

# Simplifying Psychopharmacology:

Empowering Primary Care with an introduction to  
*The Waco Guide to Psychopharmacology*

# Objectives

By the end of this session, learners will be able to:

- Understand the primary care clinician's role in evaluating and treating behavioral health disorders
- Understand the importance of decision support tools to empower primary care clinicians to provide high-quality behavioral health outcomes
- Implement ***The Waco Guide to Psychopharmacology*** as an exemplar clinical decision support tool to treat behavioral health disorders throughout the lifespan

# Accreditation & Credit Designation Statements

## Joint Accreditation Statement

In support of improving patient care, this activity has been planned and implemented by the University of Colorado and the American Society of Addiction Medicine. The American Society of Addiction Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

### Physicians

The American Society of Addiction Medicine designates this live activity for a maximum of 5 AMA PRA

Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### Nurses

This activity awards 5 Nursing contact hours.

### Social Workers

As a Jointly Accredited Organization, ASAM is approved to offer social work continuing education by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program.

Organizations, not individual courses, are approved under this program. Regulatory boards are the final authority on courses accepted for continuing education credit. Social workers completing this course receive 5 general continuing education credits.

## Disclosure Information

In accordance with disclosure policies of ASAM and Joint Accreditation, the effort is made to ensure balance, independence, objectivity, and scientific rigor in all CME/CE activities. These policies include mitigating all relevant financial relationships with ineligible companies for the Planning Committees and Presenters. All activity Planning Committee members and Presenters have disclosed all financial relationship information. The ASAM CE Committee has reviewed these disclosures and determined that the relationships are not inappropriate in the context of their respective presentations and are not inconsistent with the educational goals and integrity of the activity.

The planners, faculty and have no relevant financial relationships.

# Disclosures

- No financial disclosures
- Created free of industry funding
- Free to access



**Lance Kelley, PhD**  
Chief Behavioral Health Officer  
Associate Editor, Waco Guide



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Editor in Chief, Waco Guide



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Associate Program Director  
Associate Editor, Waco Guide  
Director for Primary Care Addiction Medicine

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# The Landscape

# Picture yourself in clinic tomorrow...

- 67-year-old with new diagnosis of severe MDD
- 14-year-old with severe GAD and failure to max dose fluoxetine
- 28-year-old s/p DT hospitalization 2/2 EtOH with cirrhosis requesting alcohol abstinence pharmacotherapy and treatment of MDD
- 31-year-old G1P0 at 12 weeks EGA with bipolar disorder, hospitalized 6mo ago, currently euthymic but not on any medications





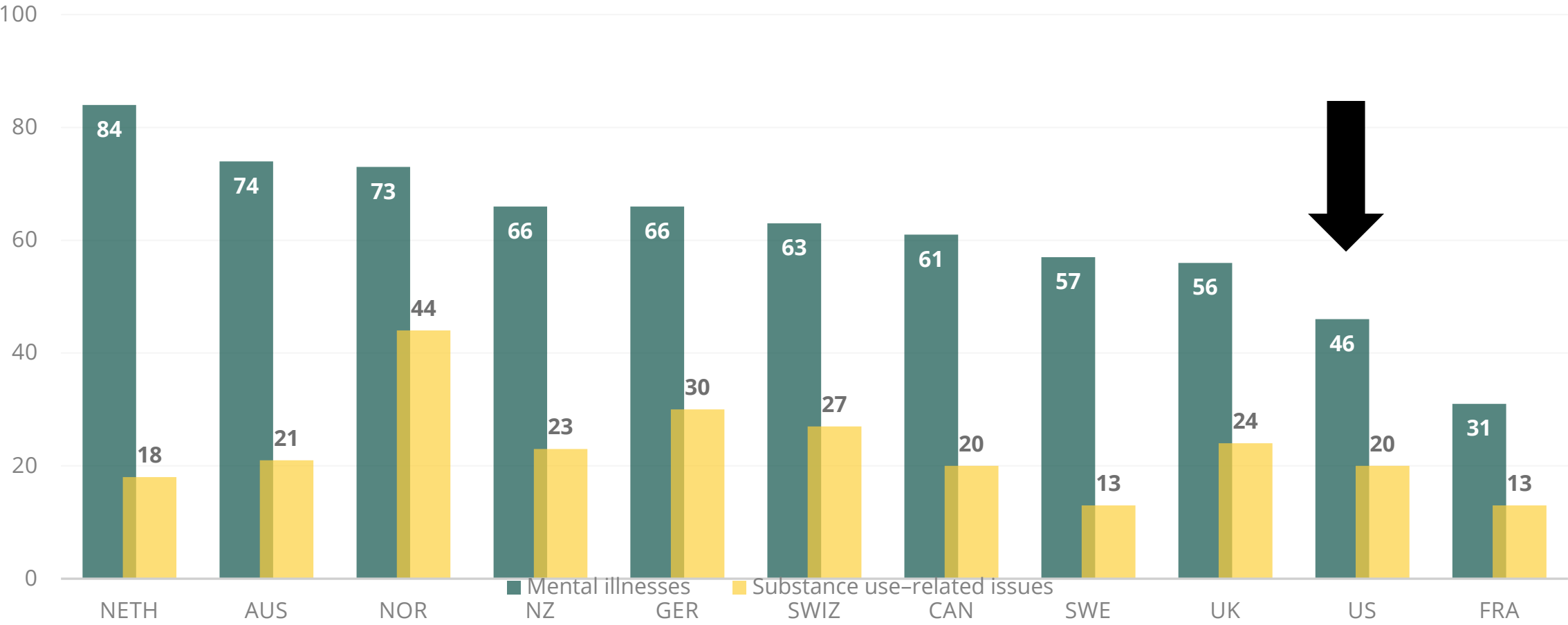
# Identification & Access

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- Most patients enter care for mental illness through PC
- ~80% of people with a behavioral health disorder visit a PCP yearly
- 2/3 PCPs lack access to specialty services
- Care gap is worse in underserve/rural communities



# Primary Care Practice Preparedness to Manage Patients with Mental Illnesses or Substance Use-Related Issues, 2019



Tikkanen et al., (2020). Commonwealth Fund

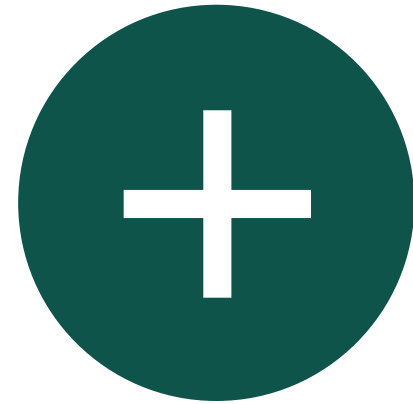
# Evidence Based Interventions



BEHAVIORAL HEALTH  
INTEGRATION



CLINICAL DECISION  
SUPPORT



MANY MORE...

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Excellent treatment  
outcomes when knowledge  
and scaffolding in place



Special Section on the Implications of STAR\*D

# What Did STAR\*D Teach Us? Results From a Large-Scale, Practical, Clinical Trial for Patients With Depression

Bradley N. Gaynes, M.D., M.P.H.

Diane Warden, Ph.D., M.B.A.

Madhukar H. Trivedi, M.D.

Stephen R. Wisniewski, Ph.D.

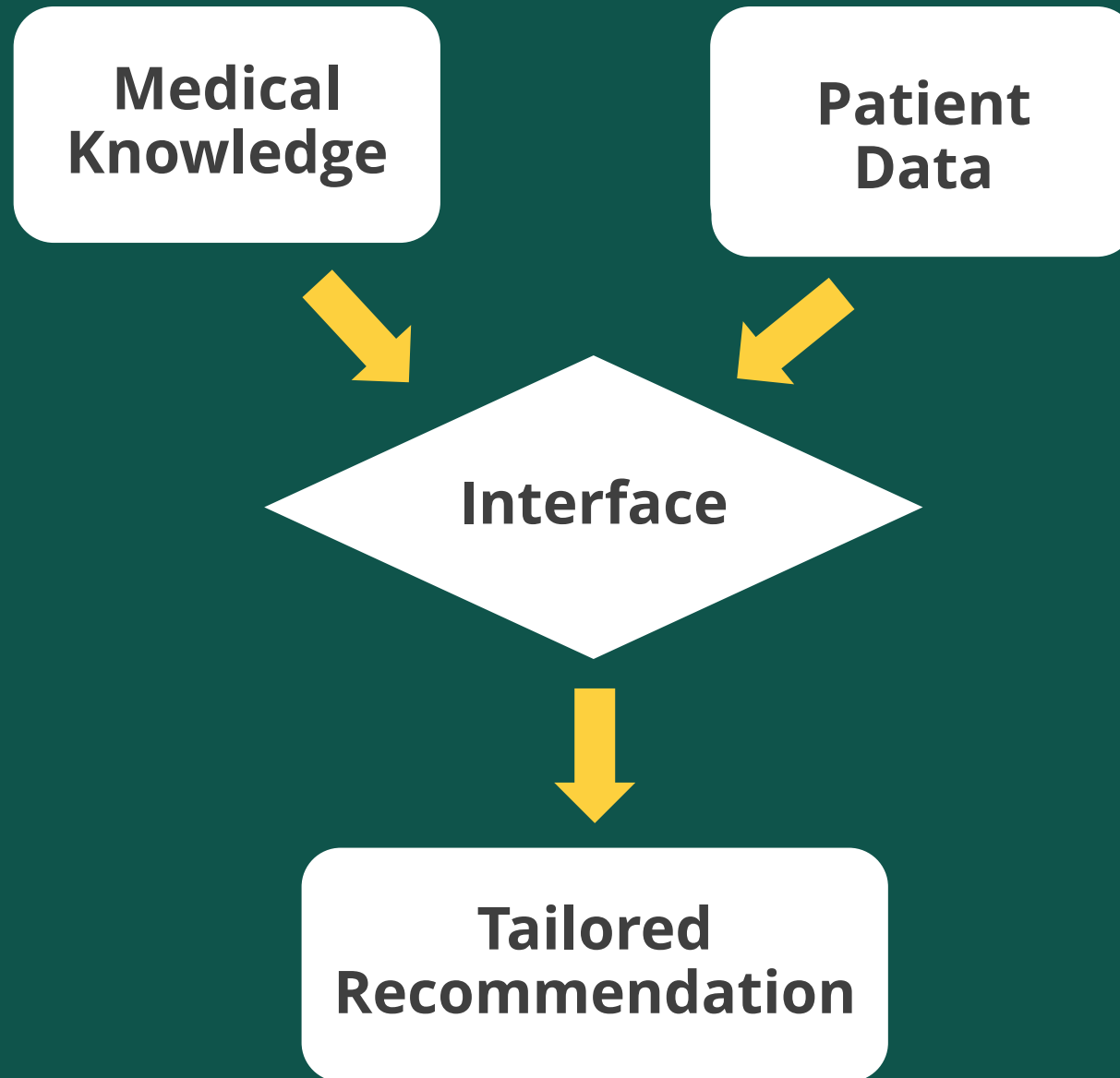
Maurizio Fava, M.D.

A. John Rush, M.D.

# **Guidelines only become effective when integrated into the fabric of patient care**

CCM- Wagner 2001

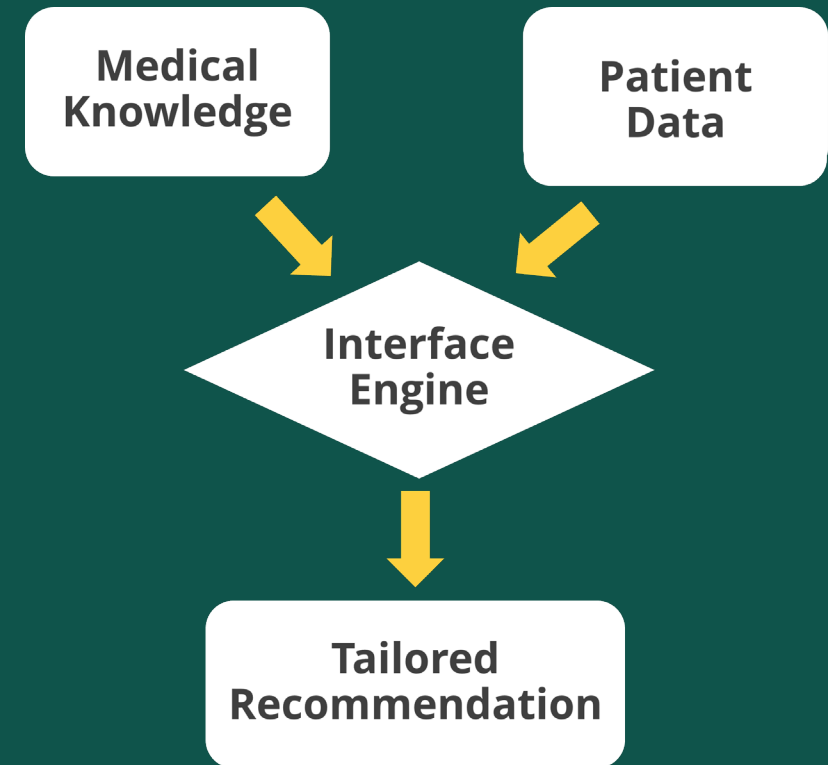
# Clinical Decision Support





# CDST Advantages

- Guidelines are difficult to implement
- Guideline updates may have low clinician adherence
- CDST's can increase adherence to guidelines
- Carry-over effect toward educating
- Resource stewardship



Kwok, R., Dinh, M., Dinh, D. & Chu, M. Improving adherence to asthma clinical guidelines and discharge documentation from emergency departments: Implementation of a dynamic and integrated electronic decision support system. *Emerg. Med. Australas.* 21, 31–37 (2009).

Davis, D. A. & Taylor-Vaisey, A. Translating guidelines into practice: a systematic review of theoretic concepts, practical experience and research evidence in the adoption of clinical practice guidelines. *Can. Med. Assoc. J.* 157, 408–416 (1997)

Michael, C., Rand, C. S., Powe, N. R., Wu, A. W. & Wilson, M. H. Why don't physicians follow clinical practice

Wyatt, J. & Spiegelhalter, D. Field trials of medical decision-aids: potential problems and solutions. *American Medical Informatics Association.* 3–7. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2247484/> (1991).

# Limitations

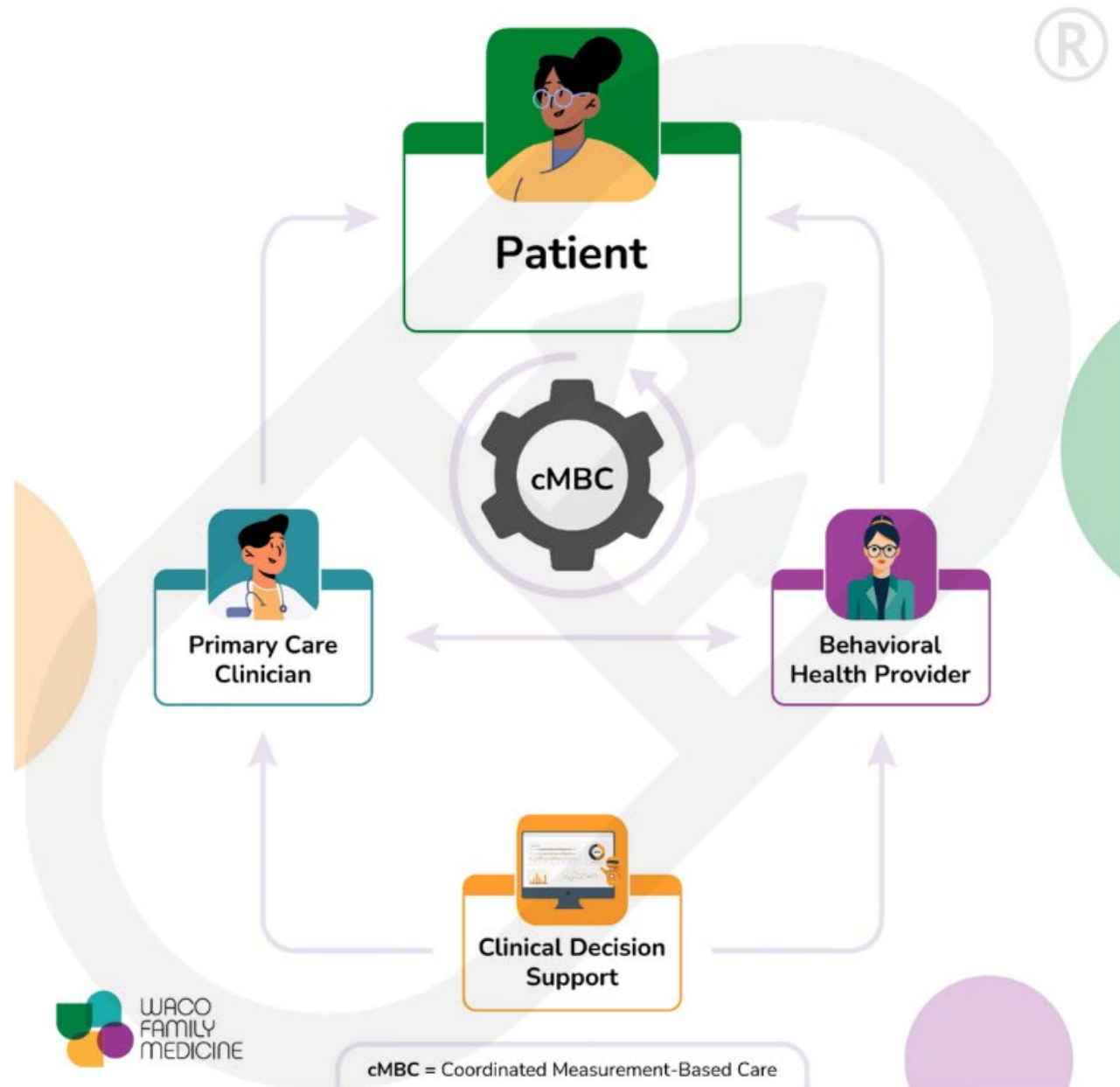
Intrusive

Disrupting

Alert fatigue

Bias



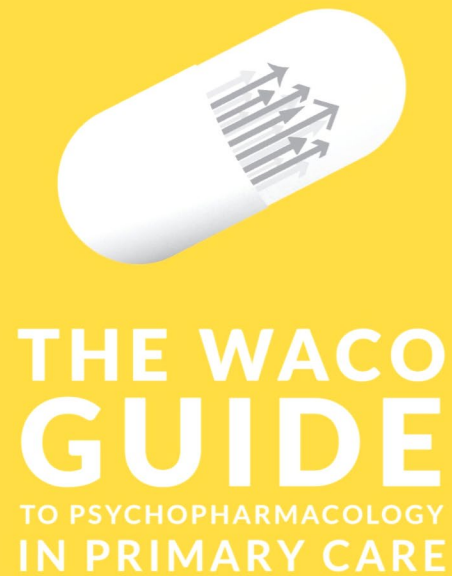


# Objectives

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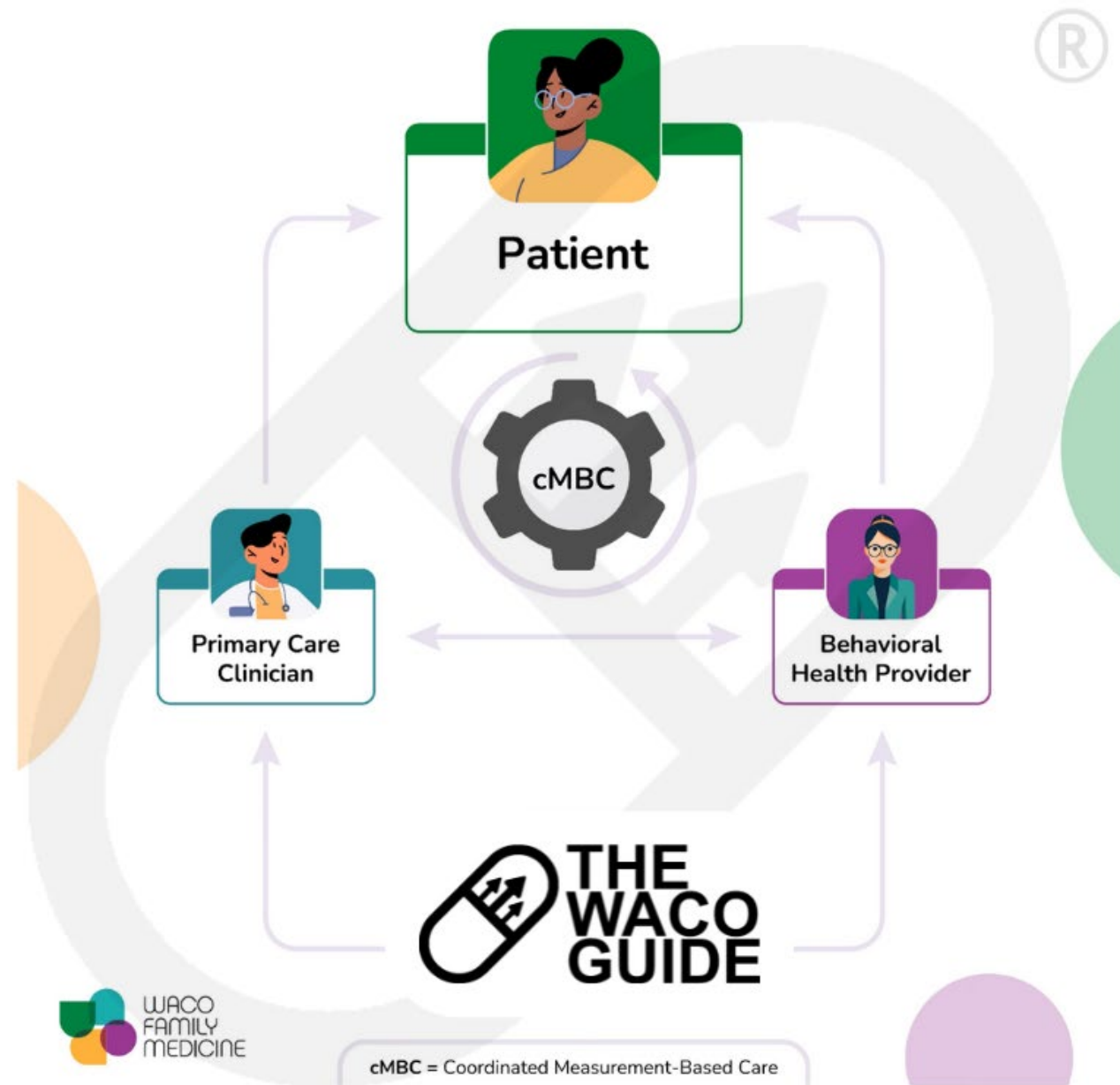
- Understand the primary care clinician's role in evaluating and treating behavioral health disorders
- Understand the importance of decision support tools to empower primary care clinicians to provide high-quality behavioral health outcomes
- Implement ***The Waco Guide to Psychopharmacology*** as an exemplar clinical decision support tool to treat behavioral health disorders throughout the lifespan

Top-level evidence. Expert opinion.  
Tailored to primary care.



MASSACHUSETTS  
GENERAL HOSPITAL  
*V I S I T I N G*





# Clinical Decision Support for Psychopharmacology

# Components of Decision Support Tools





# Waco Guide's CDSTs



## RELIABLE

top level evidence and expert  
opinion, with real world  
primary care experience



## SUCCINCT

without  
compromising quality



## COST

respect to cost  
and funding sources



## SCOPE

adult, pediatric,  
and perinatal



## ETHICAL

not industry funded



# MASSACHUSETTS GENERAL HOSPITAL

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V / I / S / I / T / I / N / G



WACO  
FAMILY  
MEDICINE

# Massachusetts General Hospital Psychiatry Academy Consultants

## David Rubin, MD

Professor of Psychiatry, Harvard Medical School  
Child and Adolescent Psychiatry  
Director of Child and Adolescent Psychiatry Residency  
Training  
Executive Director, MGH Psychiatry Academy

## Lee Cohen, MD

Professor of Psychiatry, Harvard Medical School  
Director- Center for Women's Mental Health at MGH  
Associate Chief of Psychiatry

## Khadijah Watkins, MD, MPH

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Child and Adolescent Psychiatry MPH  
Interim Director, Child and Adolescent Psychiatry Residency Training  
Associate Director, The Clay Center for Young Healthy Minds  
Associate Director, Psychiatry Clerkship, Harvard Medical School

## Greg Acampora, MD

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Assistant Professor Harvard Medical School  
Addiction Leadership at MGH

## Felicia Smith, MD

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Chief, Psychiatry Consultation Service  
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Co-Director, Center for Addiction Medicine  
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Director, MGH Psychiatry

## Thomas Spencer, MD

Director, MGH Psychiatry

## Tim Wilens, MD

Director, MGH Psychiatry

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## Edwin Ram, MD

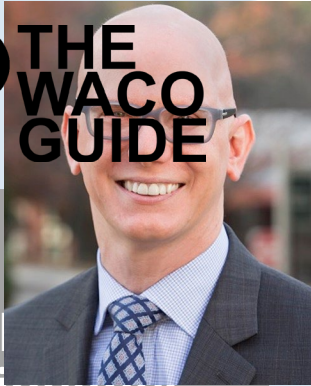
Director, MGH Psychiatry



# Methodology



**THE WACO GUIDE**



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Final Review

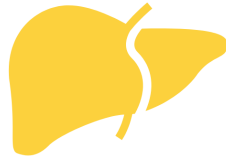


# Individualized Treatment



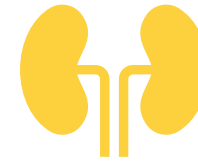
## Cardiac Impairment

myocardial infarction within last 6mo, cardiomyopathy with left ventricular dysfunction, or ventricular arrhythmia



## Hepatic Impairment

based on Child-Pugh score



## Renal Impairment

based on eGFR



## Obesity

BMI  $\geq 30$  kg/m<sup>2</sup>



## Persons of Reproductive Age

divided into preconception, antepartum, and postpartum



## Geriatric

age  $\geq 65$  years



## Pediatric

age  $< 13$  years



## Adolescent

age 13-18 years

Strength of recommendation ratings assigned for specific areas of the decision support tools using the strength of recommendation taxonomy (SORT)

SORT	Definition
A	Recommendation based on consistent, good-quality patient-oriented evidence
B	Recommendation based on inconsistent or limited-quality patient-oriented evidence
C	Recommendation based on consensus, expert opinion, or disease-oriented evidence

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# Implementation and Evaluation of Educational Workshops to Increase Primary Care Provider and Medical Student Comfort in Psychiatric Care

In Brief Report | Published: 03 April 2024

(2024) [Cite this article](#)



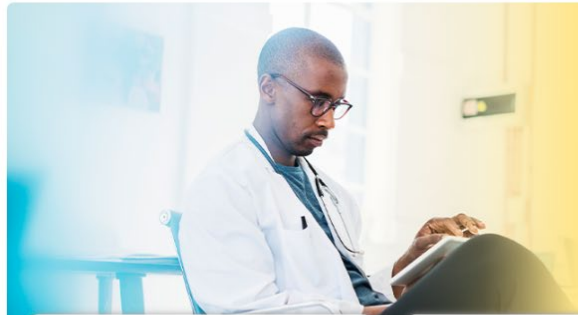
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## PSYCHOPHARMACOLOGY IN PRIMARY CARE

TOP-LEVEL EVIDENCE  
EXPERT OPINION  
TAILORED TO PRIMARY CARE



### Step-by-Step Guided Tool View

Answer patient-focused questions to  
arrive at recommendations.

[VIEW TOOLS](#)



### Comprehensive Tool View

View a disorder's entire tool at a  
glance.

[VIEW TOOLS](#)



### Additional Treatment Resources

Medication search, calculators, and  
more.

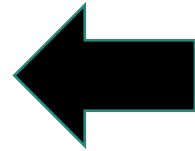
[VIEW TOOLS](#)



## THE WACO GUIDE

TO PSYCHOPHARMACOLOGY  
IN PRIMARY CARE





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## TOP-LEVEL EVIDENCE, EXPERT OPINION, TAILORED TO PRIMARY CARE

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All Tools

Adult

Pediatric

Perinatal

Geriatric

Cardiac

Hepatic

Renal

Obesity

Substance Use Disorders

Acute Stress Disorder

ADHD

v

Alcohol Use Disorder

v

Anorexia Nervosa

Antipsychotic Management

v

Autism Spectrum Disorder, Pediatric

Benzodiazepine Deprescribing

Binge Eating Disorder

Bipolar Disorder

v

Bulimia Nervosa

Depressive Disorder

v

Female Sexual Interest/Arousal Disorder

Fibromyalgia

v

Generalized Anxiety Disorder

v

Insomnia, Acute

v

Insomnia, Chronic

v

Intermittent Explosive Disorder

Neuropsychiatric Symptoms of Dementia

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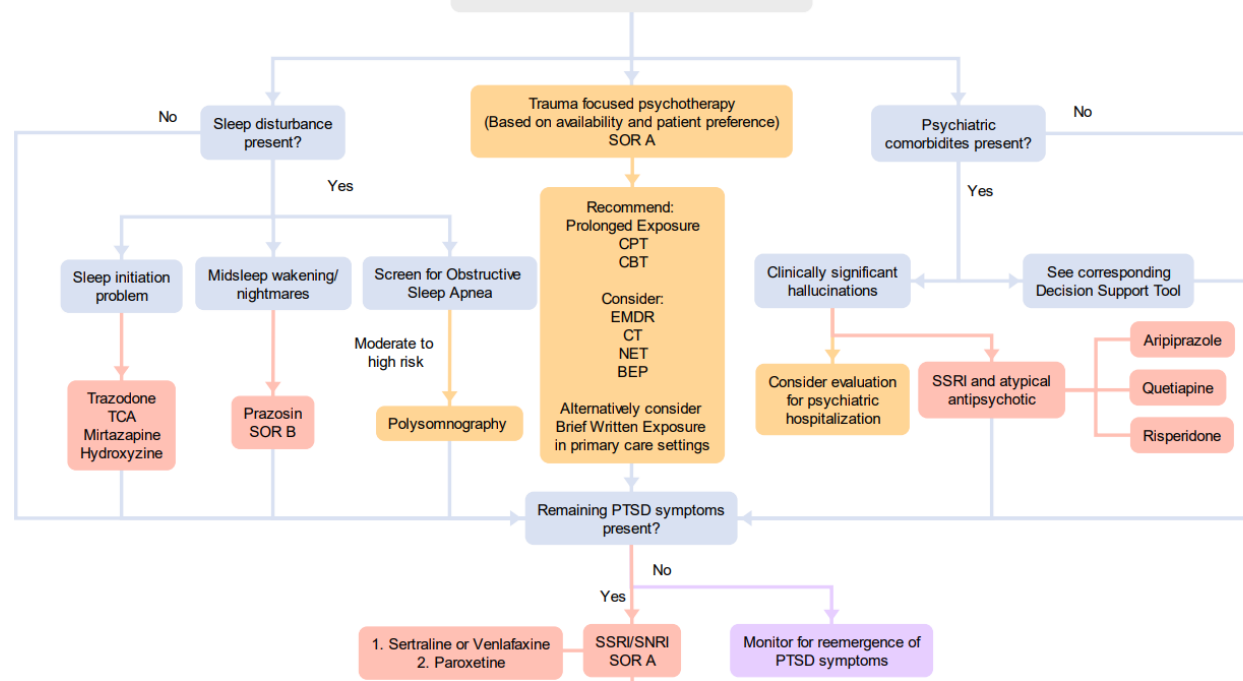
Tool

Medications

References

GUIDED VIEW

### Posttraumatic Stress Disorder



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#### SSRI Antidepressants

[FLUoxetine](#) *SSRI Antidepressants*[PARoxetine](#) *SSRI Antidepressants*[Sertraline](#) *SSRI Antidepressants*

#### Serotonin receptor antagonist and reuptake inhibitor

[traZODone](#) *Serotonin receptor antagonist and reuptake inhibitor*

#### Tricyclic Antidepressants

[Amitriptyline](#) *Tricyclic Antidepressants*[Desipramine](#) *Tricyclic Antidepressants*[Imipramine](#) *Tricyclic Antidepressants*

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## POST-TRAUMATIC STRESS DISORDER RECOMMENDATIONS AND REFERENCES

Recommendations with Key References	Strength of Recommendation
Trauma-focused psychotherapy should be offered to all patients for the treatment of PTSD <sup>1-6</sup>	A
Consider using prazosin for nighttime trauma-related sleep disturbance including nightmares <sup>7-11</sup>	B
Pharmacotherapy can be used for pharmacologic treatment based on patient preference, availability of psychotherapy, or when a patient does not respond to psychotherapy adequately <sup>3,4</sup>	A
Sertraline, venlafaxine, and paroxetine have empirical support for the treatment of PTSD <sup>1-6, 12, 13</sup>	A
TCAs—particularly imipramine—are effective third choice pharmacotherapy for treatment of PTSD <sup>4,5</sup>	B
Antipsychotics—particularly risperidone, quetiapine, and aripiprazole—have mixed evidence to support their use; therefore, they should be reserved for refractory symptoms as monotherapy or as alternative augmentation options <sup>12, 14-26</sup>	B

### References

1. Katzman MA, Bleau P, Blier P, Chokka P, Kjernisted K, Van Ameringen M. Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders. BMC psychiatry. 2014;14(1):1-83.
2. Hoskins M, Pearce J, Bethell A, et al. Pharmacotherapy for post-traumatic stress disorder: systematic review and meta-analysis. Br J Psychiatry. Feb 2015;206(2):93-100. doi:10.1192/bjp.bp.114.148551
3. U.S. Dept. of Veterans Affairs. VA Clinical Practice Guidelines for the Management of Posttraumatic Stress Disorder. 2010.
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26. U.S. Dept. of Veterans Affairs. VA Clinical Practice Guidelines for the Management of Posttraumatic Stress Disorder. 2010.

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## SUBSTANCE ABUSE DISORDERS



- Identifying Patients, Adult
- Home Induction, Adult
- In-office Induction, Adult
- Stabilization and Maintenance, Adult
- Transition from Methadone, Adult
- Discontinuation, Adult
- Opioid Use Disorder, Perinatal
- Opioid Use Disorder, Adolescent



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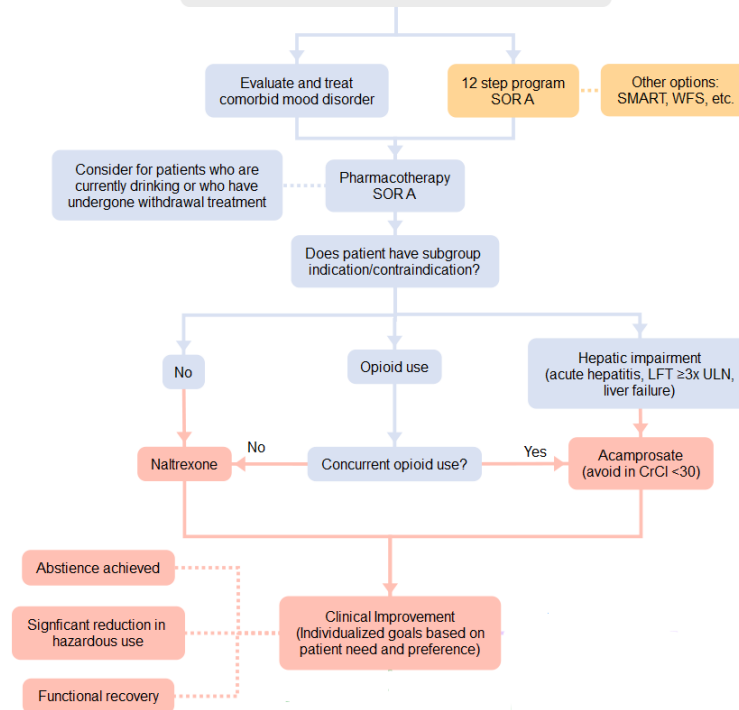
Tool

Medications

References

GUIDED VIEW

### Medications for Alcohol Use Disorder





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## Calculators



## Medication Switching



## Antipsychotic Management



## Medications



### CALCULATORS

[STOP BANG](#)[Child-Pugh](#)[CKD-Epi](#)[BMI \(Adult\)](#)[COWS](#)

[ABOUT](#)[METHODOLOGY](#)[THE TEAM](#)[NEWS](#)[CONTACT US](#)[Calculators](#)[Medication Switching](#)[Antipsychotic Management](#)[Medications](#)

## MEDICATION SWITCHING

[Antidepressant Switching](#)[Mood Stabilizer Switching](#)

Calculators



Medication Switching



Antipsychotic Management



Medications



## Antidepressant Switching

Escitalopram



Venlafaxine



Cross taper medications over 1-2 week

## Calculators



## Medication Switching



## Antipsychotic Management

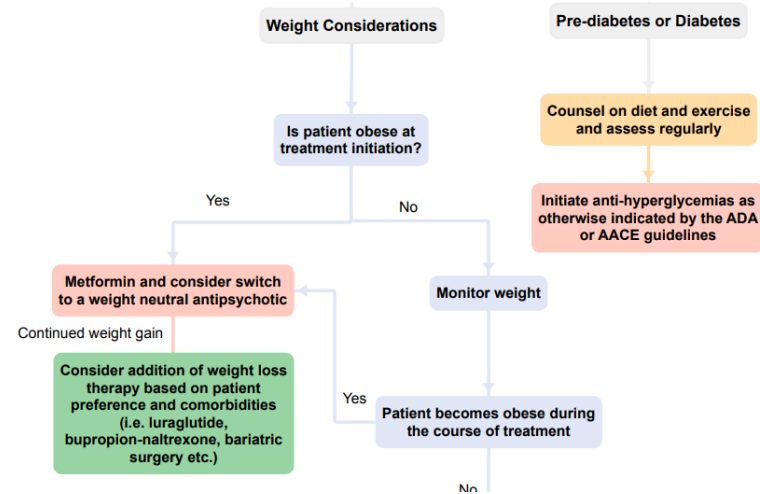


## Medications



Metabolic and Medical Disorders

Movement Related Disorders



## Calculators



## Medication Switching



## Antipsychotic Management



## Medications



Mixed agonist-antagonist postsynaptic serotonergic receptors

N-Methyl-D-Aspartate (NMDA) Receptor Antagonist

Nicotine Replacement Therapy

Norepinephrine Reuptake Inhibitor

Opioid Antagonist

Phosphodiesterase-5 inhibitor

SNRI Antidepressants

Serotonin 5-HT<sub>1A</sub> receptor partial agonist

Mood Stabilizers

Nicotine Receptor Partial Agonist

Norepinephrine Dopamine Reuptake Inhibitor

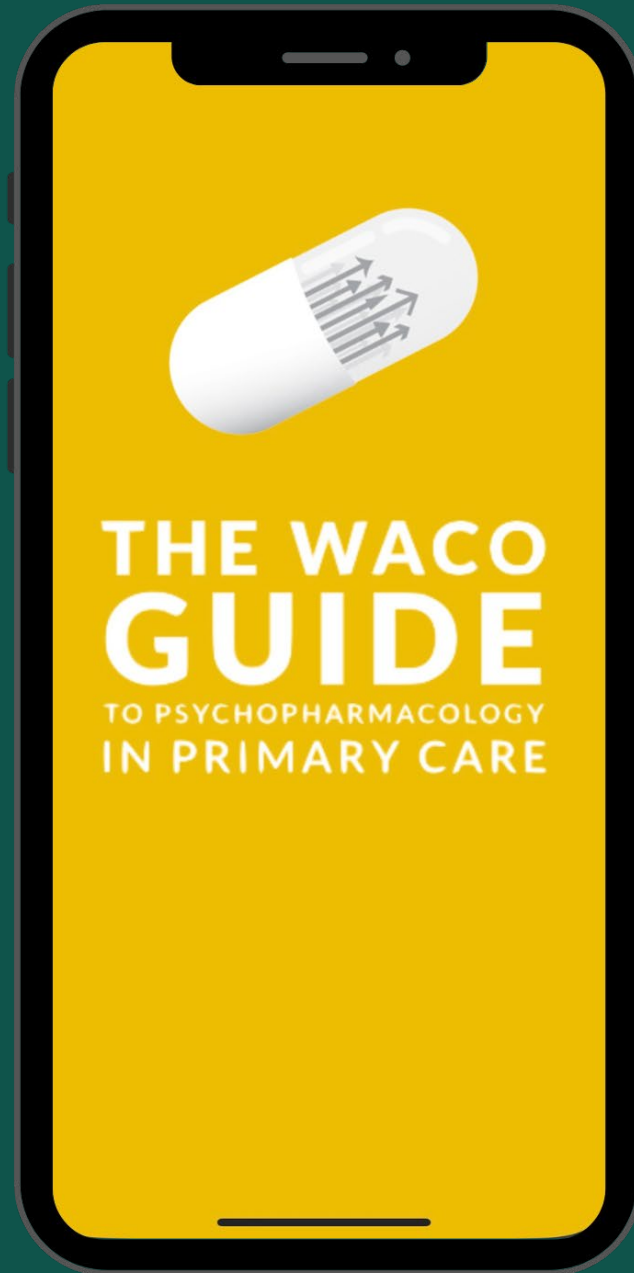
Opioid Agonists, partial

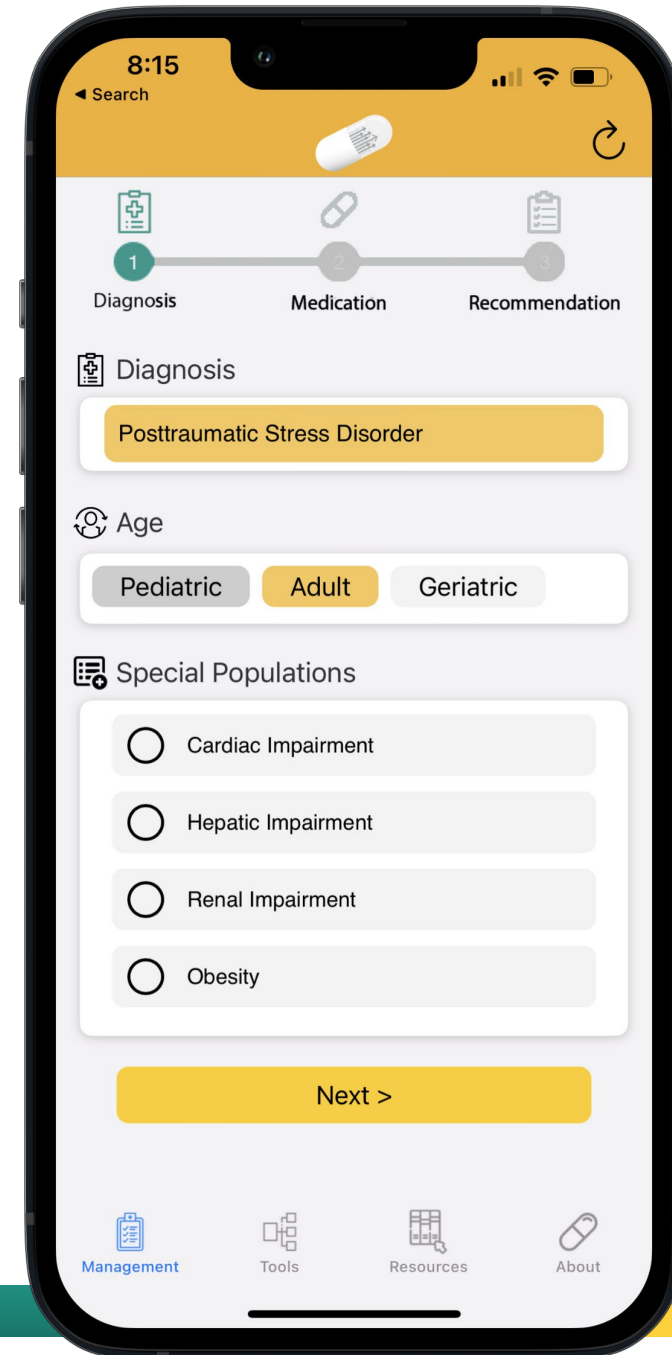
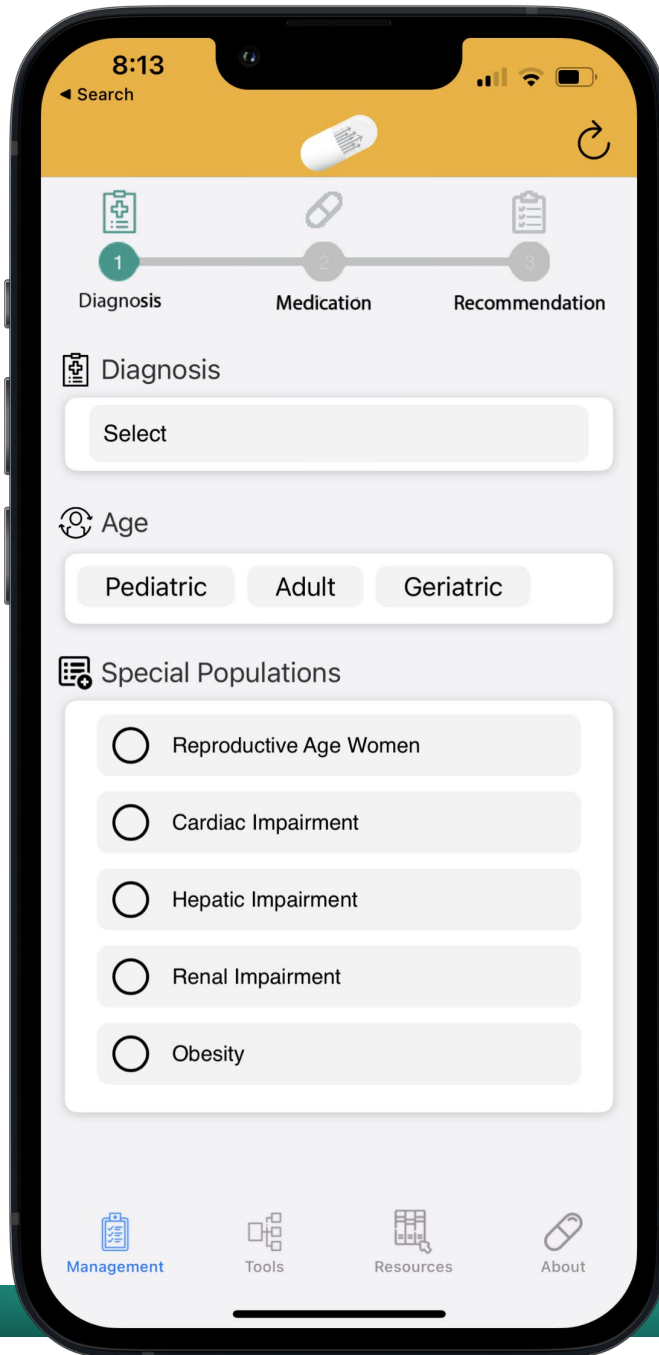
Orexin Receptor Agonist

Progestin-only Contraceptive (POC)

SSRI Antidepressants

Serotonin Modulator





8:15  
◀ Search

## Posttraumatic Stress Disorder

1 2 3  
Diagnosis Medication Recommendation

Does the patient suffer from clinically significant hallucinations?

Yes

No

Does the patient suffer from any sleep disturbances?

Yes

No

☐ Sleep initiation insomnia

☒ Midsleep waking or nightmares

☐ Positive screen for Obstructive Sleep Apnea

Management Tools Resources About

8:15  
◀ Search

## Posttraumatic Stress Disorder

1 2 3  
Diagnosis Medication Recommendation

Adequate pharmacotherapy trial: minimum 6-8 weeks for SSRI/SNRI at maximum clinically indicated and tolerable dose.

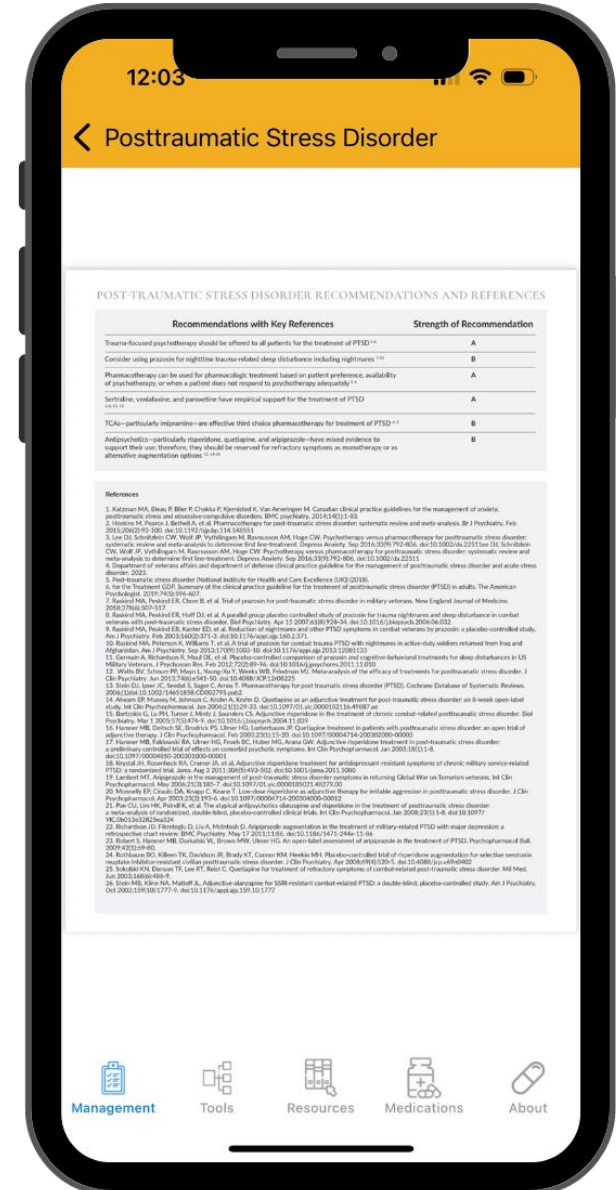
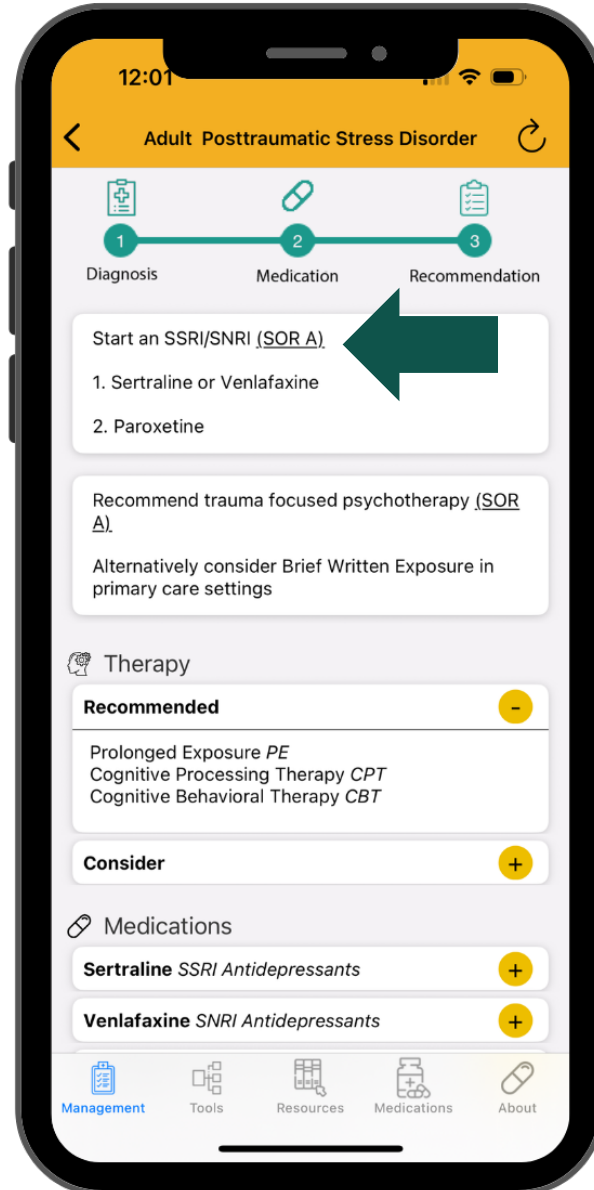
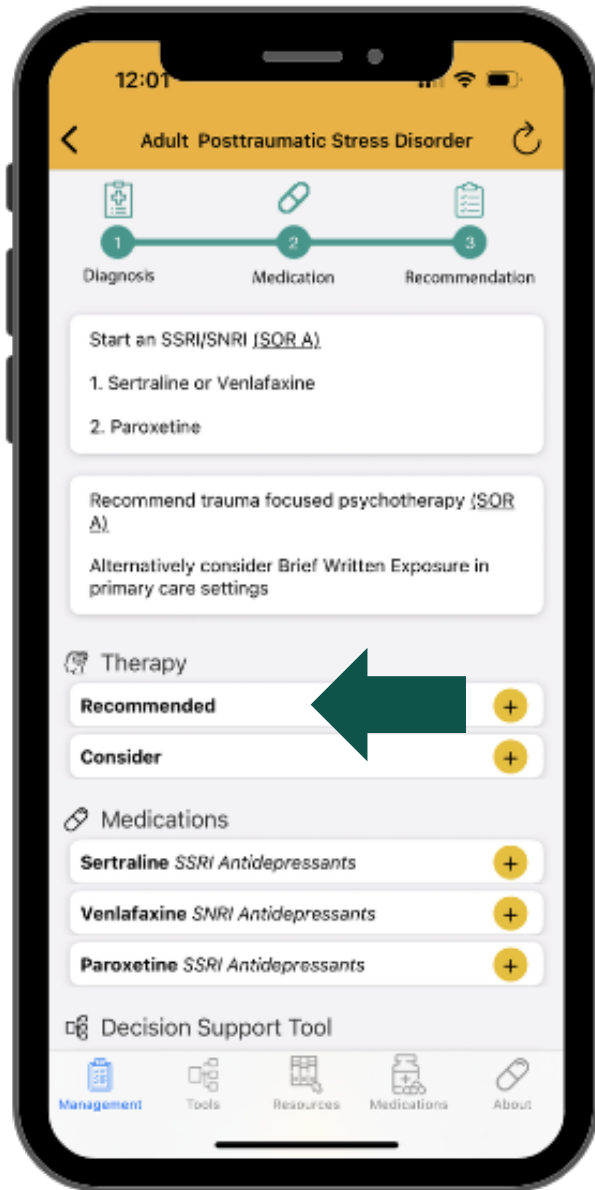
### Medication History

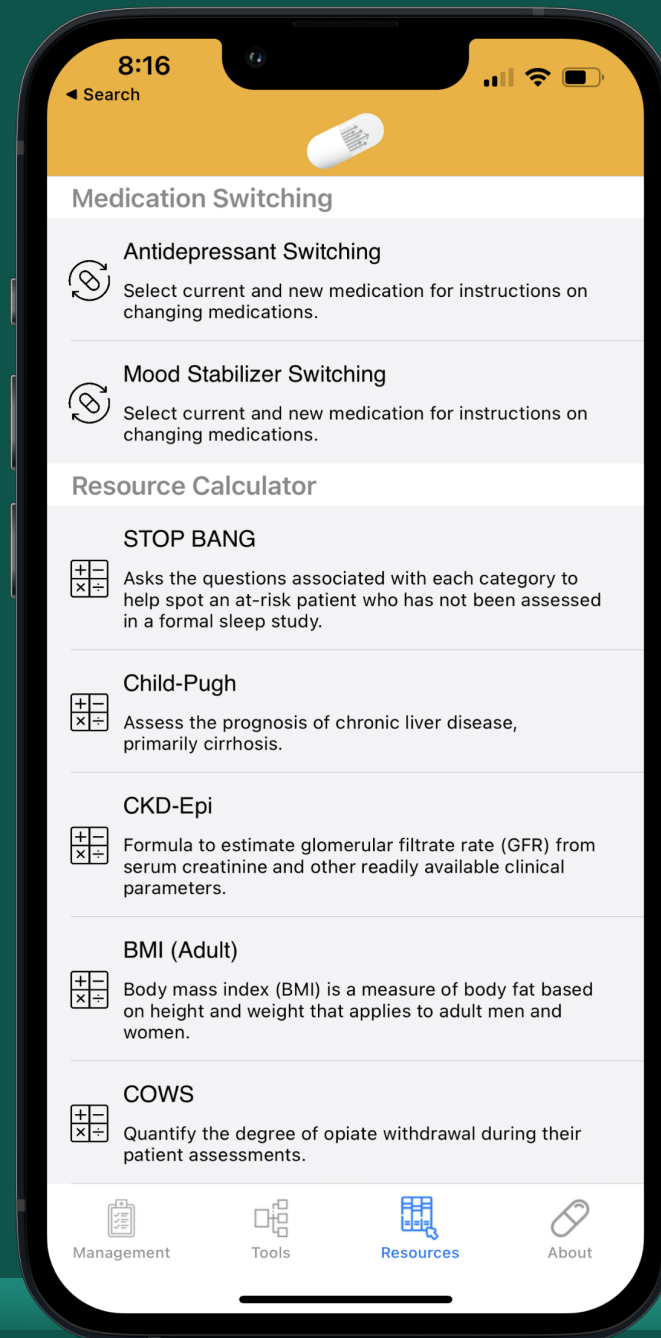
Currently or has previously taken medication to treat Posttraumatic Stress Disorder ☐

Next >

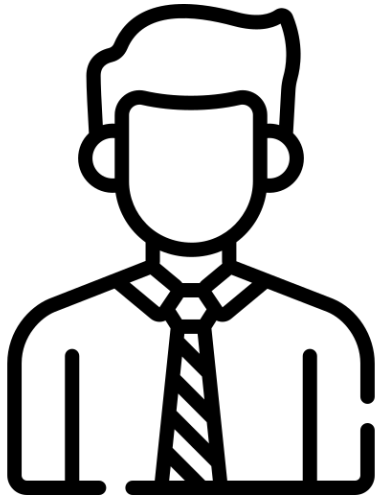
Management Tools Resources About







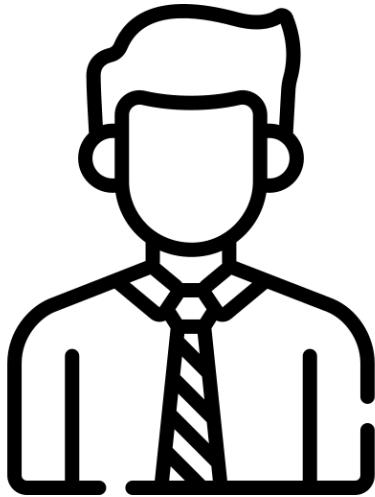
# Case – Generalized Anxiety Disorder in Adult Hepatic with Hepatic Impairment



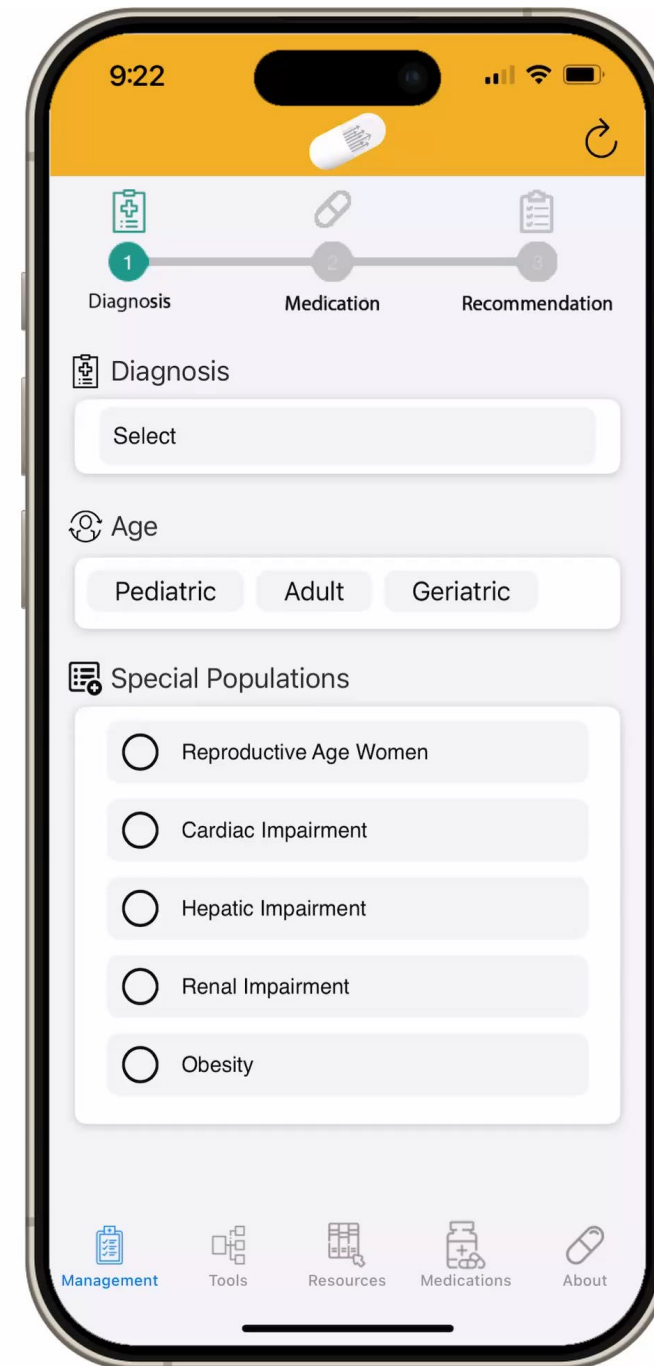
**Michael**  
**52-year-old male**  
 Severe GAD  
 PMH: Child Pugh B Cirrhosis

- Michael is a 52yo male with severe uncontrolled GAD
- He has a PMH significant for Child Pugh B Cirrhosis
- He has completed 10 weeks of Escitalopram 10mg with no response (max appropriate dose in Cirrhosis) and desires further pharmacotherapy, what pharmacotherapy could be considered next?

# Case – Generalized Anxiety Disorder in Adult Hepatic with Hepatic Impairment



**Michael**  
**52-year-old male**  
Severe GAD  
PMH: Child Pugh B Cirrhosis



# Questions?



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App



WacoGuide



WacoGuide



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