



THE TABLET

Summer 2026

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President's Column



Elizabeth (Bethe) Lonning, PsyD.



HELLO & *Welcome* to the 3rd quarter of 2026

This will be a bit shorter column with convention right around the corner so I want to highlight all that will be happening there.

Our convention co-chairs, Dr. Alyssa Cunningham and Dr. Peter Smith have been hard at work organizing this year's convention. We have 8 presentations scheduled for all of you to attend. While four of those have been selected by APA to provide continuing education credit, all of them provide valuable information for us.

We have presentations from why to choose to become a prescribing psychologist and how to get there to supervising prescribing psychologists to specific types of treatment for certain diagnoses. We have a poster session on Friday and a presentation on broadening RxP internationally.

Also, on Friday we will have our annual business meeting from 4p-5p in Room 144B where all are welcome. At this meeting, I will review the year thus far—what has been accomplished and what remains to be completed. I will also provide some information on what is coming up later this year for which members need to be aware.

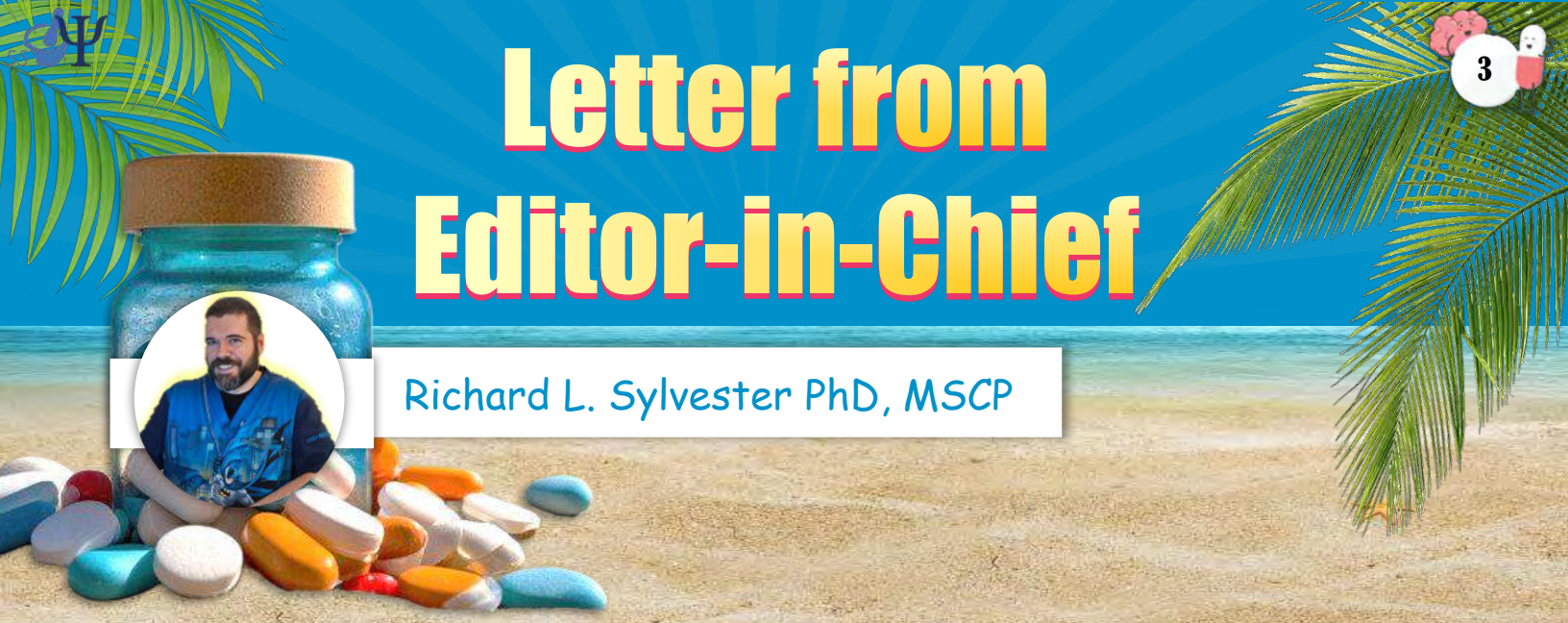
Also, at this meeting, I will have the privilege to present the Division awards to those who have given of themselves to advance our profession. There were several nominations for each of these awards which reminded me of the many members who give their time, energy and effort to RxP!!! It is truly an honor to be part of the same profession as all of you.

I have also invited Dr. Rick Barnett, Dr. Judi Steinman and Dr. Alex Lichten to give us recaps of the legislation successfully passed in each of their states---we're going to want to hear from them!

After the business meeting, we will be having our Division social from 6:00-8:30p at City Tap Kitchen and Craft, 901 9th St NW. Our convention chairs have found a great place off site for us to meet, mingle and celebrate the accomplishments of the Division especially the legislation passed in Vermont and Hawai'i!

So, please join us for any and all of APA Convention 2026!!

*Thank you for being
part of Division 55!*



Letter from Editor-in-Chief

Richard L. Sylvester PhD, MSCP

And now there are 9!

Two states adopting RxP legislation in one year is fantastic news; however, let us remember the years of hard work, advocacy, and efforts from all the individuals who made this possible. Passing legislation is a monumental undertaking. Please support legislative efforts in any way you can whether that means signing a petition, writing a letter, supporting or participating in research, volunteering your time for testimony, or a donation to an organization working to advance RxP.

In this issue, we're preparing for the fast-approaching convention and highlighting an individual who has been on the front lines of practice and research for many years, Dr. Joe Comaty. Dr. Comaty is the focus of our column, "Shining a Spotlight on RxP." Dr. Comaty is an active advocate for RxP, published author, experienced educator, and one of the most knowledgeable gentlemen I've ever met. His hard work and dedication to advancing RxP are greatly appreciated.

In addition, we have a paper submitted by a student and former artist for The Tablet, Ms. Julia Riser. I welcome student submissions. If you're a student and perhaps a little intimidated by the publication process, please feel welcome to submit a literature review or research proposal relevant to RxP and we'll work with you through the publication process.

Patient Name: _____ Date: _____
Address: _____

R_x

If you would like to submit your own

"A Day in the Life"

- Or -

"Shining a Spotlight on RxP"

column for a future issue of The
Tablet, please email me at.....

RSylvesterJr@gmail.com

MD: _____
Signature: _____

Letter from the Editor



Judi Steinman, PhD

We Didn't Quit and We Won: Hawai'i Becomes Ninth State to Pass RxP Legislation

Hawai'i has made a decisive, historic move in mental health policy with the passing of Act 266 on July 15, 2026. The state of Hawai'i now allows specially trained psychologists to prescribe a full range of psychotropic medication on Kaua'i and Hawai'i Island, aiming to cut wait times, expand access, and demonstrate safety in a pilot study model that could reshape mental health care across the Pacific.

Hawai'i's Act 266 places the state among a select group — including New Mexico, Louisiana, Illinois, Idaho, Iowa, Colorado, Utah, and Vermont — that have authorized

Details in Act 266

- Three-year pilot study
- Two locations: FQHCs on Kaua'i and Hawai'i (Big Island)
- Supervision by a physician
- **Full formulary** except narcotics

psychologists with advanced training to prescribe medications for mental health disorders.

Under the new law, licensed psychologists with MSCP training will be eligible for the study. Unlike some other states, Hawai'i's pilot allows a full formulary for psychiatric medications, with the exception

of narcotics, and requires ongoing supervision by a licensed physician.

The three-year pilot program will operate on the islands of Kauai and Hawai'i at Federally Qualified Health Centers (FQHCs), with data collected on safety, patient outcomes and system impact before any decision on statewide expansion. The study will be overseen by the Hawai'i State

Training Pathway for Hawai'i Prescribing Psychologists (Act 266)

Step 1 - Licensure

Hold an active Hawai'i license as a doctoral-level psychologist (Ph.D. or Psy.D.).

Step 2 - Advanced Education

Complete a postdoctoral master's degree in clinical psychopharmacology from an APA accredited program or its equivalent.

Coursework includes biochemistry, neuroanatomy, neurophysiology, pharmacology, pathophysiology, clinical medicine, and psychopharmacology—typically takes 2 years

Step 3 - Clinical Training

Fulfill supervised practicum hours in assessment, diagnosis, and medication management (to be defined by Board of Psychology)

Training must occur under supervision of a licensed physician (psychiatrist or other qualified MD/DO) at an FQHC on Kaua'i and Hawai'i Island

Step 4 - Examination

Pass a national psychopharmacology competency exam (PEP - Psychopharmacology Examination for Psychologists). ASPPB requires that you have been a licensed psychologist for at least two years to take the PEP

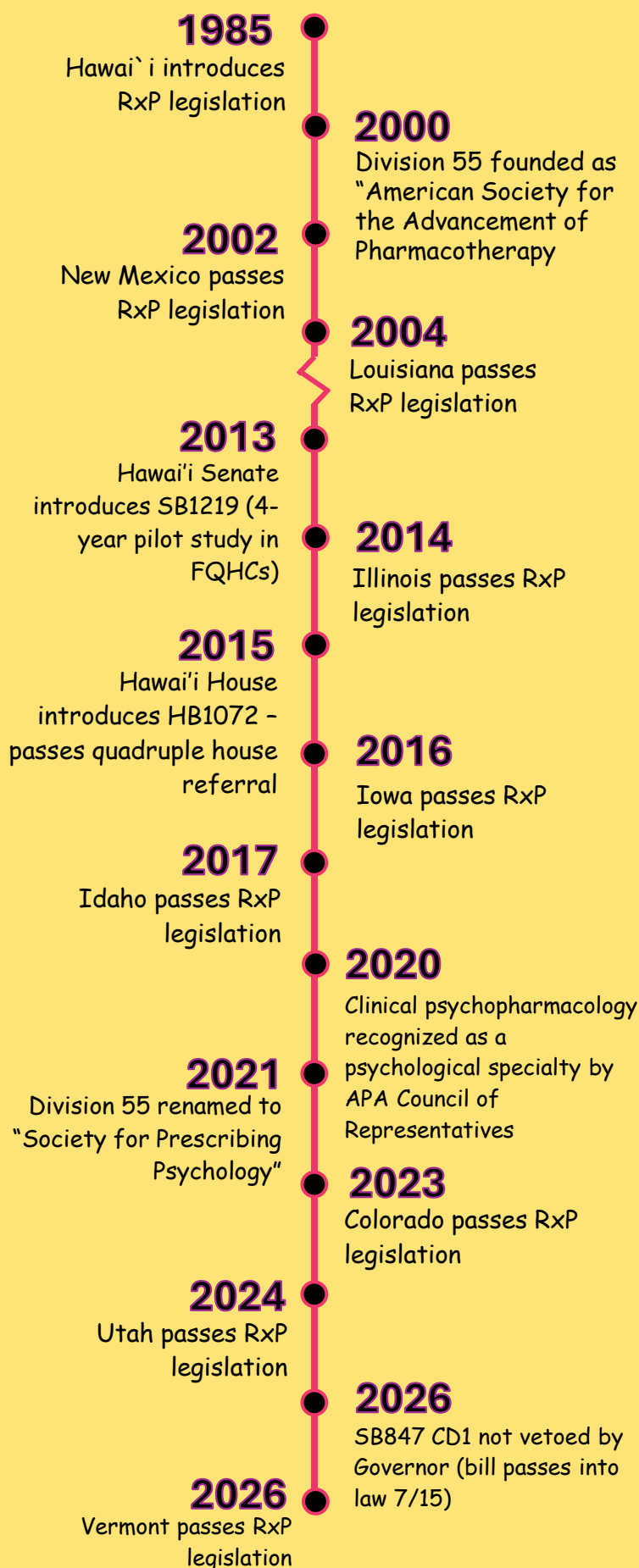
Health Planning and Development Agency (SHPDA).

For psychopharmacologists, this change signals both opportunity and adjustment. Prescribing psychologists will join existing care teams, potentially reducing bottlenecks in medication management. This could foster new avenues for collaboration, training partnerships, and research into integrated prescribing models.

For those who followed SB847 over the 2026 session, the bill went through two committees in the Senate and two in the House. The House hearings resulted in severe whittling away of the bill, removing locations where training would occur on only one site on Kaua'i, reduced medications that be prescribed first to nothing on the DEA Schedule and no off-label prescriptions. The second House committee reduced the options even further to the point where only SSRIs and SNRIs would be allowed. Furthermore, supervisors were restricted to psychiatrists.

Fortunately, we came to appreciate that we were better off having a bill at the end of session than to kill the bill because we weren't satisfied with the changes. We trusted our heroes - Senator Joy San Buenaventura and Kaua'i Mayor Derek Kawakami amongst others - to deliver a bill that would be useable. When we got to conference committee, the legislators hashed out the details and we regained several important features. See the box containing the final results.

Hawai'i Was the First State to Introduce RxP Legislation: Where We Fit in the RxP Story





For those interested in the details about Act 266, it can be found here:

https://www.capitol.hawaii.gov/sessions/session2026/bills/GM1370_.PDF

The history of the bill can be found here:

[Measure Status Details for SB 847](#)

The success of the 2026 bill passage was because of the hard work and dedication from many people, too many to name here. Some of the key players are:

- Melissa Pavlicek, the lobbyist hired by the Hawai'i Psychological Association had the greatest impact on the successful course that this bill took.
- Alex Lichton, the LAC chair, was an amazing partner who steered our efforts with great finesse and wisdom.
- Sam Dutton
- Kathleen McNamara
- Andrew May
- Emma Thompson
- Nancy Sidun
- Ray Folen
- Larry James
- Jo Velasquez
- Phillip Hughes
- Teresa Juarez
- and students Daniel Baon and Rachel Domgaard

All of whom made all the difference to our success. Last but not least, I say a special mahalo to everyone from Division 55 for all of your support.

The timing couldn't be better for those who have thought about getting MSCP training.

The state of Hawai'i is offering costs to cover tuition for healthcare professionals looking to upskill through advanced training and who provide direct patient care in rural parts of the state.

A commitment of five years is required.

For more information, please visit:

[HOME RUN Rural Workforce Investment Program- Detailed Flyer.pdf.](#)

Applications are due by
September

So, you will need to act
QUICKLY!





Pat Deleon
Former APA President

*"I knew a man...
he'd dance for you"*

Appropriate Scope of Practice Expansions:

Last month, *The Washington Post* published an editorial [Alaska's Good Idea to Empower Pharmacists](#). "Like many states, Alaska is struggling with a shortage of physicians, especially in its vast rural areas. Accessing basic health care might get a bit easier for residents there if the governor signs legislation that would expand the authority of pharmacists to prescribe some medications without a doctor's appointment.... If signed into law, it would empower pharmacists to treat conditions such as flu, strep throat and urinary tract infections, as well as some chronic illnesses such as asthma and diabetes. That makes Alaska the latest example of a state trying to make better use of the underutilized medical expertise of pharmacists, who already have the training and expertise to deal with many common ailments.... Pharmacists often have more knowledge about medications than the doctors who prescribe them. Licensed pharmacists have doctorate degrees, and they are often easier to access than primary care clinics.

"Medical associations have warned that pharmacists lack diagnostic training and might miss a serious underlying condition.... But doctors fail to correctly diagnose people all the time, and

it's difficult to justify blocking access to commonly used drugs when someone has symptoms that warrant a prescription.... All these criticisms overlook the benefits of pharmacy liberalization, especially in underserved areas. Idaho's reforms helped spur the opening of pharmacies in small towns that had been without them for decades. There is no evidence of adverse effects. Those are successes other states should be emulating."

During our Uniformed Services University (USU) health policy seminars a similar theme was proffered. Teaching assistants Courtney Caesar, Nolan Hagerty, and Mary Mitchell: "Our group of students from the Medical and Clinical Psychology (MPS) and Psychiatric Mental Health Nurse Practitioner (DNP-PMH) programs recently met with several psychologists, attorneys, and policy advocates, including Ray Folen, Alex Lichten, Melissa Pavlicek, Judi Steinman, and Rick Barnett. In this meeting, the guest speakers discussed the progress, challenges, successes, and 'lessons learned' in gaining prescriptive authority for psychologists in Hawaii and Vermont. They provided valuable insights into the role psychologists can play in mental health advocacy and that marathon that is policy change.

"Also discussed were the numerous

healthcare deserts that exist in America and around the world, which can be greatly lessened by allowing appropriately trained nonphysician clinicians to prescribe a variety of psychotropic medications. Our discussion highlighted the importance of rigorous training, clearly defined standards, referral pathways, and ongoing evaluation to ensure that expanded access remains safe and effective. This definitely is analogous to Expanded Functions Dental Assistants who provide critical dental care in places like rural Alaska, where access to a dentist is sparse.

"An earlier Policy discussion on pharmacists prescribing also reflected the broader national conversation regarding healthcare workforce shortages and scope of practice expansions. Similar arguments have been made regarding RxP for psychologists, particularly in underserved and rural communities where access to psychiatric care remains limited. Mental health provider shortages continue to affect large portions of the United States, creating barriers to timely diagnosis and treatment for individuals with behavioral health concerns. Appropriately trained psychologists may help address some of these gaps in care while working within collaborative healthcare systems. Importantly, proposals for RxP emphasized rigorous postdoctoral education, competency base training, consultation requirements, and clearly defined referral

In a rapidly changing health care environment, the Academy Board of Directors assembled a Task Force of key leaders

pathways to support safe and effective practice. Expanding the roles of qualified nonphysician clinicians represents one important strategy for increasing access to care in healthcare deserts while maintaining high standards of patient safety and quality of care. The discussions were very interactive, with students asking about the speakers' backgrounds, various topics such as forensic psychology, and the personal aspects of the policy making process. In sum, the importance of persistence and advocacy was demonstrated firsthand, providing practical insights for the future psychology and psychiatric nurse leaders."

Maturing Models of Healthcare Delivery: The American Academy of Nursing, an honorific society and policy organization possessing over 3,300 Fellows, recently released its report Transforming Health and Healthcare: Core Factors and Aligned Attributes of Nurse-Led Models of Care. "In a rapidly changing health care environment, the Academy Board of Directors assembled a Task Force of key leaders within the profession and charged them with identifying how models of care are impacting meaningful change in care delivery. These leaders investigated current models of care that have integrated technology, explored broad interprofessional teams, and considered current workforce challenges. Professional nursing societies, health system leaders, community

stakeholders, and policy experts shared their insights to further guide the Task Force's work.... "The Task Force considered the state of primary care and public health, workforce demands, the impact of technology, population-based care needs, as well as long-standing models of care. [It] heard from experts advancing virtual nursing and artificial intelligence and conducted a comprehensive review of the Academy's designated Edge Runner models. Attributes of models of care such as value and incentive systems, digital health innovations, and culture were also evaluated. A key finding was the need to promote and advance Nurse-Led Models of Care (NL-MOC) in the context of how health and health care is evolving....

"The Academy reaffirms its support in the development, testing, and implementation of NL-MOC. The Task Force concluded that NL-MOC serves as a care improvement model and demonstrates positive clinical and financial outcomes, while simultaneously improving quality and equitable care. Further, the Task Force identified four core factors (patient-centered, evidence in practice, outcome driven, team-based coordination) and four aligned attributes (affirming culture, digital health innovation, resource-minded, value and incentive systems) that are integral to the success of the NL-MOC... The Task Force outlined the policy barriers that must be addressed in order to fully

realize the potential of NL-MOCs now and in the future. Ultimately, the Task Force recommended a consistent and consensus-driven definition of NL-MOC be developed."

Identified policy barriers: "Access to Care: State legislation that restricts Advanced Practice Registered Nurses from providing care to the full extent of their education and training; Digital Health Divide: Increased access to broadband for reliable telehealth services, data transmission, and access to care, particularly in rural areas; Cyber Security and Data Privacy: Strengthened Security Standards for the Protection of Electronic Protected Health Information... to protect the confidentiality, integrity, and availability of electronic protected health information (ePHI) within electronic health records, ambient intelligence technologies, and wearable devices; Value-Based Care: Incentivize value-based payment systems focused on improving quality and enhancing efficiency; Austerity Measure Removal: Removal of current austerity measures in health care in order to forward movement, implementation, and utilization of care models that seek to improve care; and Funding for Testing and Evaluation: Increased support in the form of grants or demonstration projects at the state and federal level to determine effective models."



Finally, the National Academies of Sciences, Engineering, and Medicine (NASEM) recently released its report *Using Community Partnerships to Inform the Prevention Strategy of the Center for Medicare and Medicaid Innovation*. “A large and growing body of literature describes frameworks for integrating community care with clinical services to improve health outcomes, particularly for prevention, health behaviors, mental health, and social needs.”

7 COMMON ELEMENTS

were found present for effective and sustainable community-clinical partnerships and the barriers and facilitators that support these elements.

- 1 Shared vision, population health orientation, and co-development
- 2 Multisector partnerships and defined roles
- 3 Bridging infrastructure and navigation functions
- 4 Bidirectional referral, information sharing, and communication systems
- 5 Sustainable financing, incentives, and global payment
- 6 Community engagement and trust
- 7 Continuous learning, evaluation, and adaptation

“Successful community-clinical partnerships begin with a shared vision of improving population health and addressing the broader drivers of health. Many frameworks emphasize that physical health and mental health outcomes are shaped by health behaviors (e.g., diet, exercise), social drivers, and environmental contexts, requiring collaboration across sectors rather than reliance on clinical services alone. Models such as community-oriented primary care explicitly define health improvement as a continuous process in which health systems collaborate with communities to assess needs, prioritize interventions, and evaluate outcomes together.” The call is for a definite population focus, rather than an episodic patient care model. A repeated concern is the importance of planning for sustainability beyond the start-up phase.

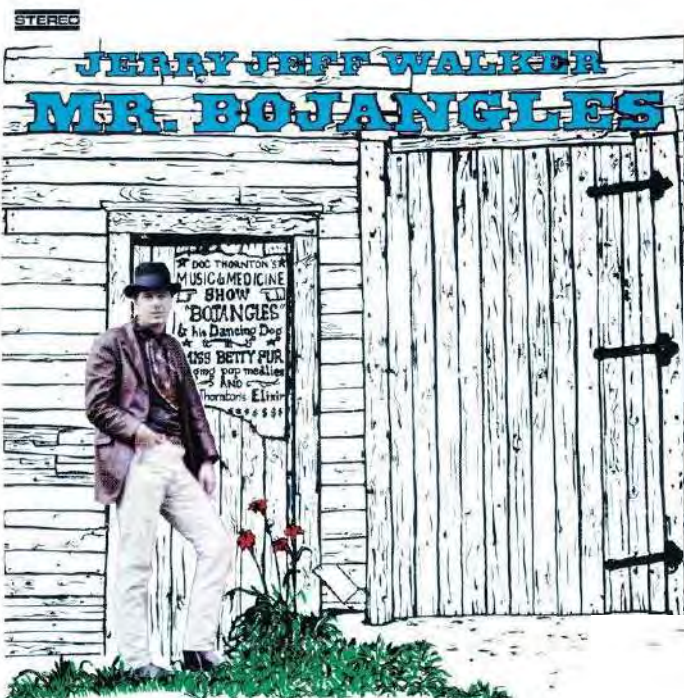
The Accountable Health Communities (AHC) model, launched by the CMS Innovation Center between 2017 and 2023, is a highly successful national effort exploring whether systematically addressing health-related social needs could improve clinical outcomes and reduce health care costs. Across all intervention tracks and payers, this model generated more than \$200 million in net savings, driven by measurable reductions in high-cost health care use, including decreases in inpatient admissions, emergency department visits, and unplanned readmissions. The greatest effect was among high-need populations; i.e., individuals with chronic conditions, behavioral health needs, or dually eligible for Medicare and Medicaid.

The Native Alaskan Southcentral Foundation's Nuka System of Care and the Program for All-Inclusive Care for the Elderly (PACE), demonstrated that, with adequate flexible funding and appropriate incentives, integrated approaches to chronic disease management and prevention can improve outcomes. Nuka highlighted the value of community-led governance, embedding services in the community, "Successful community-clinical partnerships begin with a shared vision of improving population health and addressing the broader drivers of health. Many frameworks emphasize that physical health and mental health outcomes are shaped by health behaviors (e.g., diet, exercise), social drivers, and environmental contexts, requiring collaboration across sectors rather than reliance on clinical services alone. Models and flexible, globally aligned funding. PACE demonstrated the effectiveness of interprofessional teams within

a single organizing entity, while also underscoring the need to address cost sharing and strengthen national data, evaluation, and continuous improvement to support scalability.

Interestingly, the Diabetes Prevention Program (DPP) was a highly effective community-based program addressing health behavior change; yet, it has had extremely poor uptake and sustainability. This is notwithstanding that DPP's intensive lifestyle intervention reduced the risk of developing type 2 diabetes by 58% over three years. Not surprisingly, a continuing policy theme throughout is the importance of developing ongoing evaluation and learning systems. Effective and sustainable partnerships monitor the partnership process and implementation, measure physical and mental health outcomes, and adapt strategies over time.

Aloha,
Pat DeLeon,
Former APA President



"He jumped so high"

Expecting Balance: Psychopharmacology for the Perinatal Period



Julia N. Riser
BA



Richard L. Sylvester
PhD, MSCP

Abstract

The use of psychotropic medications, including antipsychotics and benzodiazepines, during pregnancy requires a careful evaluation of the associated risks and benefits (Yonkers et al., 2004). This review examines the current evidence regarding these medications' safety and potential impacts on maternal and fetal outcomes.

Regarding antipsychotics, the literature suggests that the use of most agents during the first trimester does not significantly increase the rate of fetal malformations (Coughlin et al., 2015). However, there is a link between risperidone and a slight increase in overall malformations (Alqahtani et al., 2018), and some antipsychotics may carry a nonsignificant risk of cardiac defects (Bérard et al., 2020). Certain atypical antipsychotics, such as paliperidone, olanzapine, and quetiapine, have also been associated with an elevated risk of gestational diabetes (Bérard et al., 2017).

For benzodiazepines, initial studies reported an increased risk of cleft lip/cleft palate (Dolovich et al., 1998), but more extensive research has not supported this association (Eros et al., 2002). However, there is a linkage between benzodiazepine use during pregnancy and neonatal adaptation signs, including respiratory distress, infections, cardiac abnormalities, and neurobehavioral changes (Wikner et al., 2007).

When considering the use of psychotropic medications during pregnancy, healthcare

providers must carefully assess the available evidence regarding the safety and potential risks associated with each specific medication—consideration for factors such as the medication's mechanism of action, pharmacokinetics, and possible teratogenic effects (Gentile, 2010).

Despite the existing knowledge, there is a need for research to understand better the long-term effects of psychotropic medication use during pregnancy on both maternal and child outcomes. Robust studies that follow individuals exposed to these medications throughout pregnancy and childhood must provide more conclusive evidence (Huybrechts et al., 2018).

This review examines the evidence on the safety and impacts of using psychotropic medications, including antipsychotics and benzodiazepines, during pregnancy. For antipsychotics, most agents do not significantly increase fetal malformation rates, but risperidone may slightly elevate overall malformations, and some may raise the risk of cardiac defects or gestational diabetes. There is an existing link between Benzodiazepine use and neonatal adaptation issues, but evidence does not support an association with cleft lip/palate. Healthcare providers must carefully weigh the risks and benefits when prescribing psychotropic medications to pregnant women—further research on the long-term maternal and child outcomes of in-utero psychotropic exposure.

Keywords: psychotropic medications, pregnancy, antipsychotics, benzodiazepines, maternal mental health, fetal development

Background

Treating or prescribing psychotropic medication to pregnant women with mental health disorders is a complex and delicate issue (Smith et al., 2018; Jones & Brown, 2020). While concerns about potential risks to the developing fetus are valid, the dangers of not treating or prescribing medication deserve careful consideration. This section reviews the adverse effects of untreated maternal depression and stress during pregnancy on fetal development and child outcomes.

Untreated maternal depression during pregnancy is associated with adverse effects on infant state regulation, sleep problems, autonomic stability, and neurobehavioral development, particularly in boys (Field et al., 2016; Grote et al., 2010; Davis & Sandman, 2012). Motor skills may not be significantly affected at 18 months, but poorer gross motor functioning has been reported between 24-36 months (Jones et al., 2014; Smith et al., 2019). Prenatal stress exposure later in pregnancy also predicts worse maternal-reported gross and fine motor functioning at 6 and 16 months (Brown et al., 2018).

A modest link between maternal depression and anxiety during pregnancy suggests correlations with child cognitive outcomes (Becker et al., 2017). Prenatal stress is associated with reduced word comprehension, nonverbal cognitive development, and cognitive outcomes measured through visual preference paradigms (Jones et al., 2015; Smith & Johnson, 2018). Maternal distress during pregnancy displays a marginal predictive power of poorer language development at ages 2-3 years (Gonzalez et al., 2016). However, there is no significant association with child IQ at ages 3-6 years (Davis et al., 2017). Notably, maternal depression during pregnancy predicts lower IQ at age 8, as well as poorer working memory and lower math grades (Smith et al., 2020; Jones & Brown, 2019).

Prenatal stress, including maternal disaster exposure and psychological distress, is associated with specific temperament traits in infants and

children (Grote et al., 2012). High levels of prenatal stress are linked to negative affectivity, demanding temperament, and increased crying in infants (Brown & Smith, 2016). Maternal distress during pregnancy demonstrates associations with higher levels of anxiety, internalizing/externalizing problems, conduct disorders, and affective problems in offspring (Jones et al., 2018; Smith & Davis, 2015). Furthermore, maternal distress predicts an increased risk of borderline personality disorder, anxiety/depressive disorders, and attention deficit-hyperactivity disorder (ADHD) symptoms (Gonzalez et al., 2019; Davis et al., 2020).

The impact of significant life events, such as maternal bereavement or disaster exposure,

during pregnancy has also been examined. Maternal bereavement has shown associations with increased offspring risk of autism spectrum disorder (ASD) and ADHD (Smith et al., 2016). There is a link between maternal exposure to disasters in the first trimester and higher severity of autistic-like traits in children, but no significant effects on other psychiatric disorders (Jones et al., 2021; Brown & Davis, 2017).

Untreated maternal depression during pregnancy is associated with adverse effects on

infant state regulation, sleep, autonomic stability, and neurobehavioral development, particularly in boys (Field et al., 2016; Grote et al., 2010; Davis & Sandman, 2012). Motor skills may not be significantly affected at 18 months, but poorer gross motor functioning has been reported between 24-36 months (Jones et al., 2014; Smith et al., 2019).

There is a link between untreated maternal depression during pregnancy and poorer infant state regulation, including lower self-regulation and higher negative affectivity (Field et al., 2016), as well as increased sleep problems like shorter duration and more frequent night waking (Grote et al., 2010).

Additionally, higher maternal objective exposure to stress and floods during pregnancy, particularly later in gestation, predicts worse

Untreated
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adverse effects

maternal-reported gross and fine motor functioning in infants at 6 and 16 months of age (Brown et al., 2018). These statistics suggest maternal stress and environmental exposures can impact infant motor development.

There is a modest association between maternal depression and anxiety during pregnancy, have also been associated with modest negative correlations with child cognitive outcomes (Becker et al., 2017). Specifically, there is a link between higher prenatal stress levels and lower word comprehension, nonverbal cognitive development, and poorer performance on visual preference paradigms (Jones et al., 2015; Smith & Johnson, 2018).

Maternal distress during pregnancy has been marginally predictive of poorer language development at ages 2-3 years (Gonzalez et al., 2016), suggesting a modest impact. However, no significant association has been found between maternal depression/anxiety and child IQ at ages 3-6 years (Davis et al., 2017), indicating that the effects on general intelligence may not be substantial in early childhood.

In contrast, there is a link between maternal depression during pregnancy and a predicted lower IQ, poorer working memory, and lower math grades at eight years old (Smith et al., 2020; Jones & Brown, 2019). This statistical data indicates that the cognitive impacts may become more pronounced as children face increasing academic demands. A longitudinal study by Smith et al. (2020) found that maternal depression predicted these adverse outcomes in school-aged children.

Prenatal stress, including maternal disaster exposure and psychological distress, has been associated with specific temperament traits in infants and children. High levels of prenatal stress have been linked to negative affectivity, demanding temperament, and increased crying behavior in infants (Buss et al., 2012; Monk et al., 2016).

Maternal distress during pregnancy has also shown associations with higher levels of anxiety problems, internalizing and externalizing problems, conduct disorders, and affective problems in children and adolescents (Brennan et

al., 2020; Rice et al., 2010; Su et al., 2017; Van den Bergh et al., 2005). Symptomology suggests prenatal maternal distress can have a broad impact on child and adolescent psychopathology. Furthermore, maternal distress has been predictive of increased risk of borderline personality disorder, anxiety and depressive disorders, and ADHD symptoms in offspring at various developmental stages (Brennan et al., 2020; Rice et al., 2010; Su et al., 2017). These findings highlight the potential long-term consequences of prenatal maternal distress on offspring's mental health and wellbeing.

There is an association between maternal bereavement during pregnancy and an increased offspring risk of ASD and ADHD (Class et al., 2013; Kinney et al., 2010). For example, a study by Class et al. (2013) found links between maternal bereavement and higher ASD risk in children.

Maternal objective exposure to disasters, such as floods or ice storms, during the first trimester has also been examined. Research has found that maternal exposure to disasters early in pregnancy is associated with increased severity of autistic-like traits in children (Brown et al., 2014; Krakowiak et al., 2012). For instance, Brown et al. (2014) showed higher maternal disaster exposure during the first trimester related to more severe autistic-like traits. However, no significant effects have been found on bipolar disorder, schizophrenia, suicide, or nonaffective psychotic disorders regarding maternal bereavement or disaster exposure during pregnancy (Class et al., 2013; Kinney et al., 2010; Van Os et al., 2010).

Untreated maternal depression, stress, and related factors can lead to adverse outcomes in offspring across various domains. Infants of mothers with untreated depression or high stress may experience challenges in regulating their emotions and behaviors (Gentile, 2017). Data suggests a link between maternal mental health disorders during pregnancy and sleep problems (Bernard et al., 2017; Tikotzky et al., 2013) and disruptions in autonomic stability in offspring (Monk et al., 2016).



Furthermore, untreated maternal psychopathology can affect neurobehavioral development, with children exhibiting delays or impairments in areas like motor skills, language, and emotional regulation (Glover, 2014). This symptomology can extend to long-term cognitive impacts, such as reduced intelligence, poorer executive functioning, and attention/memory deficits (Pearson et al., 2013; Van den Bergh et al., 2017). Offspring temperament may also be negatively affected, with higher negative affect and behavioral problems (Hay et al., 2017). Lastly, untreated maternal mental health disorders are associated with an increased risk of mental health problems in children (Stein et al., 2014; Weissman et al., 2006).

Given these potential negative impacts, healthcare providers must carefully weigh the risks and benefits when considering the treatment of mental health disorders during pregnancy. A multidisciplinary approach, including psychotherapy, non-pharmacological interventions, and the judicious use of medications, may be warranted to support maternal mental health and optimize child outcomes.

Model for Clinical Decision-Making During Pregnancy

Providing comprehensive, patient-centered mental healthcare during the peripartum period requires careful consideration of the complex biopsychosocial factors that can impact a woman's emotional wellbeing (Attanasio, Ranchoff, Paterno, & Kjerulff, 2022). Several modes of care go into consideration during this time. Using tools such as Cognitive-Behavioral Therapy (CBT) can help pregnant women manage symptoms of anxiety, depression, or stress by teaching coping strategies and modifying maladaptive thought patterns (Mehri et al., 2019). Mindfulness-based interventions (MBIs) such as meditation, yoga, and deep breathing can promote emotional regulation and wellbeing during pregnancy (Dhillon, Sparkes, & Duarte, 2017). Additionally, using Motivational Interviewing (MI) techniques can enhance a woman's intrinsic motivation to engage in healthy behaviors and make lifestyle changes (Saffari et al., 2020).

The Biopsychosocial Medical Model further strengthens this comprehensive model, which considers the complex interplay of biological, psychological, and social factors that impact maternal and fetal health (Duberstein et al., 2021). Finally, the Precision Medicine Approach tailors interventions to each individual's unique genetic, environmental, and lifestyle factors to optimize outcomes (Bertozzi, Corradetti, Fruscalzo, & Londero, 2023). These integrated therapeutic modalities and conceptual frameworks provide a robust clinical decision-making process supporting women throughout pregnancy.



Cognitive-Behavioral Therapy (CBT):

CBT can help the patient identify and challenge any dysfunctional thoughts or beliefs about medication use during pregnancy (Mehri et al., 2019). The

psychologist can work with the patient to develop coping strategies and problem-solving skills to manage the uncertainty and anxiety associated with treatment decisions. CBT techniques can also help address any comorbid mental health conditions, such as depression or anxiety, that may be impacting the patient's overall wellbeing.



Mindfulness-Based Interventions:

Mindfulness practices help the patient cultivate greater self-awareness and acceptance of the challenges of making difficult treatment choices (Dhillon, Sparkes, & Duarte, 2017).

Mindfulness techniques, such as deep breathing, meditation, and body scans, can also assist the patient in managing stress and anxiety during decision-making. Incorporating mindfulness can empower the patient to be more present and engaged in shared decision-making discussions with the psychologist.



**Motivational Interviewing (MI):**

MI can be particularly useful in eliciting the patient's intrinsic motivations and values regarding their mental health and pregnancy goals (Saffari et al., 2020). The psychologist can use

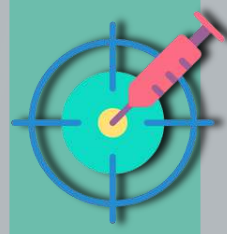
MI techniques to help the patient explore and resolve any ambivalence they may have about using psychotropic medications during pregnancy. MI can foster a collaborative, nonjudgmental environment where patients feel empowered to make informed decisions that align with their priorities. By integrating these evidence-based therapeutic models into the shared decision-making process, the medical psychologist can provide a more comprehensive, patient-centered approach to managing the mental health needs of pregnant individuals. This multifaceted approach can enhance the patient's engagement, self-efficacy, and overall satisfaction with the treatment plan. In addition to the therapeutic models, several medical decision-making models are incorporated into the shared decision-making process for pregnant patients requiring psychotropic medication.

Biopsychosocial Model:

This model recognizes the complex interplay between biological, psychological, and social factors influencing health and illness

(Duberstein et al., 2021). When

applied to medication decisions during pregnancy, the psychologist would consider the patient's medical history, genetic predispositions, mental health status, as well as their social determinants of health and support system. This holistic approach ensures that all relevant factors are considered when weighing the risks and benefits of pharmacological interventions.

**Precision Medicine Approach:**

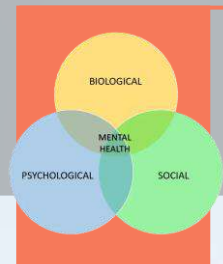
Utilizing the principles of precision medicine, the psychologist would consider the patient's individual genetic, physiological, and environmental factors that may

impact the drug's pharmacokinetics and pharmacodynamics (Bertozzi, Corradetti, Fruscalzo, & Londero, 2023). This personalized approach can help guide the selection of the most appropriate psychotropic medication and dosage, minimizing the risk of adverse effects on the developing fetus. Pharmacogenomic testing may be employed to inform the decision-making process further.

**Stepped Care Approach:**

This model suggests starting with the least intensive intervention and gradually escalating treatment as needed (Kukreti et al., 2022). In the context of pregnancy, the

psychologist may recommend starting with non-pharmacological interventions, such as psychotherapy or lifestyle modifications, before considering psychotropic medications. This stepwise approach can help minimize fetal exposure to medications while still addressing the patient's mental health needs. By incorporating these medical decision-making models, the psychologist can ensure that the treatment plan for pregnant patients is evidence-based, personalized, and aligned with the patient's values and preferences, ultimately optimizing maternal and fetal outcomes. Medical psychologists, trained in both psychology and medicine, are well-equipped to integrate therapeutic and medical decision-making models within their scope of practice when working with pregnant patients requiring psychotropic medication.





Shared Decision-Making Model:

As previously discussed, this collaborative model empowers patients to actively participate in decision-making, sharing their values, preferences, and concerns (O'Brien,

Butler, & Casey, 2021). The psychologist would provide the patient with the latest evidence-based information on the safety and efficacy of different psychotropic medications during pregnancy. Together, they would weigh the risks and benefits to arrive at a mutually agreed-upon treatment plan.



Therapeutic Models:

As mental health professionals, medical psychologists are skilled in implementing evidence-based psychotherapeutic interventions, such as cognitive-behavioral therapy

(CBT), mindfulness-based interventions, and motivational interviewing (MI) (Mehri et al., 2019; Dhillon, Sparkes, & Duarte, 2017; Saffari et al., 2020). These therapeutic approaches complement the shared decision-making process by:

- They are helping the patient explore and address any cognitive distortions, emotional challenges, or ambivalence related to medication use during pregnancy.
- We are equipping the patient with coping strategies, problem-solving skills, and self-awareness to navigate the uncertainty and stress of the decision-making process.
- They foster a collaborative, nonjudgmental environment in which patients feel empowered to make informed choices that align with their values and treatment goals



Medical Decision-Making Models:

Medical psychologists' training in psychology and medicine allows them to logically integrate medical decision-making models into the care of pregnant patients (Klann &

Wong, 2020). They can:

- Utilize the biopsychosocial model to conduct a comprehensive assessment, considering the patient's biological, psychological, and social factors that may influence medication decisions.
- Apply a precision medicine approach, leveraging pharmacogenomic testing and individualized risk-benefit analysis to guide the selection of the most appropriate psychotropic medication.
- Employ the shared decision-making model, providing the patient with evidence-based information and actively involving them in decision-making.

Implementing pharmacological and non-pharmacological interventions provides the ability to escalate treatment as necessary to meet the patient's mental health needs while minimizing fetal exposure to medications. By integrating therapeutic and medical decision-making models, medical psychologists can deliver a comprehensive, patient-centered strategy for managing the mental health of pregnant individuals. This multidisciplinary expertise enables them to:

-  Effectively assess and address the psychological and emotional aspects of the decision-making process.
-  Integrate the latest medical evidence and personalized considerations into the treatment plan.
-  Facilitate shared decision-making, empowering patients to make informed choices that align with their values and priorities.



 Closely monitor the patient's response to treatment and make necessary adjustments to optimize maternal and fetal outcomes.

This integrated approach within the medical psychologist's scope of practice ensures that pregnant patients receive holistic, evidence-based care that prioritizes their wellbeing and the health of their developing child.

Structure of Problem

The perinatal period, encompassing pregnancy and the first year postpartum, is a time of significant physical, hormonal, and psychosocial changes that can increase a woman's vulnerability to mental health disorders (Sommer et al., 2021). Common conditions seen during this time include depression, anxiety, and bipolar disorder. Left untreated, these maternal mental health issues can have profound impacts on the woman, her infant, and the entire family unit. Fortunately, there are effective therapeutic interventions available to address these concerns. This section will explore the prevalence, risk factors, clinical presentation, and evidence-based treatments for the most prevalent perinatal mental health disorders using an integrated framework of strategies. By understanding the complex interplay of biological, psychological, and social factors, clinicians are better able to provide comprehensive, patient-centered care to support women throughout the childbearing year.

Disorders and Treatment

Maternal mental health during pregnancy has significant implications for both the wellbeing of the mother and child (Grote et al., 2010). Understanding the

prevalence of psychiatric disorders and medication use patterns is crucial for healthcare providers to make informed treatment decisions (Fazio et al., 2019). This section provides an overview of the statistics surrounding mental health disorders and medication use during

pregnancy.

Approximately 90% of pregnant women report taking at least one medication, with 70% taking prescription drugs (Fazio et al., 2019). Additionally, 25.3% of women who have been pregnant in the past year would meet the criteria for a psychiatric disorder in the United States (Vesga-López et al., 2008). However, the prescription rates for psychotropic medication during pregnancy vary widely, ranging from only 6% to 15% across different states (Andrade et al., 2008).

These statistics highlight the complex and nuanced nature of managing mental health during pregnancy. While a significant proportion of women experience psychiatric disorders, there appears to be a gap between the prevalence of these conditions and the utilization of psychotropic medications. Healthcare providers must carefully weigh the potential risks and benefits when considering treatment options to optimize outcomes for the mother and child. A comprehensive and individualized approach, incorporating various evidence-based interventions, may be necessary to address this critical public health issue.



Depression: Disorder & Medication

Depression is a prevalent mental health disorder during pregnancy, with significant implications for maternal and child wellbeing (Ko et al., 2017; Lancaster et al., 2010). This section examines the prevalence of depression across different stages of pregnancy and the potential consequences of untreated depression. The point prevalence of depression is 15.5% in early and mid-pregnancy, 11.1% in the third trimester, and 8.7% in the postpartum period (Gavin et al., 2005; Lancaster et al., 2010; Marcus et al., 2003). Importantly, pregnancy does not protect or alleviate depressive symptoms, and this period is associated with a high vulnerability to

depression (Bennett et al., 2004). Untreated depression during pregnancy can lead to adverse effects, including poor prenatal care, maternal/fetal nutrition, pregnancy complications, and postpartum depression (Grote et al., 2010; Marcus et al., 2003). Additionally, the hypothalamic-pituitary-adrenal dysregulation associated with untreated depression can have negative impacts on fetal health and child development (Glover, 2014).

Despite the prevalence of depression during pregnancy, only approximately 15.4% of reproductive-aged women fill a prescription for an antidepressant (Andrade et al., 2008). The most commonly prescribed antidepressants are selective serotonin reuptake inhibitors (SSRIs), such as sertraline, which are estimated to impact approximately 6.2% of pregnancies (Andrade et al., 2008).

These findings highlight the critical need for comprehensive and evidence-based approaches to address maternal mental health during pregnancy. Healthcare providers must carefully consider the potential risks and benefits of various treatment options to optimize outcomes for the mother and child.



Anxiety: Disorder & Treatment

Research on anxiety disorders during the perinatal period is relatively limited. However, the prevalence of anxiety disorders during pregnancy is estimated to be around 15.8% and 17.1% (Dennis et al., 2017; Fairbrother et al., 2016). Symptoms of anxiety may worsen in the postpartum period (Fairbrother et al., 2016). Some studies suggest that progesterone may have an anxiolytic effect, but further research is needed to fully understand the course and treatment of anxiety disorders during pregnancy (Gavin et al., 2014; Osborne et al., 2017).

SSRIs are the first-line choice for treating anxiety disorders during pregnancy

(Misri et al., 2017). They have been extensively studied and are generally considered safe in pregnancy, with a favorable benefit-risk profile (Molyneaux et al., 2014). SSRIs, such as sertraline and escitalopram, have demonstrated efficacy in treating anxiety symptoms and are commonly prescribed during pregnancy (Byatt et al., 2013; Gentile, 2014).

However, benzodiazepines (BZDs) are still prescribed for anxiety disorders during pregnancy despite their potential risks (Newport et al., 2015). BZDs, such as lorazepam and clonazepam, are known to cross the placenta and can potentially have adverse effects on fetal development (Einarson et al., 2017). They are associated with an increased risk of preterm birth, low birth weight, and neonatal withdrawal symptoms (Huybrechts et al., 2015; Yonkers et al., 2012). It is essential for healthcare providers to carefully weigh the potential risks and benefits when considering the use of benzodiazepines for anxiety disorders during pregnancy, and SSRIs should generally be considered as the preferred treatment option (Misri et al., 2017).



Bipolar Depression: Disorders & Treatment

Pregnancy poses a significant risk for the recurrence of bipolar disorders, with estimates suggesting a recurrence rate higher than 50% (Viguera et al., 2007). This section examines the prevalence of mood episodes during pregnancy, the use of various psychiatric medications, and the importance of managing maternal mental health conditions.

Research indicates that 70.8% of women experience at least one mood episode during pregnancy, and the postpartum period carries the highest risk for illness recurrence (Viguera et al., 2007). Discontinuation of treatment during pregnancy substantially increases the risk of recurrence, emphasizing the importance of

maintaining treatment (Viguera et al., 2007). The use of psychiatric medications during pregnancy has evolved, with a shift towards increased use of atypical antipsychotics and antiepileptic drugs (AEDs) and decreased use of typical antipsychotics and lithium (Viguera et al., 2011). Atypical antipsychotics, such as olanzapine and quetiapine, are commonly prescribed due to their relatively lower risk of adverse fetal effects compared to typical antipsychotics (Newport et al., 2015). AEDs, including lamotrigine, levetiracetam, and carbamazepine, are frequently used to manage seizures and mood disorders, although they are associated with an increased risk of adverse pregnancy outcomes (Tomson et al., 2019; Bromley et al., 2014).

Polypharmacy, involving combinations of anticonvulsants and atypical antipsychotics, is common during pregnancy, with over 12% of pregnant women filling prescriptions for medications from three or more categories (Andrade et al., 2016). This practice aims to manage complex psychiatric conditions but should be carefully considered due to the potential for increased risks of adverse fetal effects and drug interactions (Newport et al., 2015).

These findings underscore the high prevalence of psychiatric disorders during pregnancy and the importance of addressing maternal mental health conditions. Healthcare providers must have a comprehensive understanding of the patterns of medication use and carefully weigh the potential risks and benefits of various treatment options to prioritize the health and wellbeing of both the mother and the child.

pregnancy or the postpartum period are at increased risk of adverse maternal and infant outcomes.

Perinatal depression has been associated with an increased likelihood of preterm birth, low birth weight, and intrauterine growth restriction (Ding et al., 2014; Suri et al., 2007). Maternal depression can also negatively impact breastfeeding initiation and duration, as well as impair mother-infant bonding and attachment (Sloman et al., 2019; Dias & Figueiredo, 2015). Left untreated, perinatal depression has been linked to delayed cognitive and socioemotional development in children (Kingston & Tough, 2014; Pawlby et al., 2009).

Similarly, perinatal anxiety disorders have been found to elevate the risk of preterm birth, low birth weight, and pregnancy complications such as preeclampsia (Grigoriadis et al., 2018; Ding et al., 2014). Maternal anxiety can disrupt the mother-infant relationship and has been correlated with behavioral and emotional problems in offspring (Glasheen et al., 2010; O'Connor et al., 2002).

Bipolar disorder during the perinatal period carries an increased risk of postpartum psychosis, which requires immediate medical intervention due to the potential for harm to the mother and infant (Munk-Olsen et al., 2009). Infants born to mothers with untreated bipolar disorder may experience developmental delays, attachment difficulties, and an elevated risk of mood disorders later in life (Connell & Goodman, 2002; Diaz-Caneja & Johnson, 2004).

Prompt identification and evidence-based treatment of perinatal mental health disorders is essential to mitigate these adverse outcomes and support the wellbeing of the woman, her child, and the entire family. An integrated approach provides a framework to address these complex biopsychosocial factors.

Likelihood of Outcomes

Untreated perinatal mental health disorders can have severe consequences for both the mother and her child. Women experiencing depression, anxiety, or bipolar disorder during

Recent Treatment Research

Peripartum mental health disorders, including depression and bipolar conditions, are a

significant public health concern, affecting a substantial number of women during pregnancy and the postpartum period (Gavin et al., 2005). Discontinuing or altering antidepressant and mood-stabilizing medications around the time of conception can substantially increase the risk of recurrence and relapse of these disorders during pregnancy (Andrade et al., 2008). This section provides a comprehensive overview, based on newly published information, of the patterns and trends in the use of antidepressants, mood stabilizers, antipsychotics, and benzodiazepines among pregnant women, with a focus on their efficacy, associated maternal and fetal risks and critical safety considerations for healthcare providers to ensure optimal treatment and outcomes.



Antidepressants

Peripartum depression, encompassing both antenatal and postpartum depression, is a prevalent condition affecting approximately 1 in 7 women (Gavin et al., 2005). Discontinuation of antidepressant medications around the time of conception is associated with an elevated risk of depression recurrence during pregnancy (Andrade et al., 2008). However, antidepressant use during pregnancy varies significantly, with approximately 8% of pregnancies exposed to an antidepressant and only 2.8% of women maintaining treatment throughout pregnancy (Mitchell et al., 2011). Notably, women who continued antidepressant therapy during pregnancy had a recurrence rate of approximately 26% (Andrade et al., 2008). Furthermore, evidence-based psychological interventions, such as interpersonal psychotherapy and behavioral activation, have demonstrated efficacy in treating peripartum depression (National Institute for Health and Care Excellence, 2014). Healthcare providers must carefully consider the risks and benefits of antidepressant use, as well as alternative treatment options, to ensure optimal management of peripartum mental health disorders. (See pg. 28, Fig. A1 & Fig. A2)

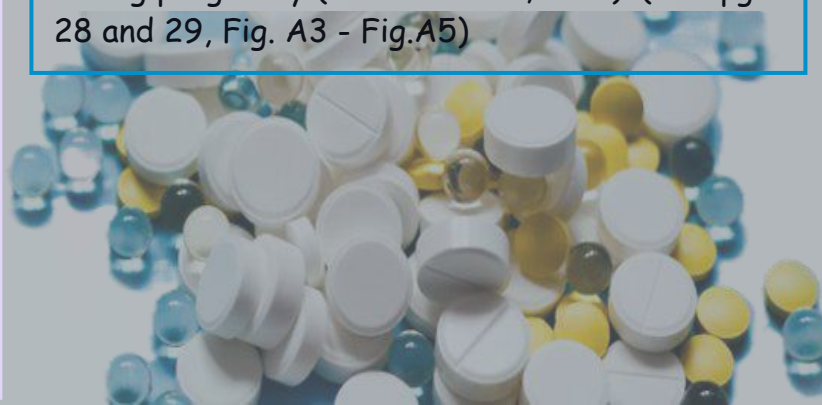


Mood Stabilizers

Discontinuing lithium proximal to pregnancy has been found to significantly increase the risk of mood episode recurrence during pregnancy, with one study reporting an 85% recurrence rate among women who discontinued the medication (Mitchell et al., 2011). Abrupt lithium discontinuation upon learning of pregnancy can lead to a 50% recurrence rate within two weeks (Mitchell et al., 2011). However, lithium use during pregnancy is associated with an increased relative risk of fetal cardiac defects, particularly Ebstein's anomaly, warranting close fetal echocardiography and ultrasound monitoring (Mitchell et al., 2011).

The mood stabilizer lamotrigine is associated with a potential increased risk of cleft lip/palate, necessitating supplementation with high-dose folic acid (Mitchell et al., 2011). Due to estrogen-induced metabolism, lamotrigine dosing often requires significant upward titration during pregnancy, followed by rapid postpartum dose reduction (Mitchell et al., 2011).

Carbamazepine use during pregnancy has been linked to an increased risk of congenital malformations, requiring close monitoring and consultation with healthcare providers (Tomson et al., 2011). Similarly, exposure to valproic acid has been associated with various risks, including major congenital malformations, developmental issues, and behavioral problems, leading to its general avoidance as a first-line treatment during pregnancy (Tomson et al., 2011). (See pgs. 28 and 29, Fig. A3 - Fig.A5)





Antipsychotics

The use of most antipsychotics during the first trimester does not significantly increase the rate of fetal malformations after accounting for confounding

variables, except risperidone, which is associated with a slight increase in overall malformations (Mitchell et al., 2011). However, there is an association between nonsignificant risk of cardiac defects and some antipsychotics (Mitchell et al., 2011). First-trimester risperidone use may warrant additional safety monitoring, though the absolute risk of malformations remains relatively low (Mitchell et al., 2011).

Certain atypical antipsychotics, such as paliperidone, olanzapine, and quetiapine, have been linked to increased rates of gestational diabetes when continued during pregnancy (Newport et al., 2007). Healthcare providers should closely monitor and manage the risk of gestational diabetes in pregnant women requiring these medications for their psychiatric conditions. (See pg. 29, Fig. A6)



Benzodiazepines and Hypnotics

Initial studies reported an elevated risk of cleft lip/cleft palate with benzodiazepine use during pregnancy, but more extensive research has not supported this

association (Mitchell et al., 2011). However, there is an association between benzodiazepine use and neonatal adaptation signs, including respiratory distress, infections, cardiac abnormalities, and neurobehavioral changes, which may persist up to a month after birth (Mitchell et al., 2011; Huybrechts et al., 2018).

Healthcare providers must carefully assess the risks and benefits of benzodiazepine use during pregnancy on a case-by-case basis (Vigod et al., 2017). Individualized treatment decisions should consider the medication's

efficacy, potential adverse effects, and safety profiles (Cohen et al., 2014). The use of psychotropic medications during pregnancy requires a comprehensive evaluation of the associated risks and benefits (Vigod et al., 2017). Healthcare providers should make informed decisions based on available evidence, considering each medication's efficacy, potential adverse effects, and safety profiles (Cohen et al., 2014; Newport et al., 2015).

Further research is still needed to understand better the long-term effects of psychotropic medication use during pregnancy on maternal and child outcomes (Newport et al., 2015; Yonkers et al., 2014). Robust studies following individuals exposed to these medications throughout pregnancy and childhood must provide more conclusive evidence.

Breastfeeding Considerations. For breastfeeding mothers, lorazepam is the preferred benzodiazepine due to its shorter half-life and lower risk of accumulation in breast milk (Hale, 2021). Trazodone and zolpidem have been found to have minimal risks of congenital malformations and can be considered for use during breastfeeding (Hale, 2021). (See pg. 30, Fig. A7 - Fig. A9).

Materials and Methods

To explore this topic, we conducted a systematic review of the literature, focusing on studies that examined the use of mental health medications and associated outcomes during pregnancy and the perinatal period. The studies included in this analysis were selected using the following approach:

1. **Database Search:** We searched significant academic databases, including PubMed, Embase, and PsycINFO, using keywords related to "mental health," "pregnancy," "perinatal," "antidepressants," and "psychotropic medications."

2. Inclusion Criteria: We included peer-reviewed journal articles and industry reports that focused on the impacts of mental health medication use, particularly during pregnancy and the perinatal period. Only studies published between 2006 and 2023 were considered to ensure the analysis reflects the most up-to-date developments in the field.

3. Quality Assessment: Each study was evaluated for its methodological rigor, data sources, and the credibility of the authors and institutions involved. Only high-quality studies that met our predetermined quality criteria were included in the final analysis.

4. Reference Chaining: We also examined the reference lists of the included studies to identify any additional relevant publications that were not captured in the initial database search.

Study Selection Rationale

The studies selected for this analysis provide a comprehensive view of the potential impacts of mental health medication use during pregnancy and the perinatal period.

 The Andrade et al. (2008) study utilized a large administrative dataset to examine antidepressant use during pregnancy, which is highly relevant to understanding the challenges and considerations involved in managing these medications in this population.

 The Cohen et al. (2006) study focused on a cohort of pregnant women with a history of significant depression, providing valuable insights into the specific needs and vulnerabilities of this population.

 The Betcher & Wisner (2020) narrative review synthesized the research on the use of common psychotropic medications during the perinatal period, highlighting the complex considerations involved in balancing the risks and benefits of these treatments.

 The Okun et al. (2013) study explored the relationship between sleep patterns and mental health outcomes during pregnancy, offering a broader perspective on the potential impacts of medication management on overall maternal wellbeing.

 Finally, the Hanley & Mintzes (2014) and Michielsen et al. (2014) studies utilized retrospective cohort designs to examine medication use and pregnancy outcomes, providing valuable data on the potential impacts of medication management on maternal and fetal health.

By including this diverse range of studies, we aim to present a comprehensive and nuanced understanding of the complex challenges and considerations involved in the management of mental health medications during pregnancy and the perinatal period.



Andrade et al., 2008:



This retrospective cohort study utilized administrative data from 7 health plans within the HMO Research Network CERT, which conducts postmarketing surveillance studies with the FDA. The study population included women aged 15-49 who delivered infants between 2001-2005 (or 2001-2004 for one plan) and had one year of continuous enrollment, comprising a combined membership of 3 million in 2004. Prescription drug use was assessed assuming a 270-day pregnancy. The study examined antidepressant use during pregnancy overall and by trimester and also analyzed trends from 1996-2000.



Cohen et al., 2006:



This prospective, naturalistic study enrolled 201 pregnant women with histories of major depression from 3 centers with expertise in psychiatric illness during pregnancy. Participants were recruited through referrals, community outreach, and self-referral. Eligibility criteria included: history of major depression, less than 16 weeks gestation, euthymic for at least three months prior to last menstrual period, and currently or recently receiving antidepressants. Participants self-identified their race/ethnicity to enhance diversity. Treatment decisions were independent of study

participation, but participants received standardized information about antidepressant risks and benefits.

Betcher & Wisner, 2020:

This narrative review discusses the research and statistical methods required to interpret the literature on the use of common psychotropic medications in perinatal women. The review covers medications by class, with an emphasis on antidepressants. It also summarizes information on mood stabilizers, antipsychotics, stimulants, benzodiazepines, and sleep aids. The goal is to help clinicians assess the risks of untreated illness and the potential adverse effects of pharmacotherapy on pregnancy and infant outcomes.

Okun et al., 2013:

This prospective study recruited 184 pregnant women (< 14 weeks) from Pittsburgh between 2008 and 2012. Exclusion criteria included any psychopathology, sleep disorder, antidepressant use, or chronic diseases. The analyses included one hundred sixty women with sufficient sleep data for at least two of the three time points. Participants completed daily sleep diaries and wore actigraphy for two weeks at 10-12, 14-16, and 18-20 weeks gestation. Sleep duration, sleep insufficiency, and insomnia symptoms were assessed. Participants were classified into three groups based on the presence of sleep deficiency over the three points: persistent, intermittent, and not sleep deficient. The study assessed maternal mental health outcomes, including depressive symptoms, perceived stress, and pregnancy-specific distress.

Hanley & Mintzes, 2014:

This retrospective cohort study used the Truven Health MarketScan database, which captures person-specific clinical use data, including filled prescriptions, hospitalizations, and outpatient visits for insured employees and their dependents across multiple states in the United States. Ethics approval was obtained from the Behavioral Research Ethics Board at the

University of British Columbia.

Michielsen, Frank, Janssen, & Kuijpers, 2014:

This retrospective study was conducted at two medical centers in the Netherlands. It included all women referred to a multidisciplinary psychiatry and pregnancy team between 2004-2005 and 2008-2011 who either had an active mental disorder, were taking medication to prevent relapse, or had a history of postpartum depression or psychosis. After exclusions, 136 pregnant women were enrolled, with no control group. Demographic, maternal, and psychiatric data were collected from medical records, including information on medication use. The primary outcomes were birth weight, gestational age, and Apgar scores, while secondary outcomes were preterm birth, low birth weight, and small for gestational age.

Medication Management

The Medication Fact Book for Psychiatric Practice, 7th Edition (Puzantian & Carlat, 2024), is a valuable resource in this analysis due to its comprehensive coverage of psychotropic medications and their use in clinical practice. As a widely respected clinician and educator, Dr. Puzantian and Dr. Carlat's expertise in psychiatric pharmacology lends significant credibility to this text. The Medication Fact Book provides detailed information on the pharmacology, dosing, adverse effects, and clinical considerations for a wide range of mental health medications. It is an essential reference for healthcare providers who prescribe and manage these treatments, particularly during the critical periods of pregnancy and the perinatal phase. The in-depth discussion of the risks, benefits, and practical considerations associated with using psychotropic medications in these populations aligns well with the goals of this analysis, which seeks to provide a thorough understanding of the complex medication management challenges faced by clinicians caring for pregnant and postpartum individuals with mental health conditions.

Discussion

The use of psychotropic medications, including antipsychotics and benzodiazepines, during pregnancy requires a careful evaluation of the associated risks and benefits (Vigod et al., 2017). Healthcare providers must make informed treatment decisions that balance the management of the pregnant individual's mental health needs with the potential risks to both the mother and the developing fetus.

Regarding antipsychotic use, the literature suggests that the use of most antipsychotics during the first trimester does not significantly increase the rate of fetal malformations after accounting for confounding variables (Mitchell et al., 2011). However, there is an association between Risperidone and a slight increase in overall malformations and a nonsignificant risk of cardiac defects with some antipsychotics (Mitchell et al., 2011). As such, first-trimester risperidone use may warrant additional safety monitoring, though the absolute risk of malformations remains relatively low (Mitchell et al., 2011).

Certain atypical antipsychotics, such as paliperidone, olanzapine, and quetiapine, have been linked to increased rates of gestational diabetes when continued during pregnancy (Newport et al., 2007). Healthcare providers should closely monitor and manage the risk of gestational diabetes in pregnant women requiring these medications for their psychiatric conditions.

Initial studies regarding benzodiazepine use reported an elevated risk of cleft lip/cleft palate, but more extensive research has not supported this association (Mitchell et al., 2011). However, there is an association between benzodiazepine use during pregnancy and neonatal adaptation signs, including respiratory distress, infections, cardiac abnormalities, and neurobehavioral changes, which may persist up

to a month after birth (Mitchell et al., 2011; Huybrechts et al., 2018).

When considering the use of psychotropic medications during pregnancy, healthcare providers should carefully assess the available evidence regarding the safety and potential risks associated with each specific medication (Newport et al., 2015). This evaluation involves reviewing data from preclinical and clinical studies and the collective experience of healthcare professionals where considerations for factors such as the medication's mechanism of action, pharmacokinetics, and potential, teratogenic effects.

Despite the existing knowledge, further research is necessary to comprehend better the long-term effects of psychotropic medication use during pregnancy on both maternal and child outcomes (Newport et al., 2015; Yonkers et al., 2014). Robust studies that follow individuals exposed to psychotropic medications throughout pregnancy and into childhood are necessary to provide more conclusive evidence.

This research should encompass various domains, including neurodevelopmental outcomes, physical health, cognitive functioning, and behavioral outcomes.

When it comes to breastfeeding, lorazepam is the preferred benzodiazepine due to its shorter half-life and lower risk of accumulation in breast milk (Hale, 2021). Trazodone and zolpidem have been found to have minimal risks of congenital malformations and can be considered for use during breastfeeding (Hale, 2021).

In summary, the use of psychotropic medications during pregnancy requires a comprehensive evaluation of the associated risks and benefits (Vigod et al., 2017). Healthcare providers should make informed treatment decisions based on the available evidence,

When it comes
to
breastfeeding,
lorazepam is
the preferred
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considering each specific medication's efficacy, potential adverse effects, and safety profiles (Cohen et al., 2014; Newport et al., 2015). Continued research is crucial to enhance our understanding of the long-term effects of psychotropic medication use during pregnancy aiding in optimal decision-making and care for pregnant individuals with mental health conditions.

Conclusion

The perinatal period presents significant challenges for maternal mental health, necessitating a careful balance between the risks and benefits of psychotropic medication use. This review underscores the importance of a comprehensive understanding of the safety profiles of various medications, including antipsychotics and benzodiazepines, during pregnancy. The evidence suggests that while most antipsychotics do not significantly increase fetal malformation rates, some, like risperidone, may pose a slight risk. Similarly, while benzodiazepines have neonatal adaptation issues, the association with cleft lip and palate remains unsubstantiated.

Healthcare providers must adopt a nuanced approach that weighs the potential risks of untreated maternal mental health disorders against the benefits of pharmacological interventions. Untreated conditions such as depression and anxiety can lead to adverse maternal and child outcomes, highlighting the need for effective treatment strategies and integrating evidence-based therapeutic models, including cognitive-behavioral therapy, mindfulness-based interventions, and motivational interviewing, alongside medical decision-making frameworks like the biopsychosocial and precision medicine approaches. Further research is crucial to deepen our understanding of the long-term implications of psychotropic medication exposure during pregnancy. Robust studies that track maternal and child outcomes over time. Ultimately, a patient-centered, multidisciplinary approach that

engages pregnant individuals in shared decision-making is essential for optimizing mental health outcomes for both mothers and their children. By prioritizing this integrated care model, healthcare providers can better support the mental well-being of pregnant individuals, ensuring healthier developmental trajectories for their offspring.

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Figure A1.

BUPROPION (WELLBUTRIN)	Pregnancy: - No documented increased risk of malformation Breastfeeding: <1% excretion with no adverse outcomes reported Recommendation(s): - Probably safe for use in pregnancy and breastfeeding.
DULOXETINE (CYMBALTA)	Little to no published data is available for this medication.
MIRTAZAPINE (REMERNON)	Pregnancy: - Sparse data, no increased rate of major malformation Breastfeeding: - Low excretion; compatible with breastfeeding Recommendation(s): - Likely safe in pregnancy and breastfeeding
SSRIs	Pregnancy: - Controversial data regarding cardiovascular malformation with first trimester paroxetine (Paxil) exposure. - Reports regarding SSRI use in later pregnancy and persistent pulmonary hypertension. - Neonatal toxicity reported as transient jitteriness, tremulousness, and tachypnea. Breastfeeding: - Relatively low excretion; varies by agent. Recommendation(s): - SSRIs are relatively safe in pregnancy; avoid paroxetine if possible - Sertraline is likely safest in breastfeeding - Avoid fluoxetine in breastfeeding due to long half-life and active metabolite.

Figure A2.

TRICYCLICS	Pregnancy: - Recent meta-analysis of 300 births revealed no increased risk of malformations. - Some data indicate clomipramine may increase risk for congenital heart malformations. Breastfeeding: <1% - 5% excretion; appear relatively safe during breastfeeding Recommendation(s): - Likely safe for use in pregnancy; desipramine and nortriptyline preferred due to lower anticholinergic and orthostatic hypotension risks - Relatively safe in breast feeding; monitor infant for sedation
VENLAFAXINE (EFFEXOR)/ DESVENLAFAXINE (PRISTQ)	Pregnancy: - Recent study suggested a possible association with birth defects - Additional studies needed - Increased maternal blood pressure may be a concern during pregnancy. Breastfeeding: 2% - 9.25 excretion; no adverse outcomes reported Recommendation(s): - Less recommended than other antidepressants.
VILAZODONE (VIBRYD)	Little to no published data is available for this medication.
VORTIOXETINE (TRINTELLIX)	Little to no published data is available for this medication.

Figure A3.

CARBAMAZEPINE (TEGRETOL)	Pregnancy: - Rate of major malformation 2.2% - 7.9% - Neural tube defects (0.5% - 1%), craniofacial defects, cardiovascular malformations, and hypospadias reported. Breastfeeding: - Relatively high levels in breast milk but with few adverse effects reported. - Sedation, poor sucking, withdrawal reactions, and three cases of hepatic dysfunction have been reported. Recommendation(s): - Avoid if possible - If use is unavoidable, add high-dose (4 mg) folic acid supplementation.
LAMOTRIGINE (LAMICTAL)	Pregnancy: - Rate of major malformations 1% - 5.6% - Increased risk of oral clefts (0.4%). Breastfeeding: - Based on limited data, thought to be safe - Infant exposure can be high and can vary widely (reports of 18% - 60% of maternal concentrations). - Relatively high infant exposure (22.7%) Recommendation(s): - Safest of the anticonvulsants in pregnancy - Serum levels should be monitored - Levels usually decrease over course of pregnancy.

Appendix A

Images

Figure A4.

LITHIUM (ESKALITH, LITHOBID)

Pregnancy:

- Rate of major malformations 4% - 12%
- Risk of Ebstein's anomaly (cardiac problem) appears lower than previously thought (0.05% - 0.1%)
- Increased maternal risk of diabetes, polyhydramnios, thyroid dysfunction during pregnancy.

Breastfeeding:

- 30% - 50% excretion
- Not recommended due to high risk of toxicity

Recommendation(s):

- Try to avoid, particularly in first trimester
- Avoid in breastfeeding if possible

OXCARBAPINE (TRILEPTAL)

Pregnancy:

- Danish study showed no increased risk of major malformation
 - More data needed

Breastfeeding:

- Possible adverse effects in breastfed infants

Recommendation(s):

Relatively safe, though more data is needed.

Figure A5.

VALPROATE (DEPAKOTE)

Pregnancy:

- Most teratogenic of all the mood stabilizers
 - 6.2% - 20.3% rate of congenital malformations

Breastfeeding:

- Relatively low excretion (0.68%);
 - considered compatible with breastfeeding

Recommendation(s):

- Avoid in pregnancy unless absolutely required
- Likely safe in breastfeeding

Figure A6.

FIRST- GENERATION

Pregnancy:

- No increased risk of malformations seen with high-potency agents.
- Small increased risk with low-potency agents such as chlorpromazine (Thorazine).
- Transient extrapyramidal side effects; sedation; withdrawal symptoms in neonates.

Breastfeeding:

- Relatively low excretion reported although little data available.
- Sedation and Parkinsonism effects possible in breastfed infants.

Recommendation(s):

- Haloperidol (Haldol), fluphenazine (Prolixin) favored during pregnancy because of long history of safe use
- Relatively safe in breastfeeding

SECOND- GENERATION

Pregnancy:

- Few data available, most showing no increased risk of malformations.
- Maternal hyperglycemia, impaired glucose tolerance, and weight gain may lead to maternal complications.
- Large-for-gestational-age infants reported.
- Floppy infant syndrome reported in clozapine exposure; monitor neutrophils in neonate for six months.

Breastfeeding:

- Excretion low, usually <3%, with exception of clozapine (Clozaril), which is seen in relatively high concentrations in breast milk

Recommendation(s):

- Overall, relatively safe in pregnancy; not treating serious mental illness in pregnancy poses greater risk. Most data with risperidone, olanzapine, quetiapine.
- Avoid clozapine in breastfeeding if possible.

Appendix A

Images

Figure A7.

BENZODIAZEPINES (VARIOUS AGENTS)	Pregnancy: • Possible increased incidence of cleft lip or palate (with first trimester exposure); • floppy infant syndrome (with exposure just before delivery); • neonatal withdrawal syndrome; • lower Apgar scores Breastfeeding: • Excretion less than 10%. • Excessive sedation in infant, lethargy with consequent feeding difficulty and weight loss reported. Recommendation(s): • Try to avoid in first trimester and late in pregnancy (although intermittent use less likely to induce withdrawal symptoms in neonate) • Lorazepam (Ativan) may be best in class to use due to lack of active metabolites and relatively shorter half-life • Monitor sedation in breastfed infants; use of shorter-acting agents preferred
BUSPIRONE (BUSPAR)	Pregnancy: • Minimal data; ◦ difficult to determine risks Breastfeeding: • Low to undetectable infant levels reported Recommendation(s): • Avoid in pregnancy due to limited data • Likely safe in breastfeeding

Figure A8.

DIPHENHYDRAMINE (BENADRYL)	Pregnancy: • Fairly consistent data show lack of associated malformations Breastfeeding: • Larger doses or more prolonged use may cause adverse effects in the infant Recommendation(s): • Considered to be the safest hypnotic in pregnancy and breastfeeding
Non-benzodiazepines: • Eszopiclone (Lunesta) • Zaleplon (Sonata) • Zolpidem (Ambien)	Pregnancy: • No increased risk of malformations, but data fairly sparse Breastfeeding: • Most data are with zolpidem. ◦ Zolpidem is relatively hydrophilic and excreted rapidly; therefore, may be favored. Recommendation(s): • Reserve for second-line use due to paucity of data • Zolpidem at low dose is the best option when non-benzos are needed

Figure A9.

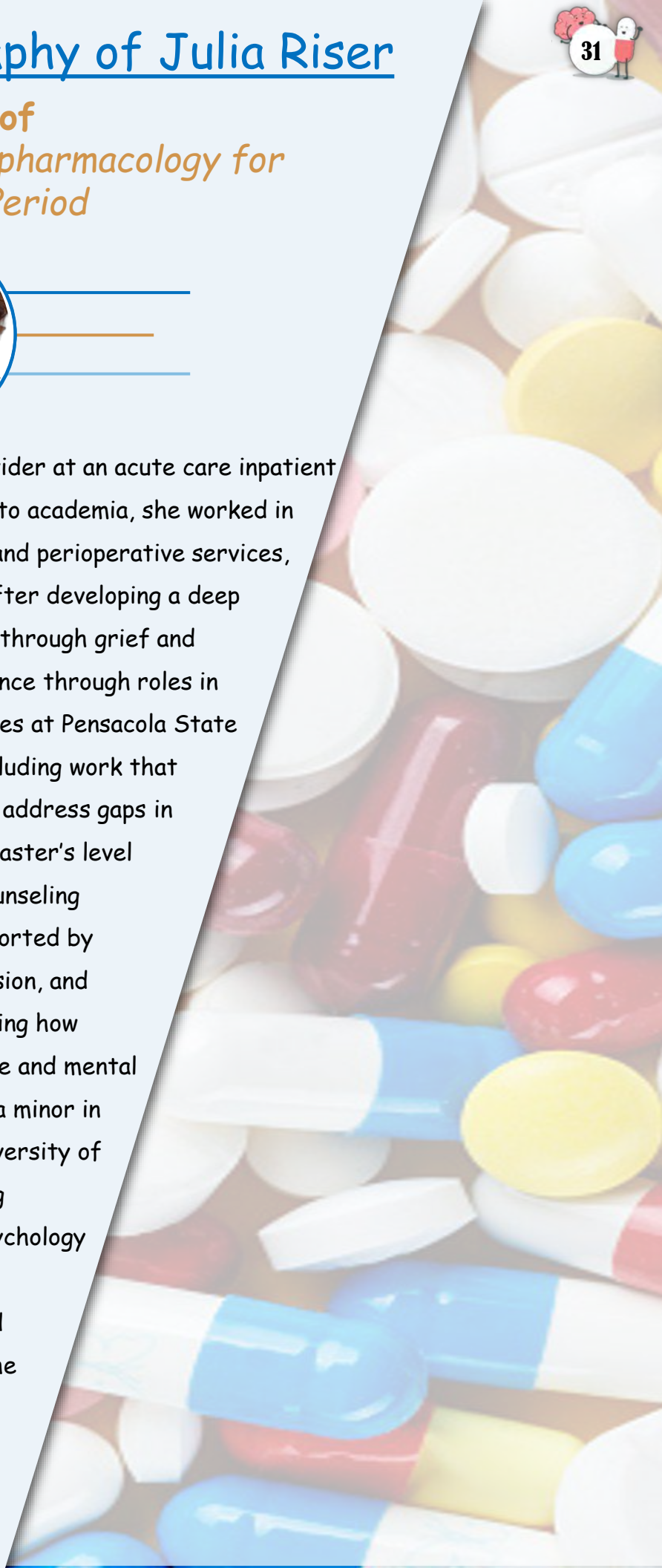
DARIDOREXANT (QUVIVIQ), LEMBOREXANT (DAYVIGO), SUVOREXANT (BELSOMRA)	Pregnancy: • No data Breastfeeding: • No data Recommendation(s): • Use other agents with more data and longer record of experience
TRAZODONE	Pregnancy: • Fewer data show no increased risk of malformations Breastfeeding: • <1% excretion; not expected to cause adverse effects in breastfed infants Recommendation(s): • Probably safe in pregnancy and breastfeeding

Professional Biography of Julia Riser

Co-author of
*Expecting Balance: Psychopharmacology for
the Perinatal Period*



Julia Riser currently works as a mid-level provider at an acute care inpatient facility in northwest Florida. Before returning to academia, she worked in nursing with specialization in oncology imaging and perioperative services, and in 2019 shifted fully back into education after developing a deep passion for supporting individuals and families through grief and end-of-life experiences. She has built experience through roles in Wellness Services and Student Support Services at Pensacola State College and the University of West Florida, including work that supports underrepresented students and helps address gaps in supportive resources. Ms. Riser received her master's level education (M.A. in Counseling and Guidance (Counseling Psychology)) at Louisiana Tech University, supported by research experience in the Personality, Persuasion, and Perception (PERS) Lab and ongoing work exploring how psychological factors intersect with modern life and mental health. Riser earned a B.A. in Psychology with a minor in Honors Interdisciplinary Studies from the University of West Florida and has been accepted to Fielding Graduate University in the Doctoral Clinical Psychology Program beginning in fall 2026, with a goal of advancing culturally competent, evidence-based mental health care that responds directly to the needs of diverse communities.



Spotlight on RxP

32



Joseph E. Comaty, MS, PhD, MSCP, MP, ABPP, ABRxP

I was asked to talk a little bit about my career, some of my accomplishments, and what led me the field of psychopharmacology, prescription privileges, and being a Medical Psychologist (MP). Let me start with a little brief history of Louisiana's journey to become the second state to pass RxP legislation and the first state to have an MP write the first civilian prescription.

2004

I am a proud member of the first cohort of Louisiana MPs. I fondly remember that original group of pioneers and especially the bond we formed with one another. We all received the phone call from the late Dr. Jim Quillin 'inviting' us to join this premier group. In 1994, we began meeting to formulate what would become targeted legislative activity leading to the passage of a statute in 2004 that would permit specially trained psychologists to prescribe psychotropic medications. I was the third Louisiana psychologist to be certified to prescribe medications in April of 2005. In the interim, Louisiana attempted and failed to pass RxP legislation 3 times. In this case the

4th time was the charm



Part of the requirements for being granted a certificate to prescribe in Louisiana was having a post-doctoral MSCP degree. Louisiana entered into an agreement with the then California School of Professional Psychology (CSPP) to provide our first cohort with the education needed to qualify for this new degree. The curriculum was based on that used to train the original 10 military psychologists in the DoD pilot program and developed by the late Dr. John Bolter. This first cohort graduated in 1999, 5 years before LA passed its RxP law. I have been asked why I made the decision to pursue RxP, investing money and time, at a time when there was no guarantee that an RxP bill would ever pass. The entire 1st and 2nd cohorts made that leap of faith for a variety of reasons. My reason rested with my history of being involved in pharmacological and clinical pharmacological research and teaching and my own clinical work consulting with hospitals and nursing homes as part of my private practice. I had been doing research in basic pharmacology since the 70's and during my doctoral training, I was part of a clinical research group doing pharmaceutical drug trials with patients in a psychiatric hospital

MSCP



in the 80's. It was these two decades of experiences that shaped my interest in the area of clinical psychopharmacology. Since I would eventually lecture in the area of clinical psychopharmacology, continue doing psychopharmacological research, and clinically consult with physicians in general hospitals and nursing homes on the pharmacological management of patients/residents with mental health needs, I wanted to ensure that I was as knowledgeable as possible in the area. Hence my motivation to pursue RxP training despite there being no guarantee that a bill would pass in LA.

My career has mostly been dedicated to public service. During my training and for most of my time as a licensed psychologist, I have been staff, unit chief, and a multi-unit program director in a state hospital and finally, in central administration of a state public behavioral health agency. I have worked in state psychiatric hospitals in Illinois and Louisiana. Around 2001, I became the Chief Psychologist and Director of the Division of Quality Management for the state public behavioral health system in Louisiana. When I received my certificate to prescribe as a MP in 2005, it allowed me to use my position in administration to advocate for MPs within the state system. Although I had been the first psychologist at one of the state hospitals to be allowed to join

My career has mostly been dedicated to public service.

the medical staff, I knew that it would not be politically possible to argue for granting prescription privileges to MPs in the state psychiatric hospital system. But there was another opportunity. The state had a system of mental health centers that were initially administered by the state and then the operation of those clinics was transferred to what are called local governing entities (LGEs) consisting of a board of directors responsible for hiring staff, administering programs,

applying for grants, etc. The state had some oversight as it provided a budget for each of the 10 LGEs.

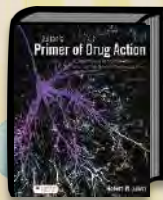
The outpatient behavioral health clinics historically had difficulty recruiting and retaining psychiatrists. One of the rural clinics was in a situation where they lost their psychiatric coverage and had difficulty finding

any replacements. I took this opportunity to discuss an alternative with the Medical Director, who is an expert, well-known, and progressive child psychiatrist. I suggested that he consider hiring MPs to fill these positions. To his credit, he accepted the suggestion and approved recruiting MPs. I was very glad to be in a position to facilitate the hiring of MPs for the state behavioral health clinics. In addition to hiring MPs, I had a discussion with the Medical Director about salary. He asked me how much we should pay MPs. MPs were not listed on the state civil

service pay grid, so I suggested we hire them as unclassified employees, meaning we could establish any salary that was appropriate. I suggested that since the MPs were performing the same job duties as psychiatrists, that we pay MPs the same salary as psychiatrists and to his credit, the Medical Director agreed. Following the hiring of that first MP, several more behavioral health clinics hired MPs and found that the MPs did a great job. Some of these MPs continue to serve the state's publicly supported population that are in need of access to quality behavioral health and RxP services. I continued to consult with the medical directors of each of the behavioral health clinics to develop policies/procedures that allowed the MPs to provide services that complied with the MP statutes.

I have been involved with psychopharmacological research both at the basic science level and also at the clinical level since the 1970's. My publications involve studying the effects of opiates on isolated tissue preparations, testing opiate effects on pain sensitivity in animal models, using colorimetric assay and gas chromatography to analyze chemical structures of compounds, testing for reinforcing effects of opiates delivered directly to specific brain areas via implanted cannulae using traditional Skinner boxes, pharmaceutical drug studies, studying the effect of neuroleptics on behavior, evaluating the effects and side effects of psychiatric

medications, as well as research on the use of behavioral interventions for treating psychiatric disorders. My earlier participation in basic research on opiate effects on isolated tissue preparations led to being named a co-owner of a patent for a naturally occurring opiate. I am particularly honored to have authored and co-authored manuals, textbooks, and guidelines. In 1997, I was asked to write the curriculum for Level II training in psychopharmacology: Older adult module by the APA Board of Educational Affairs (BEA) working group (<https://www.apa.org/ed/resources/level-ii.pdf>, p. iv).



From 2008 to 2023, I was a co-author of Julien's Primer of Drug Action, a textbook on clinical psychopharmacology, for the 11th through 14th editions and a contributor to the 15th edition (https://store.macmillanlearning.com/us/product/Julien's-Primer-of-Drug-Action/p/1319244866?srsId=AfmBOooc1M61_JRAOL2sXAYnPbPONqWRWBeMEPZcQLBWyyRUsJXk9EyL). And most recently, I joined an esteemed group of fellow Division 55 members to contribute to the 2025 revision of the APA Guidelines for Psychologists' Involvement in Pharmacological Issues (<https://www.apa.org/about/policy/guidelines-pharmacological-issues.pdf>).



Despite retiring from full-time practice in 2013, I continue to volunteer my services to APA

and the Association of State and Provincial Psychology Boards (ASPPB) and to consult with my prescribing colleagues on psychopharmacological cases. I was a charter member and for two years, the chair of the APA RxP Designation Committee from 2011-2014. I am a member of ASPPB's Model Act and Regulation Committee (MARC) contributing to the writing of the section of the template statute and regulations that states and territories may use if they license/certify psychologists to prescribe. And since 2017, I have been the chair of ASPPB's Examination Development Committee (EDC) for the Psychopharmacology Examination for Psychologists (PEP). I helped ASPPB assume management of the PEP, smooth the transition from APA who had initially developed and launched the examination in 2000, and update, revise, and maintain the examination. ASPPB is currently engaged in a new Job Task Analysis (JTA) that will lead to a revision of the PEP test blueprint and revision of the exam itself.

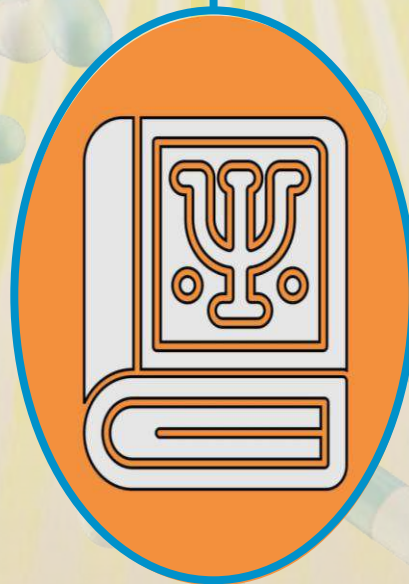
I have experience teaching psychopharmacology to graduate students and psychology interns as a faculty member of the APA accredited internship program at LSU in Baton Rouge. I along with my wife, who is a biopsychologist and retired professor of psychology, taught several sections of the RxP

training program at CSPP (now Alliant International University) and then for 10 years, we taught the clinical psychopharmacology and pharmacotherapeutics courses for CSPP to the Baton Rouge cohorts of prospective MPs.

I have an interest in regulation and have been elected to the Louisiana State Board of Examiners of Psychologists (LSBEP) twice and currently sit on the Illinois Clinical Psychologists Licensing and Disciplinary Board

(<https://idfpr.illinois.gov/profs/boards/psy.html>). I have also served as member and eventually as chair of the Louisiana Department of Hospitals Institutional Review Board (IRB) that was responsible for reviewing and approving any research protocol that used state publicly held data or enrolled any individuals that were receiving services from the state.

Finally, I continue to do presentations, workshops, and webinars on topics in clinical psychopharmacology. Since I have had time in my retirement, I made the effort to apply for and be elected a Fellow of APA from Division 55 (Society for Prescribing Psychology) and Division 18 (Psychologists in Public Service). And I recently became Board Certified in SMI Psychology under ABPP and serve as Secretary and an oral examiner of the new ABPP probational board of Psychopharmacological Psychology (ABRxP) under which I was the third



psychologist to be certified in March of this year.

I am glad to be an MP and despite being retired from clinical practice, I still maintain all of my psychology licenses and my MP license and despite now living in Illinois, I look forward to returning to LA 3 times per year to attend the Louisiana Academy of Medical Psychologists (LAMP) conferences to earn the required CEs and CMEs to maintain my MP license. It's a chance to see the colleagues I have known and treasured since the 90's and to make connections with the new MP members of LAMP.

I have been very fortunate to have had the opportunities I have had to become first a psychologist, and then, an MP and I have benefitted from the mentorship, teaching, collegiality, and friendship of many great psychologists/prescribing psychologists and MPs. I feel a great need to give back to the profession that has provided me with such opportunities and will continue to do so as long as I can.

- *Joseph E. Comaty,*

MS, PhD, MSCP, MP, ABPP, ABRxP



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[Today](#)

Board Member Election Results

Dear Board Members,

The membership of Division 55 has elected the following people to begin terms in 2027:



LUCERO

Teri

MEMBER-AT-LARGE



PITTMAN

Demietrice

PRESIDENT-ELECT



MARKOWICZ

Jocelyn

SECRETARY



BAON

Daniel

STUDENT REP.

Congratulation All!

Respectfully,

Lynette Pujol, PhD, MSCP

Former Division 55 President

Awards Chair



AUG
06
THURS

1:00 – 2:00pm

Teaching What I'm Still Learning:
Reflections on Becoming a Prescribing Psychologist

Dr. Patrick Bartos

ROOM

203

AUG
06
THURS

2:30 – 3:30pm

From Training to Practice:
Supervising Prescribing Psychologists

Dr. Eric Neumaier

ROOM

147B

AUG
06
THURS

4:00 – 5:00pm

Prescription for Recovery:
Prescribing Psychologists in OUD Treatment

Dr. Emily Loscalzo
Dr. Beth Coke
Dr. Erik Silk

ROOM

207A



Dr. Jacks Cheng

AUG
07
FRIDAY**8:30 – 9:30am**On the Frontline:
Prescribing Psychology for
Equity in Underserved Care

ROOM 150A

Dr. Steven Curtis

AUG
07
FRIDAY**11:30am – 12:30pm**Neurodivergent Children &
Psychotropic Medication

East Salon A

Dr. Judith Steinman
Dr. Beth Rom-Rymer**AUG**
07
FRIDAY**1:00 – 2:00pm**International Expansion of
Prescribing Psychology

ROOM 150A

Dr. George Kapalka

AUG
07
FRIDAY**2:30 – 3:30pm**Mixed Bipolar States:
Diagnostic Challenges &
Treatment Options

East Salon F

Div. 55 Posters

AUG
07
FRIDAY**2:30 – 3:30pm**

- RxP-Trained Psychologists in Forensic Contexts:
Expanding the Roles & Systems Impact
- Medication-Induced Behavior vs. Psychopathology in Children
- From Theory to Practice: A Mixed-Methods Study to the Experiences
of RxP

Hall D

Solutions Center

Dr. Leigh Ford
Charles Smith
Dr. Sarah Mayes

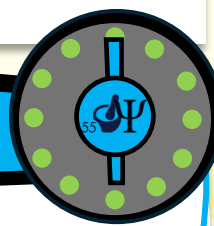
ALL ARE WELCOME

AUG
07
FRIDAY**4:00 – 5:00pm**Div. 55 RxP Business
Meeting

ROOM 144B

AUG
07
FRIDAY

Social Hour

6:00 – 8:30pmCome grab apps, drinks, &
meet other Div. 55ers!City Tap Kitchen & Craft
901 9th St. NW



Dr. Jacqueline Gallios

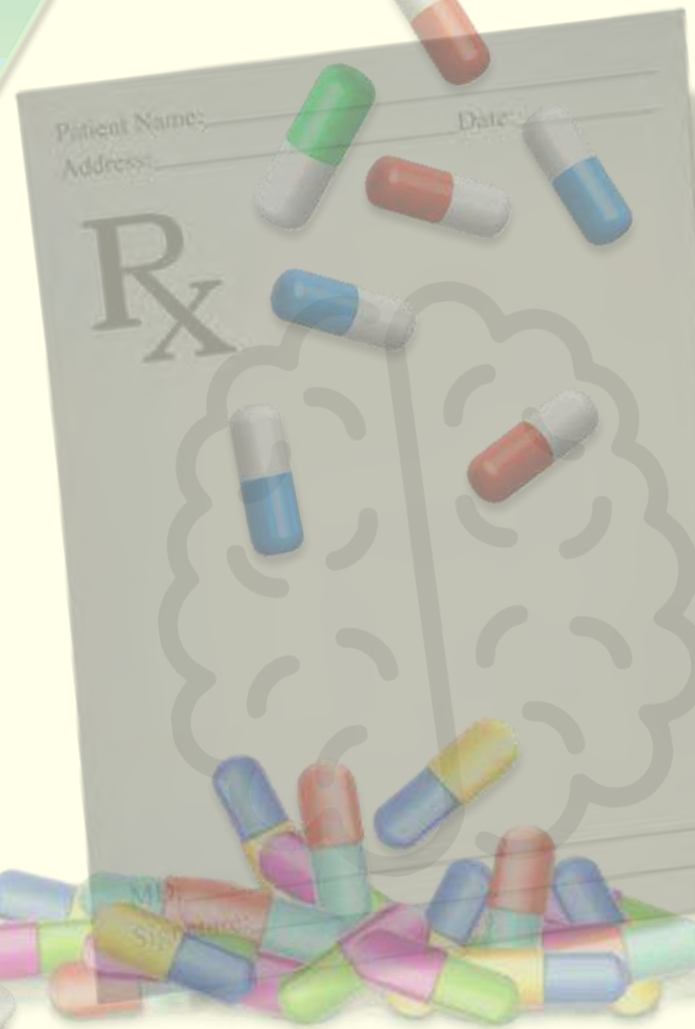
AUG
08
SAT

10:30 - 11:30am

RxP Unlocked:
Why Psychologists Choose to Prescribe
- and how you can too!

East Salon

F

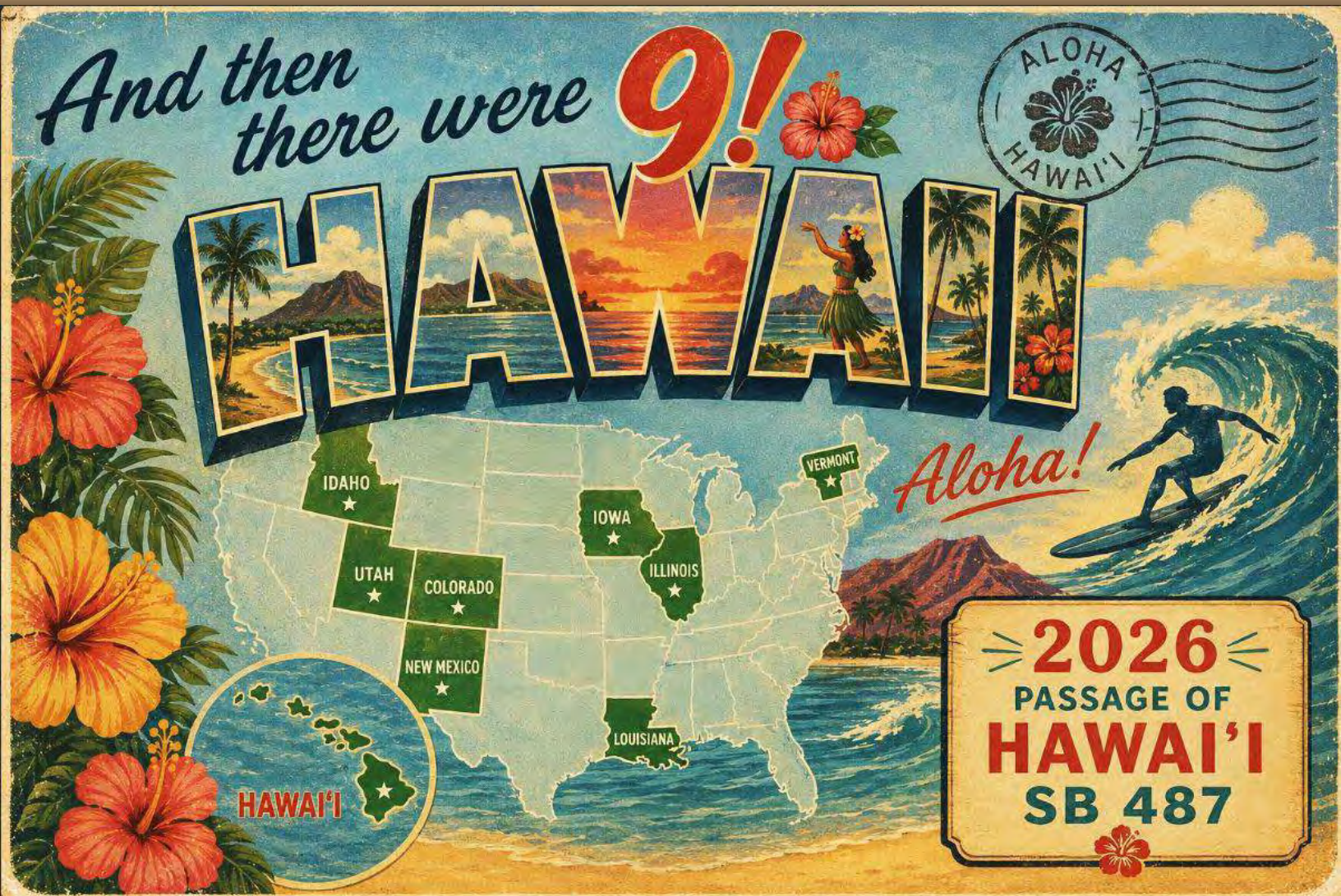




Travel Grant Award Winners



HAWAI'I MAKES HISTORY



↑ Designed by Eric Silk



Division 55



CONTACT Information



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(202) 336-5500



division@apa.org



<https://www.facebook.com/division55>



https://x.com/division_55



DONATE

<https://www.apadivisions.org/division-55/about/grants-donation>

Prescribing Psychology (RxP) Files 2026

Scope

Click Headings
to Jump to File

Coordinated Care

Patients & Supervisors

Formulary

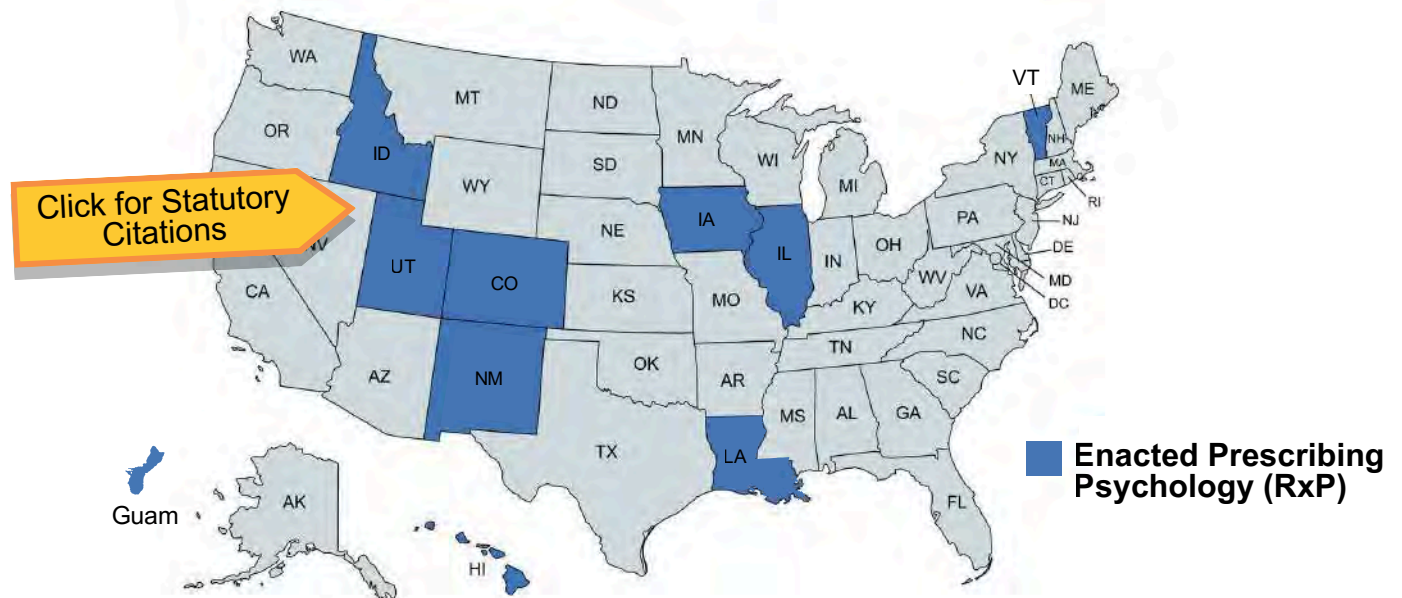
Oversight

RxP Exam Requirements

Other RxP Requirements

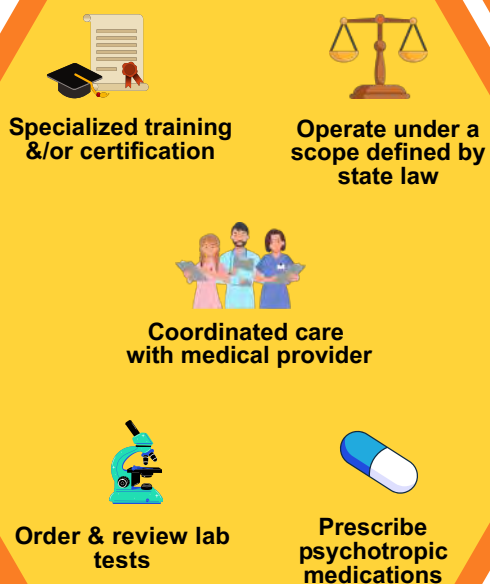
CE Requirements

STATE AND TERRITORY Prescribing Psychology Scope

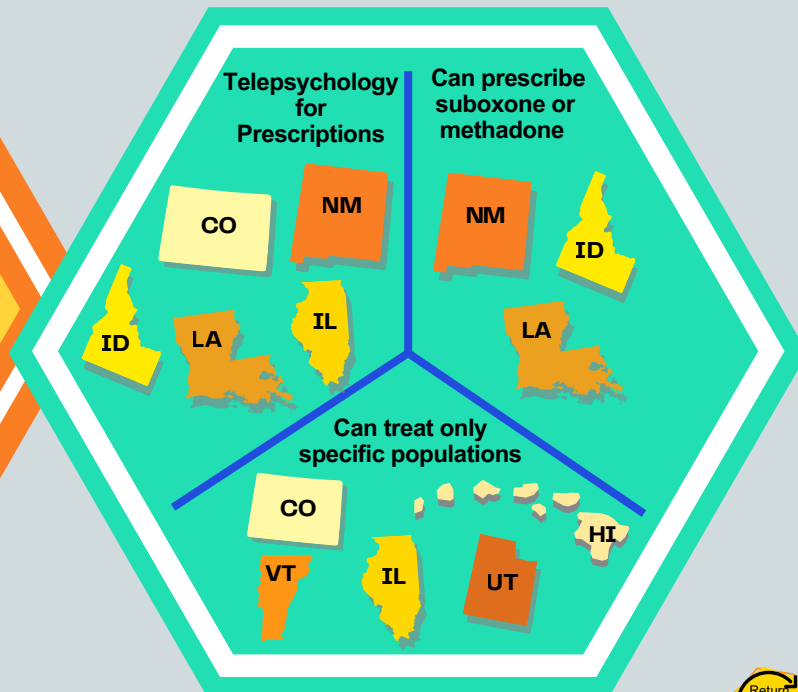


RxP is authorized in nine states and Guam, enabling the prescription and discontinuation of psychotropic medications pertinent to mental health treatment while adhering to state laws, professional training, and licensing requirements, including cooperative practice with medical professionals. HI RxP is comprised of a three-year pilot study at specific sites on the islands of Kauai and Hawaii.

RxP Similarities Among States



RxP Differences Among States



PRESCRIBING PSYCHOLOGY

Coordinated Care

STANDARDS OF PRACTICE FOR RXP COLLABORATION WITH PCP BY STATE

	Cooperative care is required by all states and legislations						
	Maintains ongoing communication	Concurrence with PCP for prescriptions (or changes)	Reports changes in conditions to PCP	Reports adverse effects to PCP	Signed patient consent for PCP collaboration	Reports medical exam or lab results to PCP	Written description of collaborative dynamic
CO							
NM							
IL							
IA							
UT							
LA							
ID							
VT							
HI		TBD	TBD	TBD	TBD	TBD	TBD
GUAM							

CO: If a patient does not have a primary care physician, the prescribing psychologist shall refer the patient to a licensed physician prior to psychopharmacological treatment.

NM: Must report lab results.

ID: The prescribing psychologist must make every reasonable effort to encourage the patient to maintain or establish a relationship with a licensed medical provider (with documentation). Must document justification for the care provided (e.g., patient assessment information, the prescription record, provider notification, follow-up care plan). Must maintain documentation justifying provision of care.

UT: Must consult on medical examinations.

IL: Collaboration does not require an employment relationship, and an agreement may not restrict third-party payment sources accepted by the prescribing psychologist. The collaborative agreement shall contain provisions detailing notice for termination or change of status involving a written collaborative agreement, except when the notice is given for just cause. Must have monthly review of medication orders by RxP and specified notice of termination or change in collaborative agreement.

IA: Separate from mandatory CPA requirement, must contact patient's PCP (physician, NP or PA) at least on a quarterly basis or to convey the following information: (a) adding a new psychotropic medication; (b) discontinuing or changing the dosage; (c) patient experiencing adverse effects from any medication prescribed by the psychologist; (d) laboratory test results related to the medical care of a patient; or, (d) noted changes in patient's mental condition that may affect the patient's medical treatment. Limitations for working with vulnerable populations and physicians are limited to working with two RxPs at a time. Specified requirements for annual reviews. Permission or signature from PCP to prescribe is not needed; rather, prescribing psychologists are to alert the PCP to prescriptions and/or changes.

LA: See 46 LAC §6115(E) for physician consultation documentation requirements.

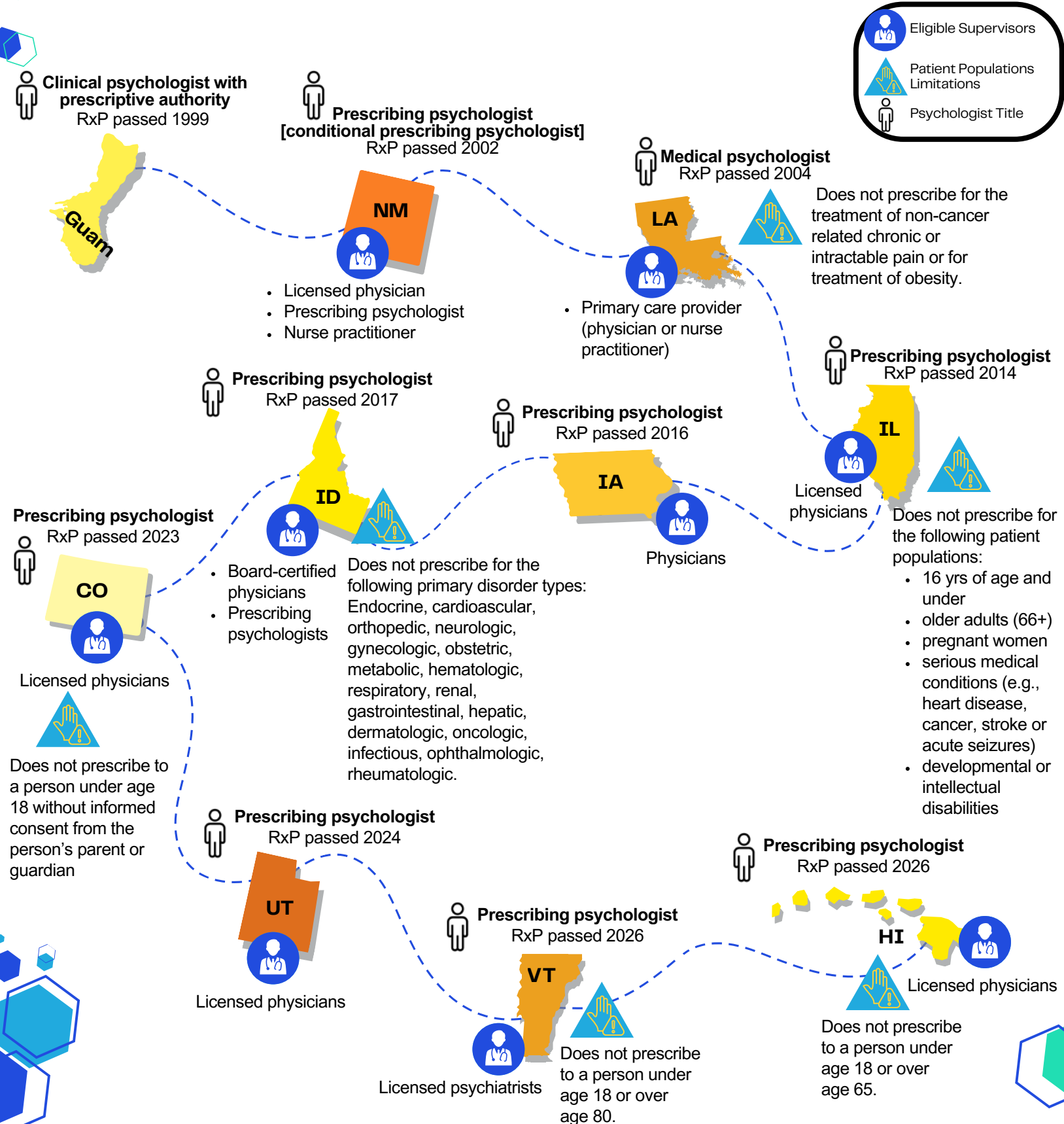
HI: Board of Psychology is actively drafting rules and regulations

VT: Requires the collaborative agreement to be with a psychiatrist.



Supervisors and Patient Populations

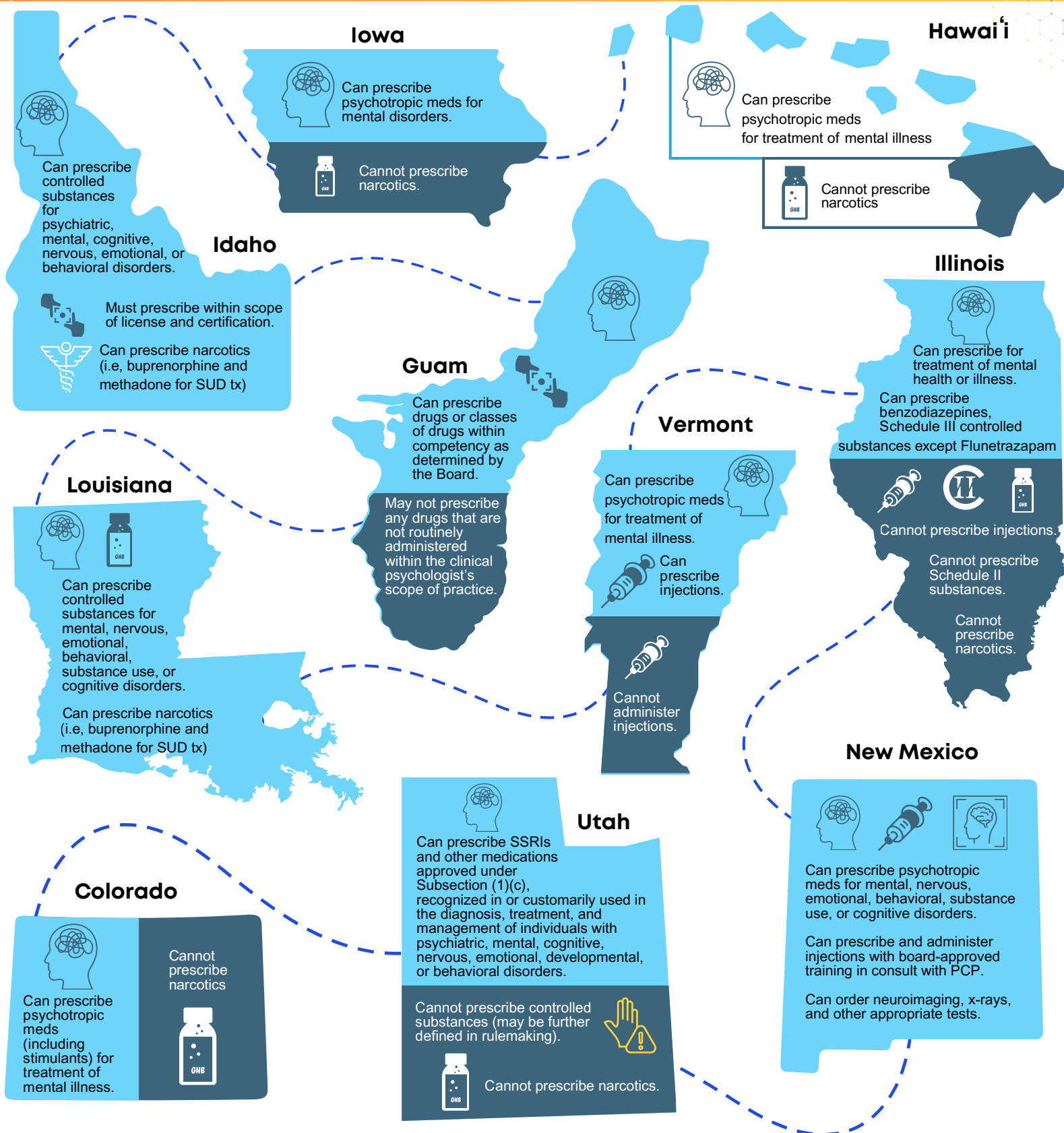
Prescribing Psychology





RxP Formulary

STATE AND REGIONAL FORMULARY AUTHORITY AND CONSTRAINTS
FOR PRESCRIBING (MEDICAL) PSYCHOLOGISTS





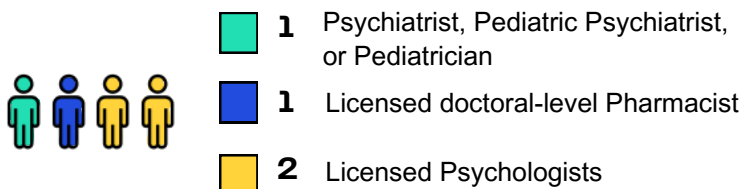
RxP Regulatory Oversight

Click on the title for each state to be directed to appropriate website

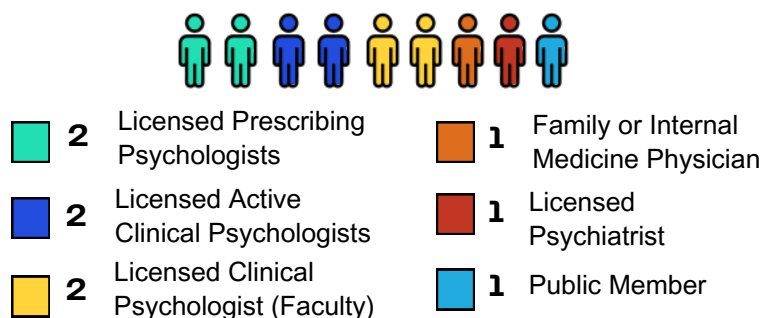
Hawai'i Board of Psychology

TBD

Idaho State Board of Psychologist Examiners & Advisory Committee

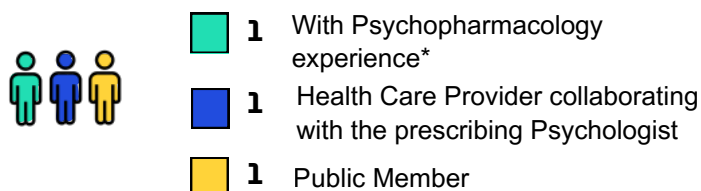


Illinois Clinical Psychologists Licensing & Disciplinary Board



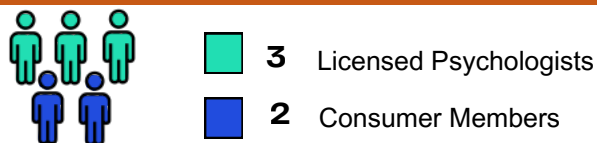
New Mexico State Board of Psychologist Examiners

For complaints involving collaboration, a joint board committee is involved consisting of the following appointed members:

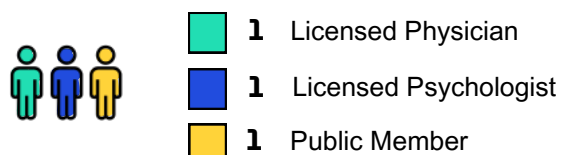


* licensed physician, pharmacist, or psychologist; nurse practitioner or physician's assistant

Vermont Board of Psychologist Examiners



Iowa Board of Psychology



Guam Board of Allied Health Providers



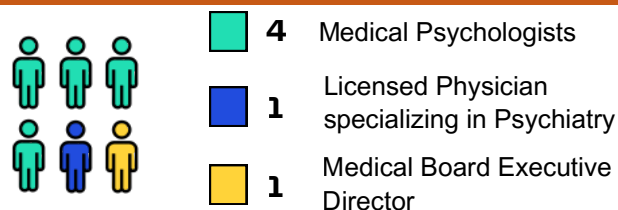
*1 rep. from each profession being examined for licensure

Colorado Board of Psychologist Examiners

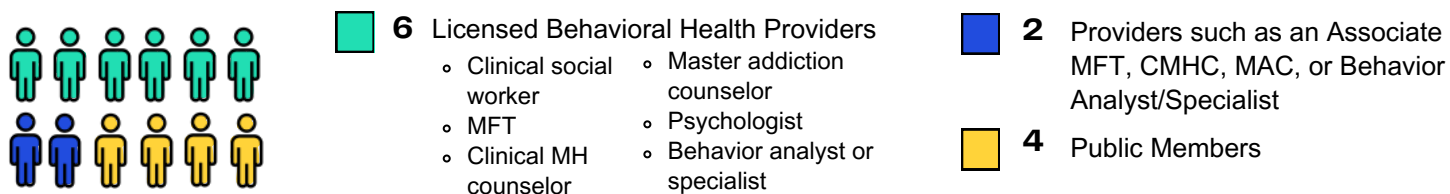


*at least 2 practicing psychologists & 1 prescribing psychologist

Louisiana Board of Medical Examiners & Medical Psychology Advisory Committee



Utah Behavioral Health Board



The division may consult with the medical board on issues involving the licensing of prescribing psychologists, provisional prescribing psychologists, and rulemaking related to prescribing psychology.



RxP REQUIREMENTS

Didactic Training Exam



State Psychology license*

An active non-prescribing psychology license is required in the state where they intend to apply for prescribing licensure

**click on title to be directed to the website*

Minimum Credit Hours

Minimum curriculum hours range from 30 credit hours or 450 curriculum (classroom) hours depending on the state requirements, which may include but not necessarily limited to Master of Science in Clinical Psychopharmacology (MSCP) program*

**see below for APA designated schools*



Course Curriculum*

includes (but not limited to)

- Anatomy and Physiology
- Microbiology
- Patient Evaluations
- Physical Assessment
- Biochemistry
- Clinical Pharmacotherapeutics
- Neuroscience
- Pharmacology
- Psychopharmacology
- Diagnostic Methods
- Pathophysiology

**click on title to be directed to the APA website*



Exam Requirement*

- National certification exam, such as the Psychopharmacology Exam for Psychologists (PEP)

**click on title to be directed to the website*





PSYCHOLOGIST

PRESCRIPTIVE AUTHORITY

ADDITIONAL REQUIREMENTS

RxP: ACTIVE STATE PSYCHOLOGY LICENSE



Sufficient Malpractice Insurance Coverage



DEA Controlled Substances Registration



State Issued Controlled Substances Permit

click on state for Statutory Citations

STATE: Idaho

TYPE: Clinical Experience determined by MSCP

TYPE: Provisional Certification Holder

EST: 2 yrs (2000 hrs¹)

QTY: 50 patients

Additional requirements for Pediatric* or Geriatric population

*at least 10 patients must be 12 yo or younger and at least 10 patients must be 13-17 yo

STATE: Utah

TYPE: Certified Prescribing Psychologist

EST: 2 yrs* (4000 hrs)

*at least 1 of the 2 years for Geriatric or Pediatric patients

STATE: Hawai'i

TBD

Guam**

STATE: New Mexico

EST: 80 hrs Clinical Assessment/Pathology

EST: 400 hrs

QTY: 100 patients

TYPE: Conditional Prescribing period

EST: 2 years

QTY: 50 patients

TYPE: Specialized training to administer long-acting injectable antipsychotics

STATE: Colorado

EST: 80 hrs Clinical Assessment

EST: 750 hrs

QTY: 150 patients

TYPE: Prescription Certificate

EST: 750 hrs*

*250 hrs must be spent specializing in children under 18 or persons older than 65 with comorbid medical conditions to work with the population

STATE: Vermont

Must hold a doctoral Clinical License

TYPE: Pre-licensing

EST: < 14 months

QTY: 5 Practice Settings

STATE: Iowa

EST: 40 hrs Clinical Assessment

EST: 400 hrs

QTY: 100 patients

TYPE: Conditional Prescribing

EST: 2 yrs*

QTY: 300 patients

*1 of the 2 years spent specializing in children, persons older than 65 with comorbid medical conditions

STATE: Illinois

Clinical training must meet accreditation standards for PAs, APNs, and MDs

TYPE: Pre-licensing

EST: 1620 hours

EST: 14 - 28 months

QTY: 9 medical specialty disciplines

Additional undergraduate level courses required

STATE: Louisiana

MP licensure supersedes psychology license

TYPE: Advanced Practice Certificate

EST: 3 years

QTY: 100 patients*

*25 must get antidepressants, 25 must be other medications

LEGEND

- States with Enacted RxP
- Practicum (Pre-licensure)
- Post-licensure (initial or conditional)
- Advanced/Specialized

**Guam is not included



Continuing Education (CE)

MINIMAL REQUIREMENTS EVERY 2 YEARS

GUAM

20 hrs CE in Psychopharmacology
+
40 hrs* CE psychology licensure renewal

**must include 6 hrs of Ethics training*

IDAHO

30 hrs CE psychology licensure renewal

+
30 hrs* CE in Psychopharmacotherapy

**must include 4 hrs of Laws and Ethics*

IOWA

80 hrs CE in Psychopharmacology of these

20 hrs* CE if treating children

**must be related to prescribing psychotropic medications to children*

NEW MEXICO

40 hrs CE in Psychopharmacotherapy and Psychopharmacology

+

20 hrs* CE psychology licensure renewal

**must include 4 hrs of Ethics training, 4 hrs of Equity and Inclusion training, and 2 hrs of Cultural Diversity or Health Disparities training*

VERMONT

will be defined in rulemaking

COLORADO

80 hrs CE in Psychopharmacology

HAWAII

will be defined in rulemaking

ILLINOIS

20 hrs CE in Pharmacology

+

24 hrs* CE psychology licensure renewal

**must include 3 hrs of Ethics training & 3 hrs of Diversity training*

LOUISIANA

15 hrs CE in Psychology

+

20 hrs* Continuing Medical Education (CME) every year** related to Medical Psychology

**must include 2 hrs of Ethics training*

***25% CME hrs provided by Louisiana Academy of Medical Psychology*

UTAH

48 hrs CE in Ethics and Law*

**no specific hours are mandated for Psychopharmacology*

