretation of PE and MS with moderate prompting</td>
<td>Accurately describes conduct and interpretation of PE and MS, but only with maximum prompting</td>
<td>Not able to describe conduct or interpretation of PE or MS adequately</td>
</tr>
<tr>
<td>Review of Systems (RS)</td>
<td>Accurately identifies key elements in RS appropriate to the case and interprets findings correctly with minimal or no prompting</td>
<td>Accurately identifies key elements in RS appropriate to the case and interprets findings correctly with moderate prompting</td>
<td>Accurately identifies key elements in RS appropriate to the case, but only with maximum prompting</td>
<td>Not able to identify key elements in RS appropriate to the case accurately or interpret findings correctly</td>
</tr>
<tr>
<td>Medical History Interview and Documentation (MHI)</td>
<td>Accurately describes conduct, interpretation, and documentation of MHI appropriate to the case with minimal or no prompting</td>
<td>Accurately describes conduct, interpretation, and documentation of MHI appropriate to the case with moderate prompting</td>
<td>Accurately describes conduct, interpretation, and documentation of MHI appropriate to the case, but only with maximum prompting</td>
<td>Not able to describe conduct, interpretation, or documentation of MHI adequately</td>
</tr>
<tr>
<td>Assessment (AS)</td>
<td>Identifies key tests to conduct, including both psychological and biological instruments, with minimal or no prompting</td>
<td>Identifies key tests to conduct, including both psychological and biological instruments, with moderate prompting</td>
<td>Identifies key tests to conduct, including both psychological and biological instruments, but only with maximum prompting</td>
<td>Not able to identify key psychological or biological tests to conduct</td>
</tr>
<tr>
<td>Differential Diagnosis (DD)</td>
<td>Considers reasonable alternative hypotheses and comes to an acceptable diagnoses with minimal or no prompting</td>
<td>Considers reasonable alternative hypotheses and comes to acceptable diagnoses with moderate prompting</td>
<td>Considers reasonable alternative hypotheses and comes to acceptable diagnoses, but only with maximum prompting</td>
<td>Not able to identify reasonable alternative hypotheses or come to acceptable diagnoses</td>
</tr>
<tr>
<td>Integrated Treatment Planning (ITP)</td>
<td>Based on the diagnoses selected, outlines a reasonable treatment plan that considers both biological and psychosocial interventions administered safely and effectively with minimal or no prompting</td>
<td>Based on the diagnoses selected, outlines a reasonable treatment plan that considers both biological and psychosocial interventions administered safely and effectively with moderate prompting</td>
<td>Based on the diagnoses selected, outlines a reasonable treatment plan that considers both biological and psychosocial interventions administered safely and effectively, but only with maximum prompting</td>
<td>Not able to outline a reasonable treatment plan that considers both biological and psychosocial interventions based on the diagnoses selected, or that uses interventions in an unsafe manner</td>
</tr>
<tr>
<td>Consultation and Collaboration (CC)</td>
<td>The treatment plan identifies reasonable choices for coordinating care with other providers with minimal or no prompting</td>
<td>The treatment plan identifies reasonable choices for coordinating care with other providers with moderate prompting</td>
<td>The treatment plan identifies reasonable choices for coordinating care with other providers, but only with maximum prompting</td>
<td>Not able to identify reasonable choices for coordinating care with other providers</td>
</tr>
<tr>
<td>Criteria</td>
<td>EE</td>
<td>ME</td>
<td>NI</td>
<td>Inadequate</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Treatment Management (TM)</td>
<td>Can develop a long-range plan for care, including likely hurdles to overcome in the treatment, with minimal or no prompting</td>
<td>Can develop a long-range plan for care, including likely hurdles to overcome in the treatment, with moderate prompting</td>
<td>Can develop a long-range plan for care, including likely hurdles to overcome in the treatment, but only with maximum prompting</td>
<td>Not able to develop a long-range plan for care, including likely hurdles to overcome in the treatment</td>
</tr>
</tbody>
</table>

EE=Exceeds Expectations     ME=Meets Expectations   NI=Needs Improvement   Inadequate=Failed

**Overall Evaluation**

___Pass: At least 5 of 8 criteria receive a score of EE or ME, and no more than 2 of 8 criteria receive a score of Inadequate

___Fail: At least 5 of 8 criteria receive a score of NI or Inadequate, or at least 3 of 8 criteria receive a score of Inadequate
Appendix J
New Mexico 80-Hour Practicum
Evaluation Form
## Interviewing/History Taking

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Establishes good rapport with patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Can interview patient skillfully about:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Chief complaint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Present problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Symptom analysis of each present problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Past history</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Family history</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Review of systems</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Physical Examination/Laboratory Skills

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Observes and participates in physical examination as situation dictates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Recognizes range of symptoms and manifestations of abnormal findings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Demonstrates adequacy in assessing vital signs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Experience in Assessment

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Differentiates relevant from irrelevant diagnostic cues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Formulates assessment at highest diagnostic level which data support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Formulates prioritized risk/health-maintenance-needs list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Can plan diagnostic studies judiciously</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Can plan non-pharmacologic strategies when appropriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Plan recommended follow-up/referral when appropriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Demonstrates competent laboratory assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Demonstrates competency in physical and health assessment techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Assesses a diverse and significantly medically ill population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>Satisfactory</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>a. Applies current theoretical knowledge to clinical setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Assumes responsibility appropriate to current knowledge/skill level; appropriate to limits of practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Seeks assistance appropriately</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Takes a patient's family situation into consideration planning care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Communicates clinical goals/objectives clearly to preceptor/clinical advisor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Retains composure under stress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Recognizes and seeks to remediate weak areas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

________________________________________  ___________________________
Supervisor Signature                               Date
College of Pharmacy

PHPS 607
Psychopharmacology Practicum

Course Coordinator
Judith Steinman, PhD
Office: 34 Rainbow Drive Annex
Hilo, HI 96720
Phone: 808- 987-8752
Email: steinman@hawaii.edu
Course Title: Psychopharmacology Practicum

Course Number: PHPS 607

Course Credit: 2 hours

Class Time(s) and Location:

Lectures: Day, Time and location TBA

Instructors:

Ed Fisher, PhD
Office: 722 S. A'ohoku St., Room 106
Phone: 808-933-7689
Email: fishere@hawaii.edu

Judith L. Steinman PhD
Office: 34 Rainbow Drive Annex
Hilo, HI 96720
Phone: 808-933-2964
Cell: 808-987-8752
Email: steinman@hawaii.edu

Prerequisites:

Acceptance into the program.

Course Description:

Students will participate in a psychopharmacology practicum for eight hours per week for at least one-year. The total amount of hours per year is at least 400 hours. They will be supervised by a qualified clinical practitioner with demonstrated skills and experience in clinical psychopharmacology in accordance with the prevailing jurisdictional law. Clinical supervision will be for one hour per week or one hour per eight hours of patient contact. Students will be actively involved in consultation with physicians and/or appropriately credentialed psychologists regarding the prescribing of psychoactive medications. The Clinical Psychopharmacology Practicum components will be consistent with APA Recommendations. The Psychopharmacology Practicum courses will require students to demonstrate competence in medication therapy management specific to psychopathology. Students will present cases from this practicum in the Advanced Psychopharmacology I and II courses taught concurrently. At the end of the training program, a capstone competency evaluation will be completed. Students will need to arrange their own practicum according to the guidelines listed in the course syllabus.

Course Learning Outcomes:
For the purposes of program assessment, two broad program learning outcomes (PLO) have been developed. The PLO number refers to the overall outcome designed for the successful completion of the MSCP program.

**Summary of Program Outcomes, Course Objectives and Assessment:**

For this course, the successful student will be able to:

<table>
<thead>
<tr>
<th>Course Learning Objectives (see below)</th>
<th>Assignment/Assessment (see below)</th>
<th>Program Learning Outcome</th>
<th>PLO #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>Midterm evaluation</td>
<td>Review and explain at a high level of proficiency, both orally and in writing, the most current theories of the pathophysiology, etiology, signs and symptoms underlying mental health disorders and their psychopharmacologic treatment. Choose the appropriate diagnosis and effectively apply psychopharmacological knowledge to resolve clinical psychopathological cases using “Subjective, Objective, Assessment and Planning” (SOAP) notes and case presentations, and differentiate mental disorders that are drug-induced or caused by somatic disease. Devise, formulate and plan medication therapy management specific to psychopathology, with an emphasis on drug selection based on relative efficacy for the disorder, adverse effect profiles, food and drug interactions, and pharmacokinetics, and determine appropriate pharmacologic assessment and monitoring</td>
<td>2, 3, 5</td>
</tr>
<tr>
<td>6-14</td>
<td>Midterm and Final evaluation</td>
<td>Review and explain at a high level of proficiency, both orally and in writing, the most current theories of the pathophysiology, etiology, signs and symptoms underlying mental health disorders and their psychopharmacologic treatment. Choose the appropriate diagnosis and effectively apply psychopharmacological knowledge to resolve clinical psychopathological cases using “Subjective, Objective, Assessment and Planning” (SOAP) notes and case presentations, and differentiate mental disorders that are drug-induced or caused by somatic disease.</td>
<td>2, 3</td>
</tr>
<tr>
<td></td>
<td>Analyze, interpret, integrate and evaluate pharmacologically-based clinical findings in psychological settings through literature review, class presentations and written analysis.</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Devise, formulate and plan medication therapy management specific to psychopathology, with an emphasis on drug selection based on relative efficacy for the disorder, adverse effect profiles, food and drug interactions, and pharmacokinetics, and determine appropriate pharmacologic assessment and monitoring</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonstrate the ability to compare and contrast and interpret epidemiological, professional, legal and ethical findings in the clinical psychopharmacology literature and case presentations using information technology.</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Course Learning Objectives:

At the completion of this course, the student should be able to:

1. Describe the indications, contraindications, and off label uses of various psychotropic and adjunctive medications
2. Recall the rationale for psychotropic medication selection, taking into account diagnoses, target symptoms, patient and family history, premorbid personality, demographics, comorbid medical conditions, existing medication regimen and potential for interactions, and differences among medications within classes of drugs
3. List the dosing, time course of therapeutic action and adverse effects; and patient factors that influence dose (e.g., weight, gender, ethnicity, age, concurrent disease)
4. Describe therapeutic monitoring, augmentation strategies, and dose adjustments (e.g., titration, cross-taper, discontinuation) for psychotropic medications
5. List the routes of administration (e.g., oral, intramuscular, intravenous, inhalation) and differential response of psychotropic medications
6. Describe the specific drug toxicities, management of adverse reactions, including overdose, and indications for referral for appropriate medical care (e.g., acute allergic reaction, extrapyramidal symptoms, hypertensive crisis) for psychotropic medications
7. Recall interactions of psychotropic and adjunctive medications with other medications (including other drugs used in medicine, for recreational purposes, and available for OTC purchase)
8. Describe methods for relapse prevention, maintenance, and prophylaxis (e.g., strategies for sustaining remission of substance abuse, ensuring treatment compliance, preventing recurrence of depression)
9. Recall drug effects in special populations (e.g., developmentally disabled, elderly, pregnant or lactating women)
10. Describe the pharmacological implications for comorbidity of age-related and disability-related disorders (e.g., overanxious disorder comorbid with ADHD)
11. Distinguish potential psychological and physiological manifestations of medications (including OTC drugs, supplements, and herbal substances) used for nonpsychological purposes (e.g., beta blockers, steroids)
12. Predict the psychological and physiological manifestations of various recreational substances and treatment of intoxication or addiction, including strategies for assisted withdrawal, maintenance, and relapse prevention
13. Predict tolerance or cross-tolerance development, dependence and withdrawal, sensitization/cross-sensitization with respect to specific medications, and the management strategies used to treat them
14. Distinguish culturally appropriate educational techniques to inform patients about drug utilization, risks, benefits, potential complications, and alternatives to pharmacotherapy (e.g., procedures to enhance compliance, techniques to teach appropriate attribution and self-monitoring)
**Course Assessment:**

Students will be assessed using the following rubric by their clinical supervisor. They will receive both a midterm and a final evaluation. In order to receive a grade of Pass they must achieve a minimum of a 3 (meets expected level of performance) in all fifteen of the following practicum-specific learning outcomes.

1. Has failed to demonstrate expected level of performance
2. Performs satisfactorily at times, has specific deficiencies
3. Meets expected level of performance
4. Exceeds expected level of performance
5. Exceptional performance

**Practicum-Specific Learning Outcomes:**

I. Obtains appropriate psychological and medical history  
II. Forms appropriate diagnoses  
III. Recommends referral for medical evaluation when necessary  
IV. Initial goals are appropriate for patient’s diagnosis  
V. Is knowledgeable about when laboratory tests should be ordered  
VI. Demonstrates appropriate knowledge in interpreting lab tests.  
VII. Demonstrates an ability to explain a drug’s benefits, side effect profile, and risks  
VIII. Is responsible in monitoring psychotropic drug effectiveness and recommending appropriate changes  
IX. Able to explain drug use to a patient in a thorough, clear manner  
X. Is systematic in checking for drug interaction  
XI. Is systematic in assuring that drug selection is not contraindicated with patient’s medical condition or other medical treatment  
XII. Give patients written information when appropriate  
XIII. Sets appropriate long term goals  
XIV. Keeps timely and thorough notes, etc.  
XV. Is an active participant in the learning process, asking appropriate questions, reading recommended material, etc.

The clinical supervisor will need to submit documented proof to the director of the MSCP program that the student has completed a minimum of 400 hours of practicum, that clinical supervision was for one hour per week or one hour per eight hours of patient contact, and that a minimum of 100 patients were seen for medication.

**Course Grade Scale (%):**

This course will be taught P/NP

**Required Texts:**

Recommended Texts:


Introduction to the Pharmaceutical Sciences, Pandit, NK, Lippincott Williams & Wilkins, 2007.


Professionalism Policies:

Make-up exams (due to illness or approved extenuating circumstance) will generally only be given if the instructor is notified prior to the examination. Failure to take an exam will count as a zero on that exam.

Missing Exams Documentation will be required for all missed exams.

Requests for re-grading exam questions may result in the entire exam being re-graded. Point total errors can be corrected without re-grading the entire exam.

Cell Phones, Pagers & Other Communication Devices:

All cell phones, pagers etc. are to be on silent mode during class or turned off! Cell phones and pagers are NOT to be answered during video chats.

Dress Code:

Students are expected to dress in an appropriate professional manner.

Attendance Policy:

University of Hawaii, Hilo, encourages 100% attendance by students at all course-related sessions, lectures, laboratories, and clinical assignments. Each college or department has the prerogative to establish its own attendance requirements and policies. Unless a department’s policy differs, class attendance is mandatory for all students for the first session of each course in each quarter as well as on the first day of class after scheduled vacations and University holidays. If illness, a personal emergency, personal incapacitation, or other exceptional problem of a serious nature causes a student to be absent from a session requiring mandatory attendance, the student must immediately notify the course coordinator and follow stated course policies and procedures. Unexcused absences during these or other mandatory attendance sessions may result in course failure.

Academic Honesty:
Academic honesty and integrity are expected of all students throughout their course of study at UHH-CoP. Any violation of this code is considered to be a serious academic violation and may result in a reprimand, monetary fine, written warning, academic and/or disciplinary probation, suspension, or dismissal. Academic dishonesty constitutes a breach of academic integrity that violates the academic foundation of an institution and compromises the integrity and well being of the educational program. The policies on students’ academic and professional responsibilities are included in Graduate Handbook UHH-CoP.

**Students with Disabilities:**

Any student with a documented disability who would like to request for accommodations should contact the University Disability Services Office (933-0816 (Voice), or 933-3334 (TTY), shirachi@hawaii.edu, Hale Kauanoe A Wing Lounge), as early in the semester as possible.
MEMORADUM FOR

SUBJECT: Psychopharmacology Practicum for Clinical Psychologists

1. PURPOSE: To establish _______________ Policy for Clinical Psychologists (staff and post doctoral fellows) completing a Psychopharmacology Practicum.


3. SCOPE: This policy applies to all clinical psychologists (staff and postdoctoral trainees) assigned to ________ to provide medical care.

4. GENERAL:
   
a. Psychopharmacology Practicum Requirements:
      
      (1) Clinical psychologists need to participate in a psychopharmacology practicum for eight (8) hours per week for at least one-year. The total amount of hours per year is at least 400 hours.
      
      (2) Clinical psychologists will see a minimum of 100 separate patients.
      
      (3) Clinical psychologists will conduct evaluation and treatment with psychotropic medications.
      
      (4) The patients will be from a range of disorders, a range of comorbid conditions, and from diverse backgrounds (gender, ages throughout the lifecycles, various ethnicities, sociocultural background, various cultural economic backgrounds) as much as possible within the expertise of supervisor.

      (5) Psychotropic drugs medications include antidepressants, antipsychotics, anxiolytics, anticonvulsants, mood stabilizers, and Attention Deficit Hyperactivity Disorder/narcolepsy agents.

   b. Clinical Psychopharmacology Supervisors for Clinical Psychologists.
      
      (1) The credentials of the clinical psychopharmacology supervisors include Board Certified Psychiatrists or clinical psychologists who are credentialed to prescribe
psychotropic medications in a Department of Defense (DoD) Military Treatment Facility or other equivalent facility.

(2) The clinical supervision consists of at least one (1) hour of supervision per week or one (1) hour per eight hours of patient contact.

c. Necessary Documentation:

(1) Before the Clinical Psychologist participates in the psychopharmacology practicum experience, he or she will notify the UH Hilo MSCP program coordinator and provide him or her with the following information:

(a) Site where clinical supervision is going to take place.

(b) Name of psychopharmacology clinical supervisor.

(c) Before the Clinical Psychologists participates in a psychopharmacology practicum, the UH Hilo MSCP program coordinator must assure that the Site have an existing Memorandum of Agreement (MOA) for the site to conduct training with the Clinical Psychologist.

(2) Clinical Psychologist participating in the psychopharmacology practicum must maintain the following documentation:

(a) Maintain a log of dates and hours of clinical psychopharmacology supervision. At the end of training, the clinical psychopharmacology supervisor and the clinical psychologist will sign the log certifying that supervision took place (Enclosure # 1).

(b) Maintain a log of patients that include number of times seen for evaluation and treatment of psychotropic drugs, diagnosis, medication(s) used, doses used, age, sex, and dispositions (see enclosure # 1). At the end of training, the log needs to be signed by both the clinical supervisor and the clinical psychologist (trainee) certifying for the accuracy of the log. To assure the privacy of the patients, only demographic information will be use to identify the patient. A copy of this log needs to be provided to the Chief, Department of Psychology (Enclosure # 2).

(3) Clinical Psychopharmacology Supervisors need to complete the following documentation:

(a) A Midpoint Evaluation for Clinical Psychologists they are supervising (Enclosure # 3). This evaluation will be sign by both, the supervisor and the clinical psychologist participating in the practicum in psychopharmacology. A copy of the Mid Evaluation will be provided to the Chief, Department of Psychology.
(b) A final evaluation for the Clinical Psychologists they are supervising (see enclosure 1). This evaluation will be signed by both, the supervisor and the clinical psychologist participating in the practicum.

d. Required Training before clinical psychologists begin their practicum in psychopharmacology.

(1) The clinical psychologists have completed a Masters Degree in Psychopharmacology from a regionally accredited university or

(2) The clinical psychologists is in their second year of Postdoctoral Psychopharmacology training program leading to a Masters Degree in Psychopharmacology

5. Point of Contact for this memorandum is Dr Judi Steinman, UH Hilo Daniel K Inouye College of Pharmacy Master of Science in Clinical Psychopharmacology Program, 808-987-8752 or steinman@hawaii.edu.
Enclosure 1

PRACTICUM FOR PRESCRIBING PSYCHOLOGIST
Clinical Psychopharmacology Supervision Log

PRACTICUM SITE LOCATION _____________________________
PRACTICUM SITE PRECEPTOR _____________________________
PRACTICUM SITE CONTACT INFORMATION _______________________

<table>
<thead>
<tr>
<th>Date of Supervision</th>
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Enclosure 2
UH Hilo Daniel K Inouye College of Pharmacy MSCP Practicum
PRACTICUM FOR PRESCRIBING PSYCHOLOGIST
Log of Contact Hours with Patients

<table>
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<tr>
<th>Patient</th>
<th>Age</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>Diagnoses</th>
<th># of times seen</th>
<th>Medication(s) used</th>
<th>Dose Used</th>
<th>Disposition</th>
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</table>
Enclosure # 3:

PRACTICUM SITE DEPARTMENT: ______________________________
PRACTICUM SITE PRECEPTOR: ______________________________
PRACTICUM SITE CONTACT INFO: __________________________

EVALUATION FOR PRESCRIBING PSYCHOLOGIST PRACTICUM

Date: __________________________________________

Psychologist’s name: _________________________________

Supervisor’s name: __________________________________

Midpoint and final evaluation- please indicate: Mid-rotation_____ Final_____

Please use the following to guide your evaluation (circle):

1. Has failed to demonstrate expected level of performance
2. Performs satisfactorily at times, has specific deficiencies
3. Meets expected level of performance
4. Exceeds expected level of performance
5. Exceptional performance

If a student receives a one or a two, please include any comments about what would improve his/her performance.
   1) Obtains appropriate psychological and medical history

   1  2  3  4  5

Comments:

   2) Forms appropriate diagnoses

   1  2  3  4  5

Comments:

   3) Recommends referral for medical evaluation when necessary

   1  2  3  4  5
Comments:

4) Initial goals are appropriate for patient’s diagnosis
   1  2  3  4  5

Comments:

5) Is knowledgeable about when laboratory tests should be ordered
   1  2  3  4  5

Comments:

6) Demonstrates appropriate knowledge in interpreting lab tests.
   1  2  3  4  5

Comments:

7) Demonstrates an ability to explain a drug’s benefits, side effect profile, and risks
   1  2  3  4  5

Comments:

8) Is responsible in monitoring psychotropic drug effectiveness and recommending appropriate changes
   1  2  3  4  5

Comments:
9) Able to explain drug use to a patient in a thorough, clear manner
   1 2 3 4 5
Comments:

10) Is systematic in checking for drug interactions
    1 2 3 4 5
Comments:

11) Is systematic in assuring that drug selection is not contraindicated with patient’s medical condition or other medical treatment
    1 2 3 4 5
Comments:

12) Give patients written information when appropriate
    1 2 3 4 5
Comments:

13) Sets appropriate long term goals
    1 2 3 4 5
Comments:

14) Keeps timely and thorough notes, etc.
    1 2 3 4 5
Comments:
15) Is an active participant in the learning process, asking appropriate questions, reading recommended material, etc.

1 2 3 4 5

Comments:

Supervisor’s Signature ___________________________ Date ___________________________

Student’s Signature ___________________________ Date ___________________________

Chief, Department of Psychology ___________________________ Date ___________________________
## Annual Report Activities

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<thead>
<tr>
<th>Title Of Activity</th>
<th>Credits</th>
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<th>End</th>
<th>Hours</th>
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<td>When Good Drugs Go Bad: Abuse and Misuse of Stimulants</td>
<td>1.25</td>
<td>04-29-2019</td>
<td>11-11-2021</td>
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<td>Workshop</td>
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<td>Alcohol Use Disorder: Treatment in the Context of Mental Illness</td>
<td>1.25</td>
<td>03-21-2019</td>
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<td>London Bridge Is Falling Down: An Update on Childhood Anxiety</td>
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<td>02-28-2019</td>
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<td>2019 NEI Self-Assessments</td>
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<td>01-31-2019</td>
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<td>2018 Pre-Conference Academy: Child and Adolescent Psychiatry</td>
<td>33.25</td>
<td>11-07-2018</td>
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<td>Sleep and Circadian Rhythm Disorders</td>
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<td>07-20-2017</td>
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<td>Lightning Round Cases: Anxiety</td>
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<td>Antidotes and Strategies for Managing Specific Drug Side Effects</td>
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<td>Background and Overview for Assessing Suspected Adverse Drug Effects</td>
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<td>Forgotten But Not Gone: New Developments in the Understanding and Treatment of Tardive Dyskinesia</td>
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<td>Juvenile Bipolar Disorder: Further Complicated by Comorbidity</td>
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<td>01-17-2017</td>
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<td>Beyond P450—Understanding the Role of PGP Transport in CNS Drug Response</td>
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<td>Optimizing Outcomes in ADHD Treatment: From Clinical Targets to Novel Delivery Systems</td>
<td>1.00</td>
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<td>11-30-2019</td>
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### Title of Activity: Forgotten But Not Gone: New Developments in the Understanding and Treatment of Tardive Dyskinesia

- **Credits:** 1.25
- **Start:** 01-03-2017
- **End:** 11-30-2019
- **Hours:** 1.25
- **Format:** Workshop
- **Notes:**

  - **Psychologists:** 0
  - **Non-Psychologists:** 5

### Title of Activity: Emerging Pharmacological Therapies in Schizophrenia: What’s New, What’s Different, What’s Next?

- **Credits:** 1.00
- **Start:** 01-03-2017
- **End:** 11-30-2019
- **Hours:** 1.00
- **Format:** Workshop
- **Notes:**

  - **Psychologists:** 6
  - **Non-Psychologists:** 148

### Title of Activity: Recognizing and Treating Pseudobulbar Affect

- **Credits:** 1.00
- **Start:** 01-03-2017
- **End:** 11-30-2019
- **Hours:** 1.00
- **Format:** Workshop
- **Notes:**

  - **Psychologists:** 1
  - **Non-Psychologists:** 97

### Title of Activity: A Pragmatic Approach to the Diagnosis and Treatment of Mixed Features in Adults with Mood Disorders

- **Credits:** 1.00
- **Start:** 01-03-2017
- **End:** 11-30-2019
- **Hours:** 1.00
- **Format:** Workshop
- **Notes:**

  - **Psychologists:** 4
  - **Non-Psychologists:** 123

### Title of Activity: Mood Disorders: A “Spectrum” Analysis

- **Credits:** 1.25
- **Start:** 12-20-2016
- **End:** 11-06-2019
- **Hours:** 1.25
- **Format:** Workshop
- **Notes:**

  - **Psychologists:** 2
  - **Non-Psychologists:** 24

### Title of Activity: The Brain/Body Connection: Inflammation and Microbiota

- **Credits:** 1.25
- **Start:** 08-22-2016
- **End:** 03-06-2019
- **Hours:** 1.25
- **Format:** Workshop
- **Notes:**

  - **Psychologists:** 0
  - **Non-Psychologists:** 8

### Title of Activity: Lightning Round: What’s New in Psychosis and Antipsychotics

- **Credits:** 1.25
- **Start:** 07-21-2016
- **End:** 03-06-2019
- **Hours:** 1.25
- **Format:** Workshop
- **Notes:**

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  - **Non-Psychologists:** 8

### Title of Activity: Neurobiology of Psychosis in the Era of Genetic Medicine

- **Credits:** 1.25
- **Start:** 07-06-2016
- **End:** 03-06-2019
- **Hours:** 1.25
- **Format:** Workshop
- **Notes:**

  - **Psychologists:** 1
  - **Non-Psychologists:** 33

### Title of Activity: Lightning Round Cases: Antipsychotic and Antidepressant Side Effects

- **Credits:** 1.25
- **Start:** 06-27-2016
- **End:** 12-31-2018
- **Hours:** 1.25
- **Format:** Workshop
- **Notes:**

  - **Psychologists:** 0
  - **Non-Psychologists:** 13

### Title of Activity: Binge Eating and Other Eating Disorders

- **Credits:** 1.25
- **Start:** 06-13-2016
- **End:** 12-31-2018
- **Hours:** 1.25
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<th>Neurobiology of Psychosis in the Era of Genetic Medicine</th>
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**Title Of Activity:** Cognitive Impairment in Schizophrenia: The Great Unmet Need

**Credits:** 1.00  
**Start:** 12-15-2015  
**End:** 11-30-2018

**Hours:** 1.00  
**Format:** Workshop  
**Other:**  
**Psychologists:** 2  
**Non-Psychologists:** 53

**Co-Sponsored:** No  
**Co-Sponsor - Approved:** Organization Name

**Notes:**

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**Annual Report Files**

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**Proposed Future CE Activities**