

Add or Switch? Major Depressive Disorder Interactive Decision Support App Reveals Discordance Between Expert and Community Clinicians

Zachary Schwartz, MSC, ELS¹; Kiran Mir-Hudegons, PhD¹; Anne Roc, PhD¹; Leslie Citrome, MD, MPH²; Christoph U. Correll, MD³; Rakesh Jain, MD, MPH⁴; Roger McIntyre, MD, FRCPC⁵; Michael E. Thase, MD⁶

¹Clinical Care Options, LLC. ²New York Medical College. ³Donald and Barbara Zucker School of Medicine at Hofstra/Northwell.

⁴Texas Tech Health Sciences Center, School of Medicine. ⁵University of Toronto. ⁶Perelman School of Medicine at the University of Pennsylvania

1. Background

In many patients with major depressive disorder (MDD), remission is not achieved with the initial antidepressant. Most guidelines recommend switching to or adding another treatment for residual symptoms, but healthcare professionals (HCPs) often fail to measure response or adjust treatment.

To address this practice gap and to help HCPs make individualized treatment recommendations for such patients, we developed a decision support app based on recommendations from 5 experts.

2. Methods

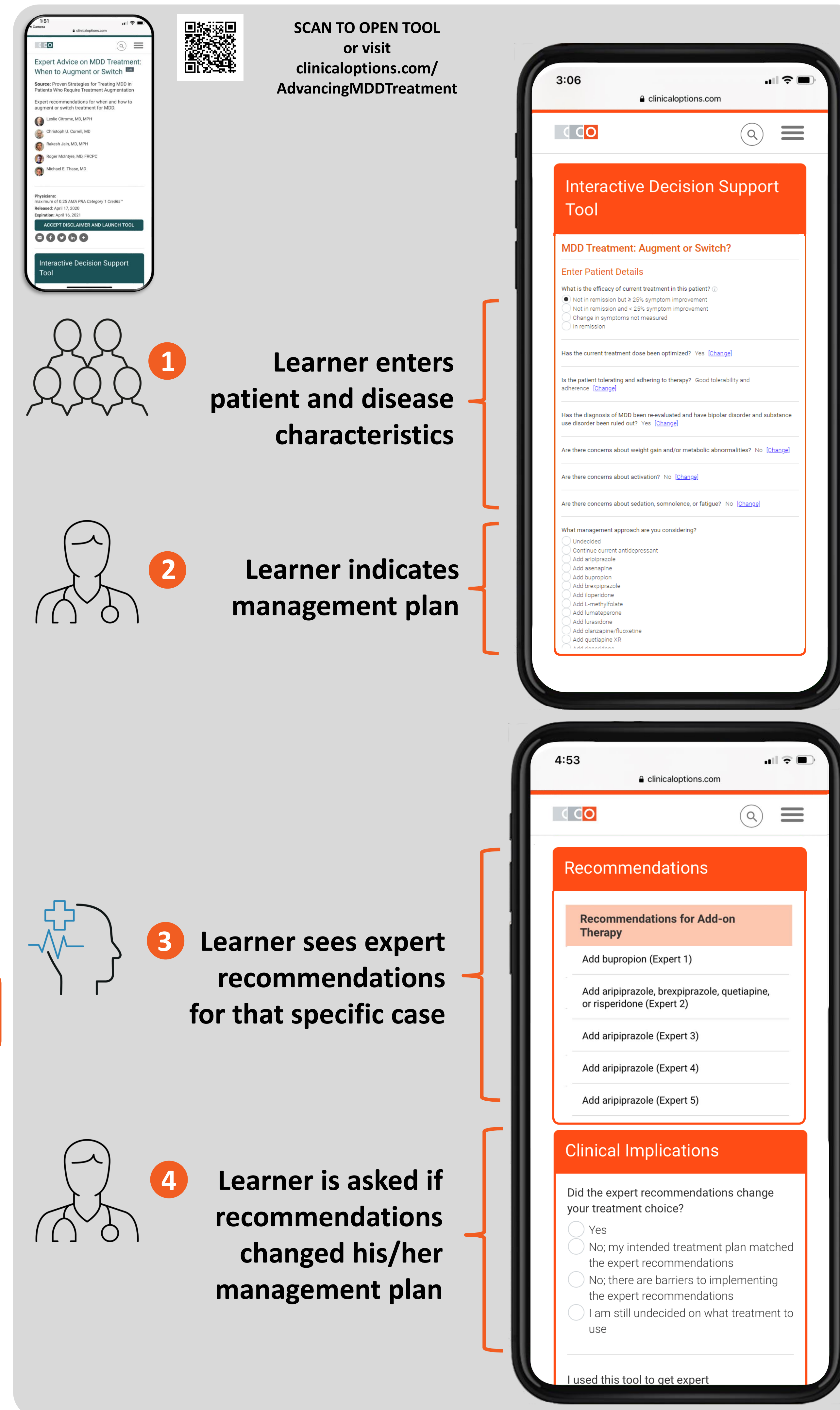
In March 2020, 5 depression experts provided treatment recommendations for 45 unique MDD case scenarios based on an agreed upon, simplified set of patient variables:

- Efficacy of current treatment
- Tolerability of/adherence to current treatment
- Concerns about sexual dysfunction, weight gain/metabolic abnormalities, activation/sedation

3. Cases

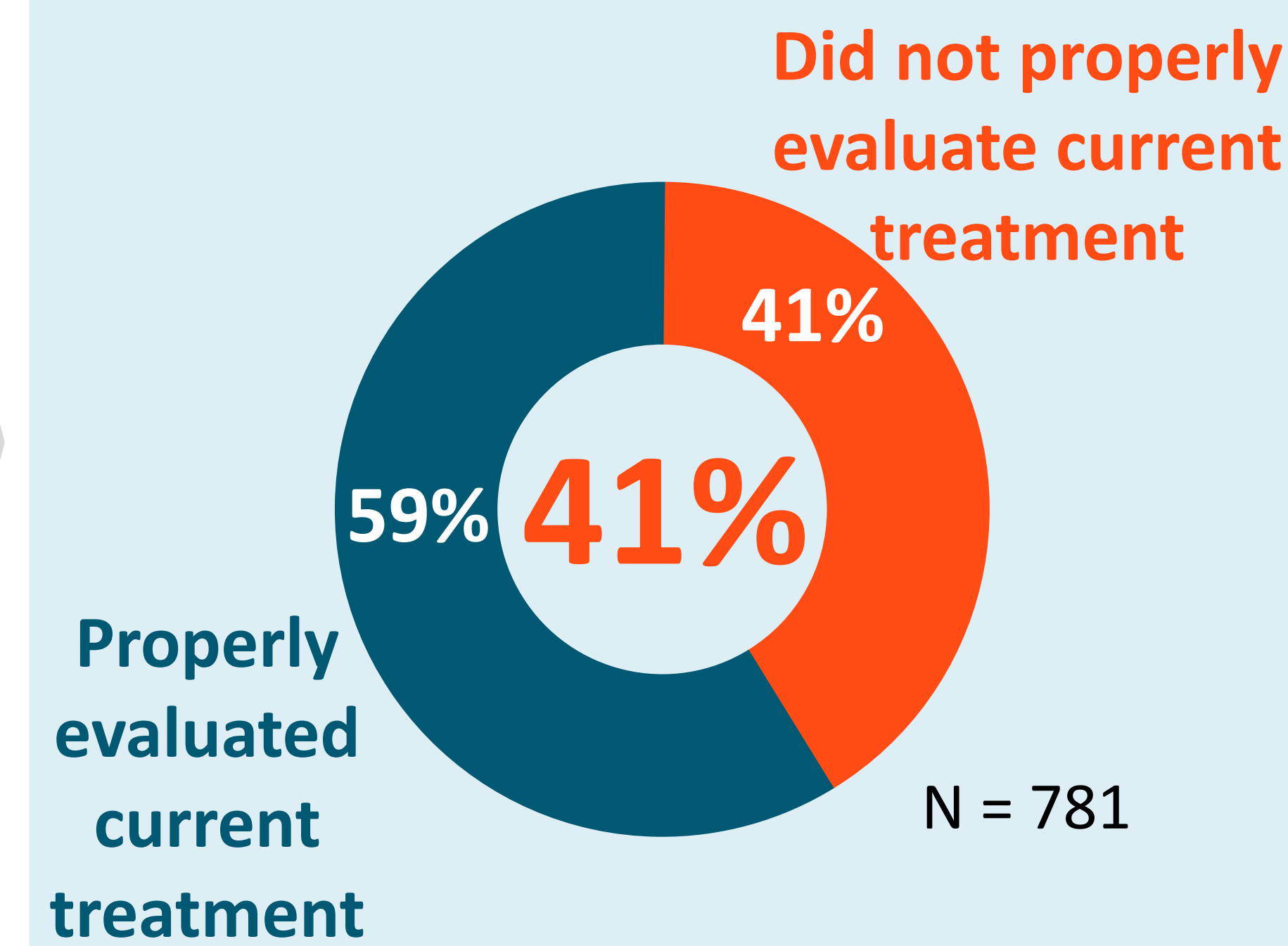
- From April 2020 to March 2021, **534 learners entered 781 unique patient case scenarios**
 - n = 394 cases via the CCO site (authenticated)
 - n = 140 cases via the app (anonymous)
- **87% of learners were US-based** and 13% were from outside the US
- **62% of learners were physicians**, 20% were nurses/NP/PA, 11% were pharmacists

4. Online Decision Support Tool Provides Patient-Specific Recommendations



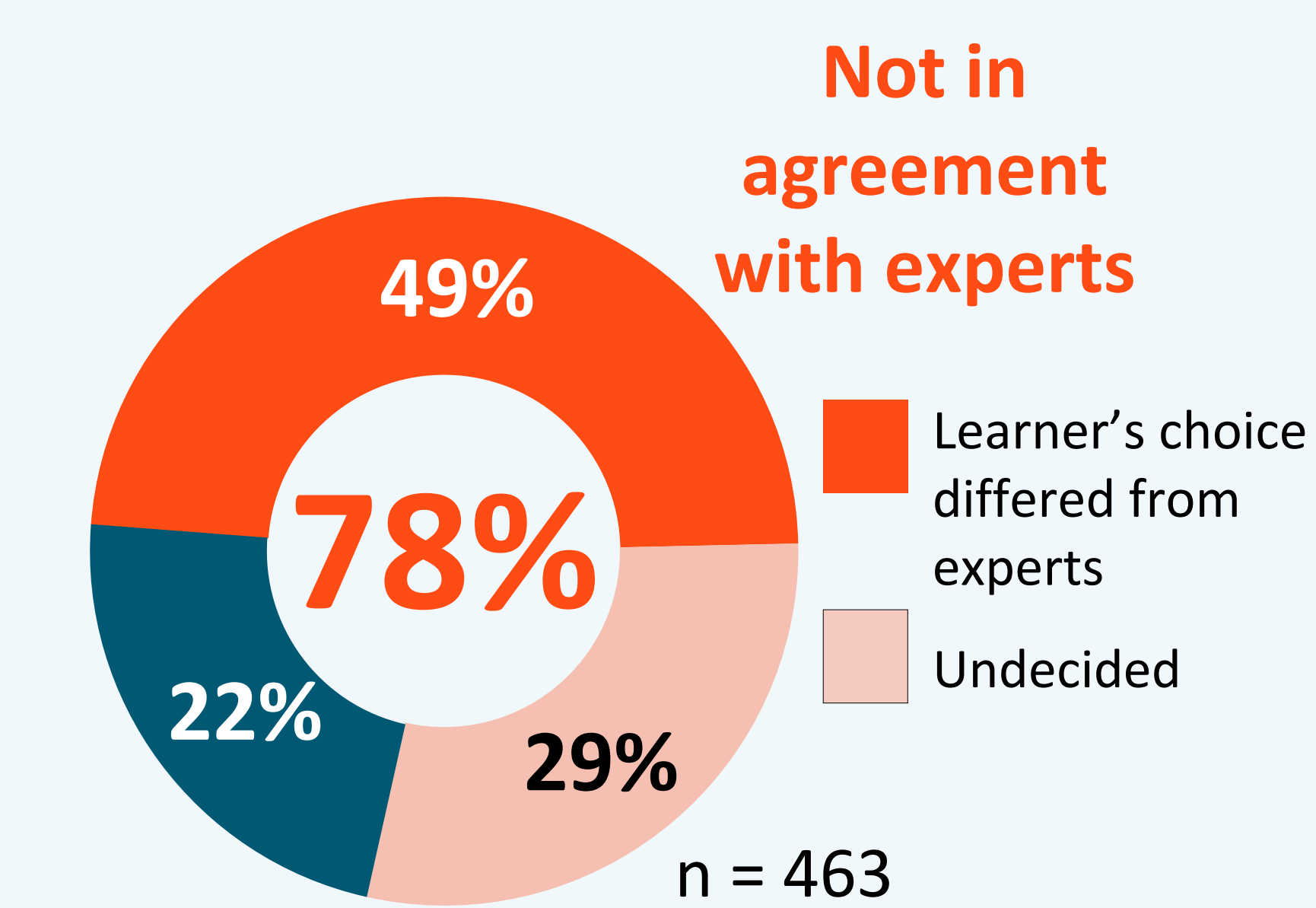
5. Intended Management Approach

Did Learners Properly Evaluate Need for Treatment Adjustment?



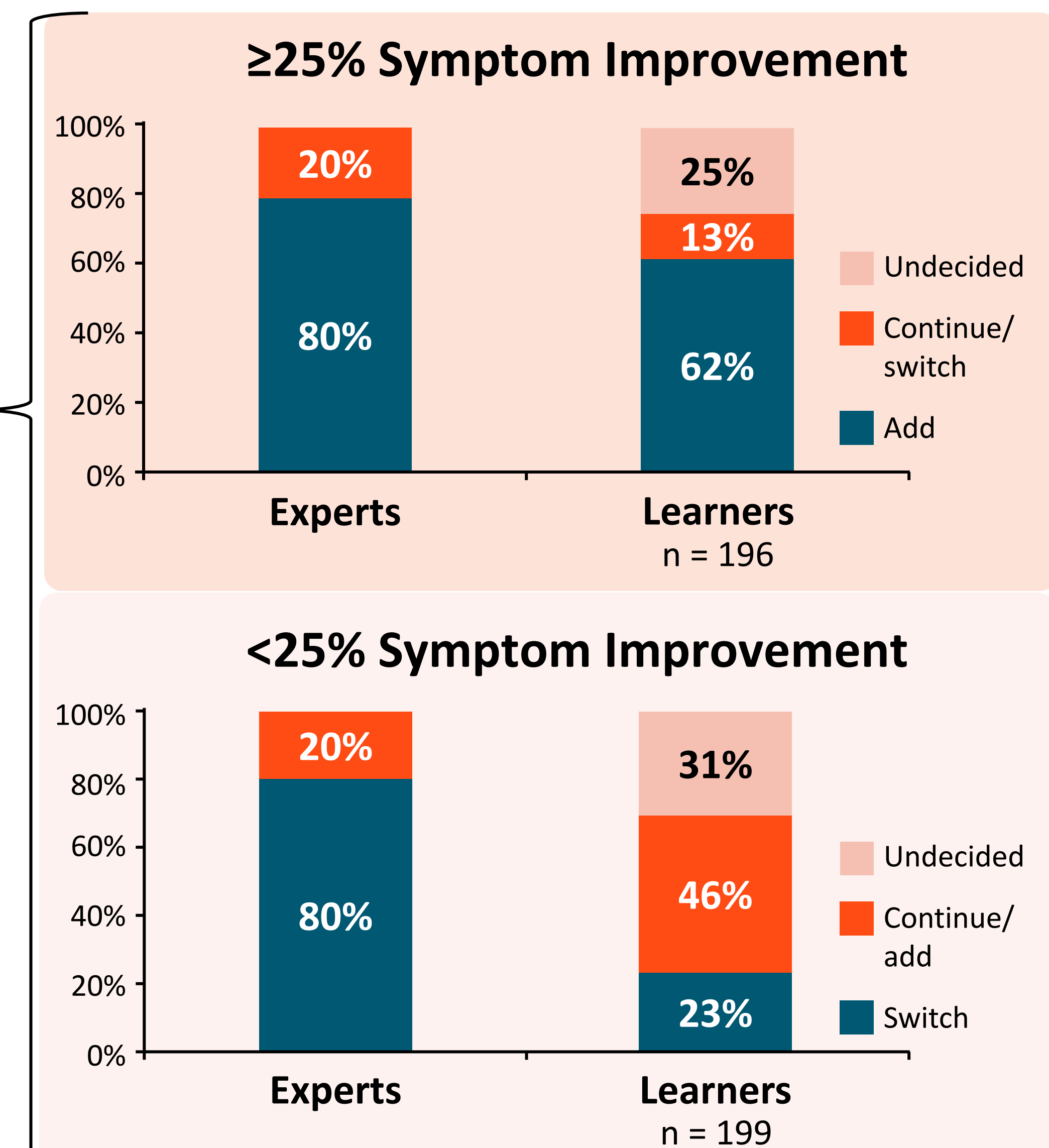
- In **41% of all cases**, participants selected a treatment plan **before evaluating the need for treatment adjustment** via the following strategies:
 - Measure change in symptoms
 - Dose optimization
 - Assess adherence/tolerability
 - Re-evaluate MDD diagnosis

Did Learners' Treatment Decisions Align With Experts?



- In **78% of cases**, where a treatment decision was made, participants selected a treatment plan that differed from experts

In Patients Not in Remission, Did Experts and Learners Add or Switch?



6. Posteducation Impact

Subset of Learner Cases Where Baseline Plan Differed From Experts and Learner Identified Future Plan



7. Conclusions

- This point-of-care app can be part of an implementation strategy to positively influence practice behaviors: Clinicians can see if their intended treatment choice is congruent with a panel of experts and reconsider their plans as appropriate. The app revealed—and helped learners correct—key gaps:
 - Learners often failed to practice measurement-based care by **neglecting to evaluate the need for treatment adjustment** in 41% of case scenarios
 - Of cases where a treatment decision was made, learners' intentions **differed from experts** in 78% of case scenarios

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