

What impact(s) on specific populations might this scope of practice change have:

The proposed scope of practice change for psychologists is poised to have far-reaching positive impacts on various population segments, leading to improved patient outcomes through enhanced access to distributed psychological services across the province. The current challenges faced by Ontarians in accessing timely and appropriate mental health services will be mitigated by this initiative, addressing critical gaps in mental health care resulting from shifting health trends, an aging population, rising rates of mental illness, and a shortage of practicing psychiatrists.

Impact on Specific Clinical Populations

Marginalized and Disadvantaged Populations:

The proposed expansion of psychologists' scope of practice is expected to significantly improve access for marginalized and disadvantaged populations. With psychologists being more widely distributed across the province, individuals in underserved communities will benefit from increased availability of mental health services.

Youth and Adolescents:

Female youths, with high rates of hospitalization for mental health, including eating disorders, stand to benefit from the proposed changes. Currently, half of Ontario's children and youth are at risk of mental health issues, facing extended wait times of up to 2.5 years to see one of the limited 170 child and adolescent psychiatrists. In contrast, the 2789 psychologists authorized to work with children and adolescents can provide more immediate and comprehensive care.

ADHD Diagnosis and Treatment:

OPA's askforhelptoday.ca referral data indicates a high demand for psychologists in the assessment and diagnosis of ADHD, a prevalent concern among children. Psychologists, with their expertise, can ensure accurate diagnoses and offer multifaceted treatment approaches, incorporating behavioral, cognitive, and pharmacological interventions. This approach not only supports the children but also provides valuable guidance to families and teachers.

Impact on Rural and Northern Populations:

Rural communities face several barriers to mental health care, including physician shortages, transportation issues, long waiting lists, and a lack of after-hours services. Extending prescriptive authority to psychologists is crucial for addressing these challenges, especially given the substantial number of psychologists (over 4400) authorized to practice in the province.

Geographic Disparities:

The 2018 workforce survey by OPA revealed that child and adolescent psychologists serve a broader geographic region than pediatricians and child and adolescent psychiatrists. Northern Ontario faces significant disparities, with a limited number of psychiatrists supporting a large

population. The extended travel distances for appointments in larger cities add stress, anxiety, and increased costs for patients.

Impact on Linguistic Minorities:

Ontario, is home to a diverse population, includes individuals whose first language is not English, with almost 600,000 Ontarians whose native language is French. The presence of psychologists (over 11%) capable of delivering services in French enhances accessibility for linguistic minorities. This linguistic diversity within the psychologist community contributes to improved mental health care options for those seeking both psychological and pharmacological treatments.

How might the proposed scope of practice changes improve access, and address efficiencies within the health care system?

- Will help increase access to vital services for Ontarians with mental illnesses.
- This initiative will help to reduce waitlists and diminish reliance on costlier and less effective modes of assessment and treatment, such as hospital emergency departments.
- The proposed scope of practice change is not only a response to current challenges but a proactive step toward creating a more accessible, equitable, and comprehensive mental health care system in Ontario.

System-Wide Improvements:

The proposed change is poised to improve the integration of specialized care, reducing delays, and mitigating wait times. By addressing redundancies in visits and billing, it streamlines the patient journey and optimizes the allocation of resources. This not only contributes to more efficient and effective mental health care but also brings about significant cost savings, benefitting both patients and the healthcare system as a whole.

Enhanced Patient Experience:

Patients, clients, and residents will benefit from a more streamlined and patient-centered experience. The reduction of redundant visits to healthcare providers ensures a more efficient and focused approach to treatment. The proposal emphasizes the improvement of quality of care and the reduction of wait time delays, resulting in better and more consistent patient monitoring. This is particularly vital for mental health, where timely interventions and monitoring can significantly impact outcomes.

Presently, over 80% of psychotropic medications are prescribed by primary care physicians. However, the National Physician Survey (2010/2012) highlights that these practitioners often lack sufficient familiarity and comfort in diagnosing and treating mental illnesses or selecting, prescribing, and monitoring psychotropic medications. This knowledge gap can lead to the inappropriate selection of medications, ineffective treatment plans, and the potential for over- or under-prescribing. Such scenarios may exacerbate symptoms, increase disability, necessitate

inpatient hospitalization, and pose risks to patient well-being, resulting in significant and escalating healthcare costs.

In contrast, psychologists, with their frequent patient interactions and a broad range of skills, can provide a more immediate and integrated approach to mental health care. This includes both pharmacological and non-pharmacological interventions, aligning with recommendations from organizations such as the National Institute for Health and Clinical Evaluation (NICE) in the United Kingdom and the CANMAT guidelines. These guidelines emphasize the pivotal role of psychological therapy in treating various mental health conditions, either alone or in conjunction with pharmacotherapy. This approach ensures that patients receive comprehensive and tailored care, promoting more effective outcomes and potentially reducing the overall burden on the healthcare system.

Evidence from United States Jurisdictions:

Drawing from studies in jurisdictions where prescribing psychologists are established, positive outcomes include a decrease in the number of medical appointments, reduced recall of challenging symptoms and wait times, and a notable reduction in unnecessary visits to hospital emergency departments. Importantly, there was a documented decrease in hospitalizations, arrests, incarcerations, and a substantial reduction in suicide rates.

Addressing Substance Use and Hospitalization:

The proposed scope of practice change acknowledges the critical link between mental health issues, poor access to psychotropic prescribing, and the increased likelihood of using substances to cope. Studies reveal a concerning average of 4,500 mental health and substance misuse-related emergency department visits in Ontario within a single week in 2021. (Mental health and addictions COVID-19 impact report provided by AMHO as provided by the Electronic Canadian Triage and Acuity Scale (eCTAS) program at Ontario Health. Percentage calculated by using the monthly ON ED visits in 2019/20 (549,697) to estimate the weekly ON ED visits.) With prescribing psychologists, it is expected that mental health patient outcomes will include reduced drug and alcohol use, contributing to a decline in substance use-related hospitalizations.

Additional considerations

Anticipated Patient Outcomes:

The introduction of prescribing psychologists is anticipated to result in a range of positive patient outcomes:

- Improved mental health outcomes
- Reduced drug and alcohol use
- Increased work productivity
- Improved return to work from workplace mental health disability
- Enhanced stability and well-being

- Improved family and interpersonal relationships
- Decreased utilization of emergency and urgent care
- Reduced burden on primary care practitioners
- Diminished use of emergency services, including 911 calls
- Reduction in suicide rates

What specific knowledge, skills & training should psychologists with advanced education in Clinical Psychopharmacology possess to safely prescribe certain medications and interpret related tests?

The comprehensive nature of psychologists' education and training, coupled with the frequency and regularity of patient contacts, uniquely equips them to accurately diagnose the full gambit of mental health conditions and recognize the necessity for prescribing psychotropic medications when appropriate. Psychologists are already well-versed in assessing the tolerability, safety, and efficacy evidence during pharmacotherapy, ensuring a holistic and patient-centered approach to mental health treatment.

Psychologists would need specialized training adopting the established programs currently used in the USA. All the US programs require a postdoctoral Master of Science Degree in Clinical Psychopharmacology. This includes coursework and supervised clinical time. There would also need to be a Psychopharmacology Examination.

Prescribing psychologists demonstrate competence in:

- Physiology and pathophysiology, primary body systems (respiratory, cardiovascular, renal, hematologic/immunologic, gastrointestinal, endocrine, reproductive, musculoskeletal, and dermatologic) that correlates fundamental knowledge of anatomy, physiology, and pathophysiology of a specific body system with the clinical applications (health assessment, physical examination, laboratory assessment) pertaining to that system.
 - Psychopharmacology (mechanisms, dosing, side-effects, interactions).
 - Assessment and differential diagnosis of mental health conditions.
 - Ordering and interpreting labs (CBC, CMP, glucose, lipids, thyroid, drug levels) and ECGs.
 - Monitoring for adverse events (e.g., serotonin syndrome, lithium toxicity).
 - Interprofessional collaboration, cultural safety, and informed consent.
- Training must include supervised clinical experience and a formal competency exam.

Are there any education/training programs readily available or do these programs need to be developed?

There are readily available education/training programs, and furthermore if the expansion in scope of practice is granted then additional programs will be developed in Ontario.

Specifically, there are five programs in the U.S. designated by the American Psychological Association that provide the 'gold standard' of education and laboratory training which is the master's degree in clinical psychopharmacology. Discussions with these programs indicate a strong willingness to continue to train Canadian psychologists, as many Canadian psychologists have already completed, or are in the process of completing this training. Consequently, two of the U.S. programs have developed modules that address Canadian content related to prescribing that have been developed in conjunction with Canadian pharmacists. Thus, the current U.S. programs have accommodated the educational needs of Canadian psychologists obtaining this advanced degree. Advanced psychopharmacology programs exist in some Canadian universities. Currently there are academic programs in Ontario that are working to develop the master's degree in clinical psychopharmacology that would emulate the designated U.S. programs given the Ontario Ministry of Health's proposal to expand the scope of practice of psychologists to include prescribing psychotropic medications. If the expansion in scope of practice is granted, then Ontario academic programs would have the students required to support development of the master's degree in clinical psychopharmacology.

Are there specific mental health and addictions conditions that should be considered? If yes, what specific medications should be considered?

The specific mental health and addictions conditions that would be considered include all those covered by the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM 5). Below are examples of the diagnostic areas.

- Neurodevelopmental Disorders
- Schizophrenia Spectrum and Other Psychotic Disorders
- Bipolar and Related Disorders
- Depressive Disorders
- Anxiety Disorders
- Obsessive-Compulsive and Related Disorders
- Trauma- and Stressor-Related Disorders
- Somatic Symptom and Related Disorders
- Eating Disorders
- Sleep-Wake Disorders
- Disruptive, Impulse-Control, and Conduct Disorders
- Substance-Related And Addictive Disorders
- Neurocognitive Disorders

The approach to treatment will be based upon the prescribing formulary determined upon regulation.

If these proposals were to proceed, what diagnostic tests would be ordered and what would the anticipated annual volume be?

Access to the following diagnostic tests would be needed:

General Tests:

- Complete Blood Count (CBC): Checks for anemia or signs of infection.
- Complete Metabolic Panel (CMP): A blood chemistry panel that assesses liver and kidney function, as well as electrolyte levels.
- Thyroid-Stimulating Hormone (TSH): Rules out thyroid conditions that can mimic or contribute to mental health symptoms.
- Fasting Glucose and/or Hemoglobin A1c: Provides baseline blood sugar levels, especially for medications known to affect metabolism.
- Lipid Panel: A baseline measure of cholesterol and triglycerides, particularly for drugs that can impact metabolic health.
- Urine Pregnancy Test: For women of childbearing age, as many psychotropic medications can be harmful during pregnancy.
- Cardiovascular assessment: A physical exam, checking blood pressure and pulse, is recommended. An electrocardiogram (ECG) may also be ordered for patients with pre-existing cardiac risks.

Specific medications require tailored lab work due to their unique side-effect profiles.

Mood stabilizers

- Lithium: Requires extensive monitoring before and during treatment due to its narrow therapeutic index and potential effects on multiple organ systems.
 - Before initiation: Complete metabolic panel (renal function, electrolytes, calcium), thyroid function tests (TFTs), CBC, and pregnancy test. An ECG is also recommended for patients with cardiovascular risk factors.
 - Ongoing monitoring: Regular checks of serum lithium levels, as well as renal and thyroid function.
- Valproic Acid (Depakote):
 - Before initiation: Liver function tests (LFTs) and CBC.
 - Ongoing monitoring: Regular LFTs, CBC, and therapeutic blood levels.
- Carbamazepine (Tegretol):
 - Before initiation: Liver function tests (LFTs) and CBC.
 - Ongoing monitoring: Regular LFTs, CBC, and therapeutic blood levels.

Antipsychotics

- Atypical Antipsychotics: Because they can cause significant weight gain and metabolic changes, monitoring includes:
 - Baseline: Fasting glucose or HbA1c, fasting lipid profile, weight, and blood pressure.

- Ongoing monitoring: Repeat metabolic tests and weight checks at regular intervals.
- Clozapine (Clozaril): Requires strict monitoring due to the risk of agranulocytosis (a serious drop in white blood cells).
 - Absolute Neutrophil Count (ANC): Must be monitored frequently and regularly during treatment.
- Antipsychotics Affecting the Heart: Some antipsychotics can prolong the QTc interval, requiring an *ECG* before and periodically during treatment, particularly in patients with cardiac risk factors.

Stimulants (for ADHD)

- Baseline assessment: Before starting stimulants like methylphenidate or Adderall, a thorough cardiovascular evaluation is needed, including blood pressure, heart rate, and an assessment of cardiac risk factors. An ECG is not routinely required but may be for high-risk patients.
- Additional baseline tests: A baseline height, weight, and BMI should be documented, especially for children and adolescents, as stimulants can affect growth.

Pharmacogenomic testing

- Some clinicians use genetic testing, such as CYP450 tests, to understand how a person's genetics may affect their metabolism of certain antidepressants and other medications. This information can help guide the selection of medications and dosage to reduce trial-and-error, though it is not a routine requirement.

Other laboratory tests:

- Electroencephalogram (EEG): To check for seizure activity.
- Magnetic resonance imaging (MRI): To look for structural brain abnormalities in neurocognitive disorders.

Please describe the potential utilization/ordering patterns, including scenarios where ordering each type of diagnostic test might be appropriate?

Please see responses embedded in the section above.

What is the mechanism that will support interprofessional collaboration between psychologists and primary care providers if these proposals were to proceed?

Collaboration could be supported through shared EMR's or secure messaging, Case conferences for complex patients. Psychologists could include Pharmacists involvement in medication reviews and consult. PCP's may wish to ask participating psychologists for a shared-care agreement.

What are anticipated costs and/or savings to patients and/or the health system if these proposals were to proceed?

There will be expected savings through reduction of mental health and substance related misuse. There will be reduction in Emergency department visits. In a 2021 study in Ontario the average number of weekly visits to hospital emergency for mental health and substance related misuse was 4500. The average cost of an emergency hospital visit at that time was reported to be \$388. Therefore, there is substantial potential savings to be experienced with the reduction of these visits. (4500/week X \$338= \$1.7M per week.)

In addition there would be expected savings created by the reduction in appointment to FHT's and PCP's. It would be expected to also improve number of days lost from work. Potential savings for the client include decreased lost work time, reduction in the number of appointments, decreased travel costs (transit, parking, gas), and decreased disability/increase in functioning.