

CME on Pharmacogenomics Testing Improves Knowledge, Competence, and Confidence Related to Implementing Testing in Practice

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BACKGROUND

Pharmacogenomics (PGx) testing, in particular combinatorial PGx testing, represents a potential means for delivering personalized treatment selection for patients with psychiatric disorders.¹

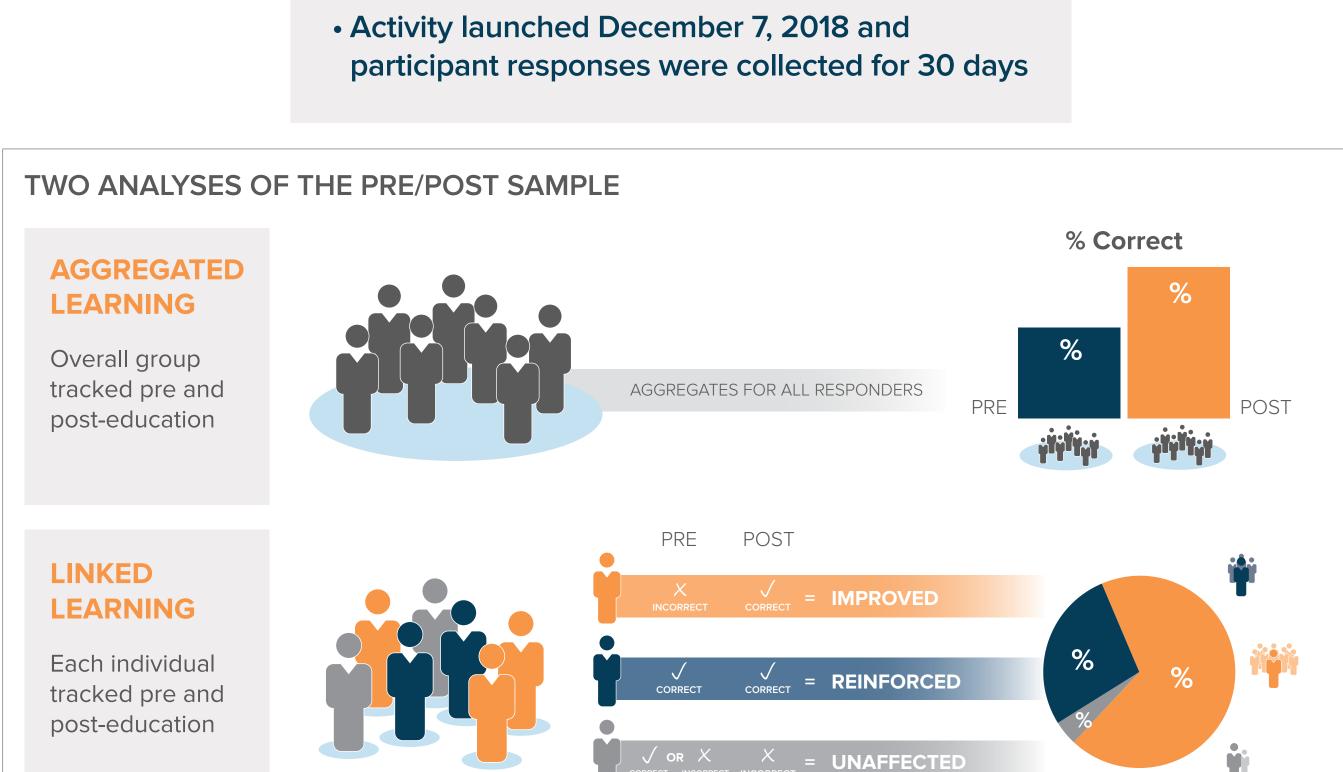
The goal of this educational intervention was

to educate clinicians about the role of PGx testing in neuropsychiatric conditions such as major depressive disorder (MDD), how these novel tests may be implemented into clinical practice, and how results may be used to inform decision-making.² We sought to determine if an online

continuing medical education (CME) activity could improve the clinical knowledge, competence, and confidence among psychiatrists regarding PGx testing.

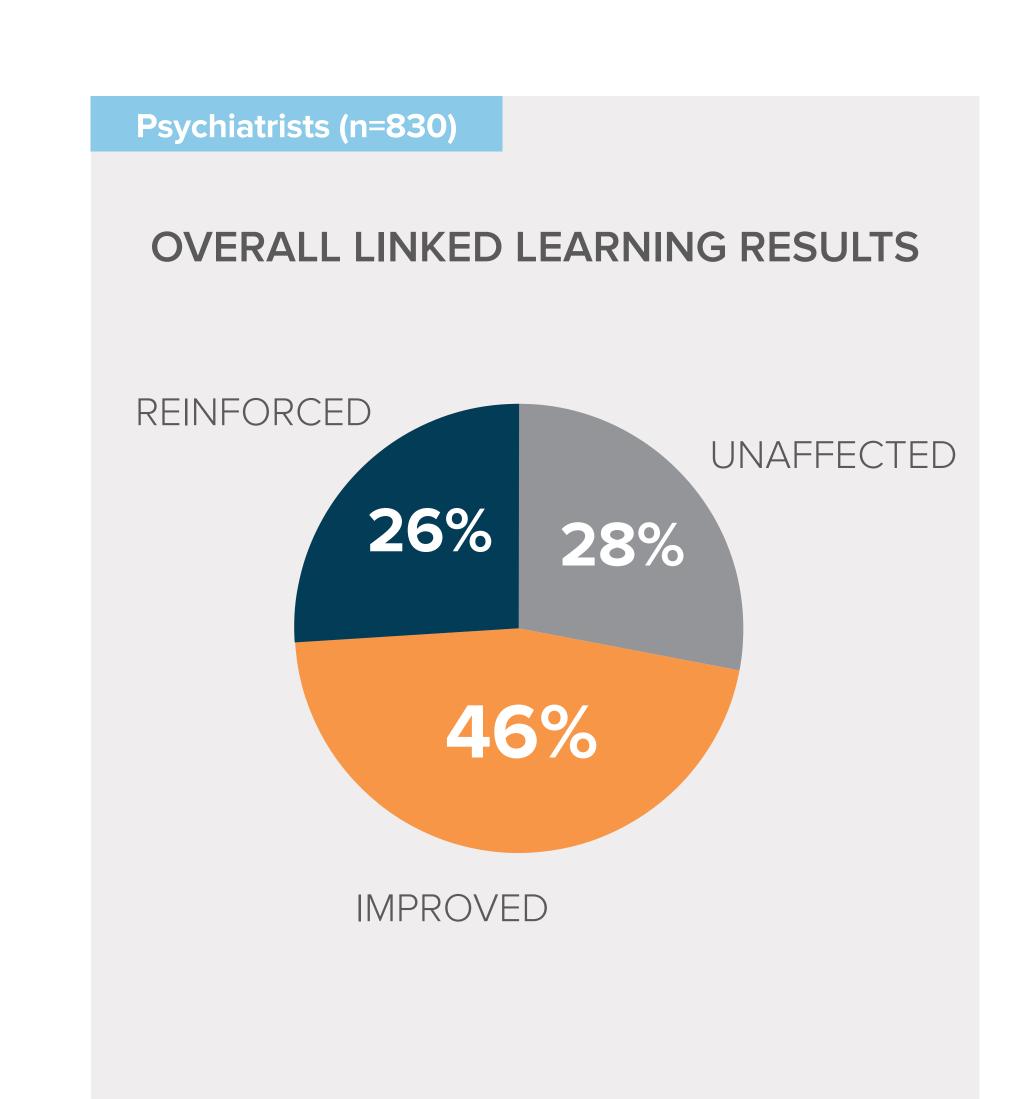
METHODS

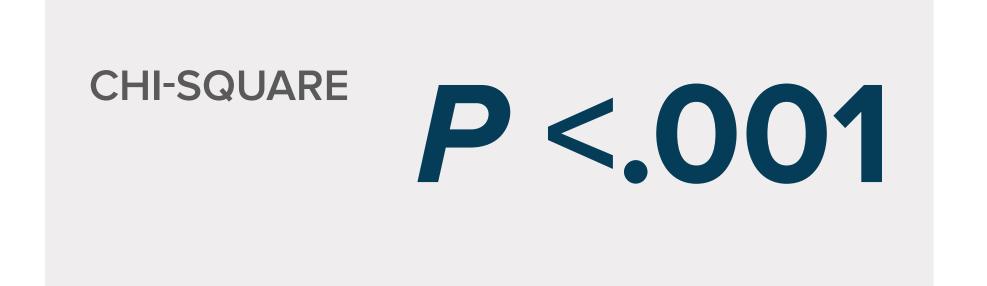




RESULTS

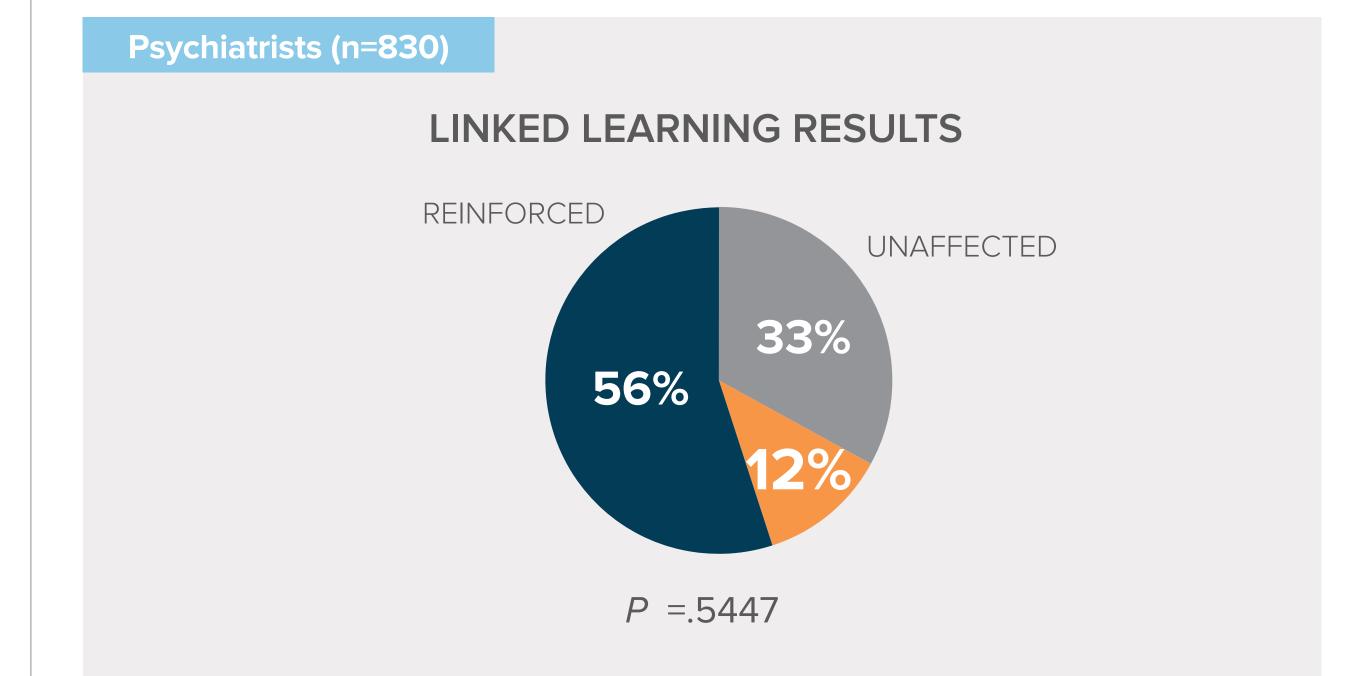
Overall, 72% of psychiatrists had knowledge or competence that was reinforced or improved as a result of education





QUESTION 1

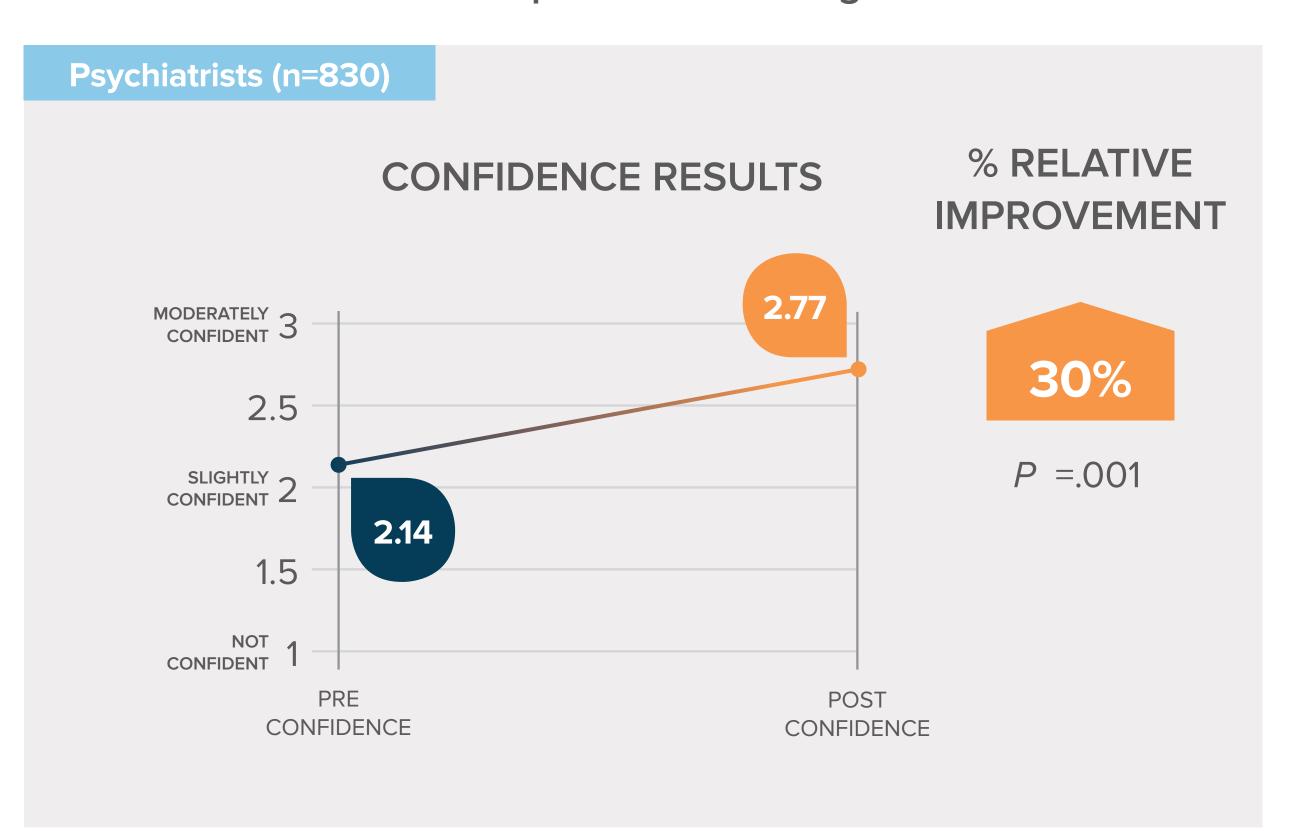
Knowledge related to the clinical benefits of PGx-guided treatment strategies



Based on evaluation of Hamilton Depression Rating Scale (HAM-D 17) scores, a metaanalysis of studies using pharmacogenomics (PGx) testing to select major depressive disorder (MDD) treatment determined which of the following related to treatment response? (Correct answer: Approximately 50% of persons showed a treatment response with PGx-guided strategies vs 36% with unguided treatment strategies)

QUESTION 3

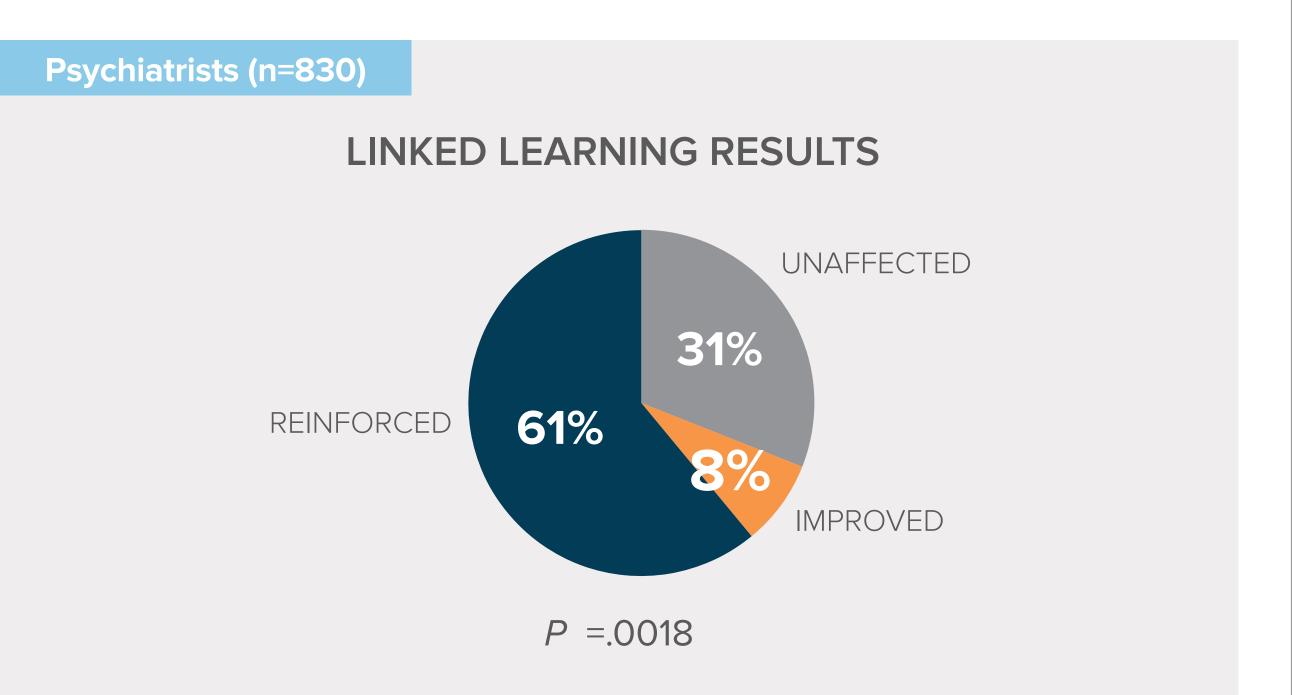
Confidence using PGx tests to help guide treatment decisions for patients with major depressive disorder significantly increased for those with reinforced or improved knowledge



How confident are you right now in using pharmacogenomic tests to help guide treatment decisions for your patients with MDD? (Select ranking from 1 [Not confident]

QUESTION 2

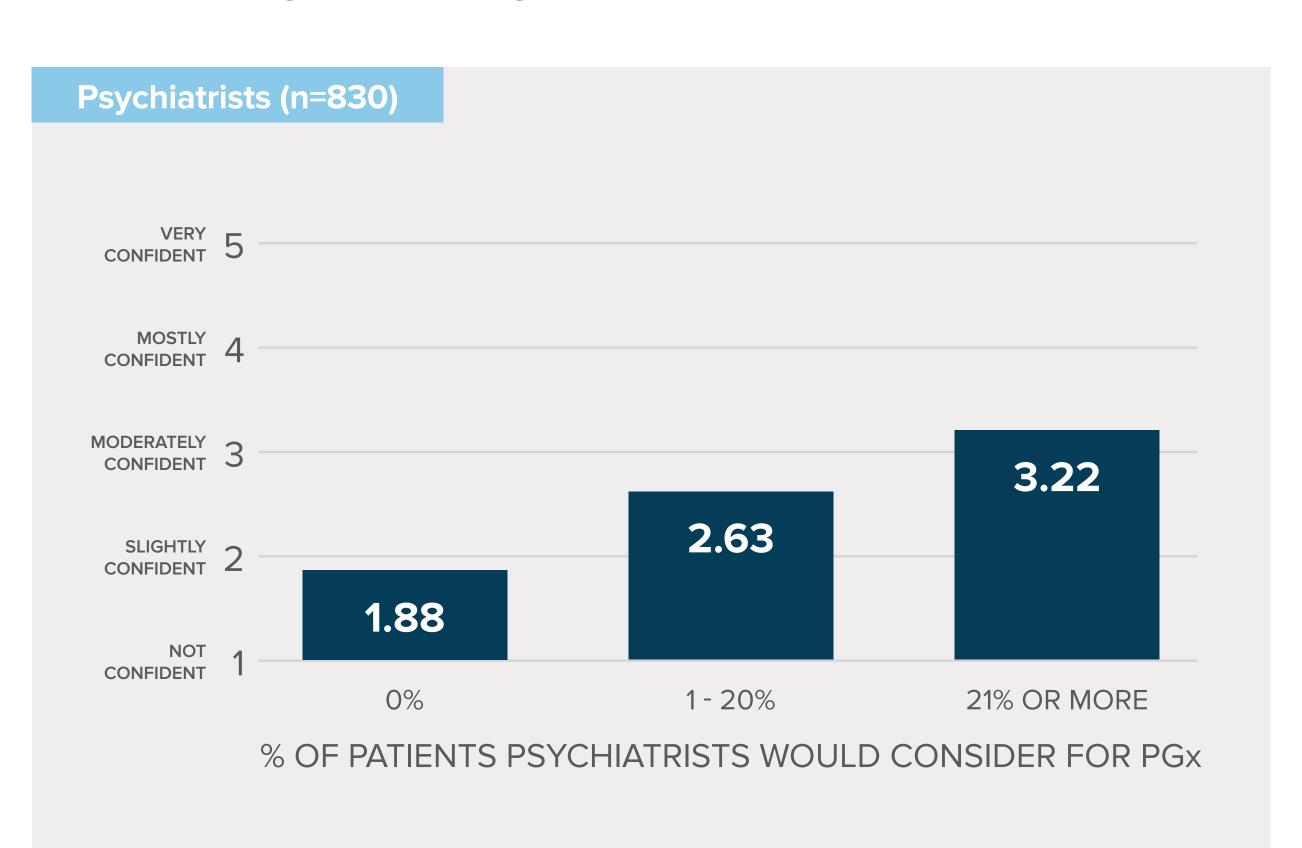
Competence related to interpreting PGx tests for patients with neuropsychiatric disorders



Metabolism of most psychiatric agents involves 1 or more cytochrome P (CYP) enzymes, and some drug labels may advise dose adjustments based on CYP status. If a person's test shows alleles with no or decreased function with little to no enzymatic activity, that person would be categorized into which of the following metabolizer phenotypes? (Correct answer: Poor)

SELF EFFICACY RESULTS

Confidence in the use of PGx testing was correlated with likelihood of considering PGx testing for patients with MDD



Self-efficacy: How confident are you right now in using PGx tests to help guide treatment decisions for your patients with MDD? (Select ranking from 1 [Not confident] to 5 [Very confident])

CONCLUSION

Online 30-min CME resulted in improvement and reinforcement in psychiatrists' knowledge, competence, and confidence in using pharmacogenomics testing in patients with psychiatric disorders.

ACKNOWLEDGMENTS

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For more information, please contact: Shari Dermer at sdermer@medscape.net.

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