

How Is Postpartum Depression Currently Diagnosed and Managed? Insights From A Virtual Patient Simulation

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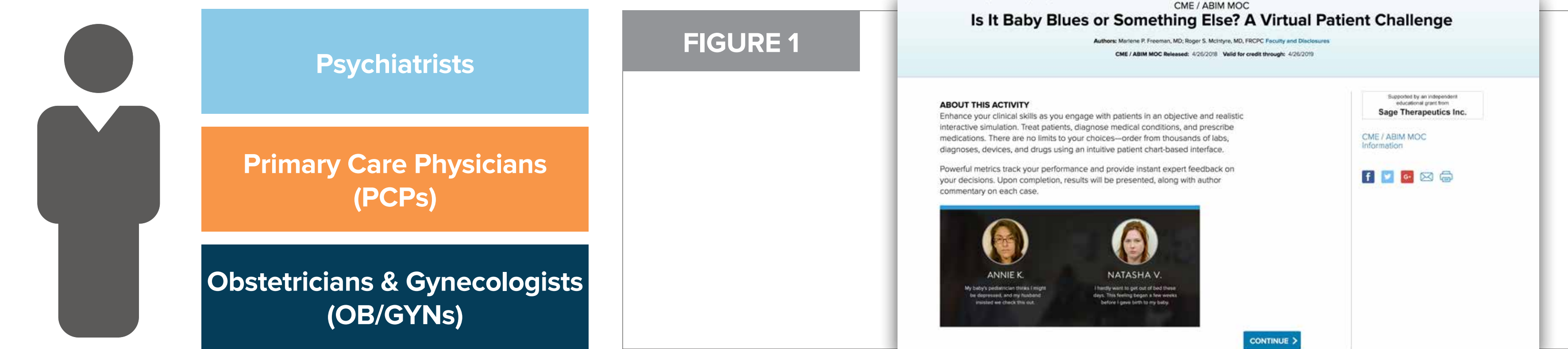
BACKGROUND

The goal of this study was to determine physician performance in the diagnosis and effective management of postpartum depression (PPD) and to provide needed education in the consequence-free environment of a virtual patient simulation (VPS).

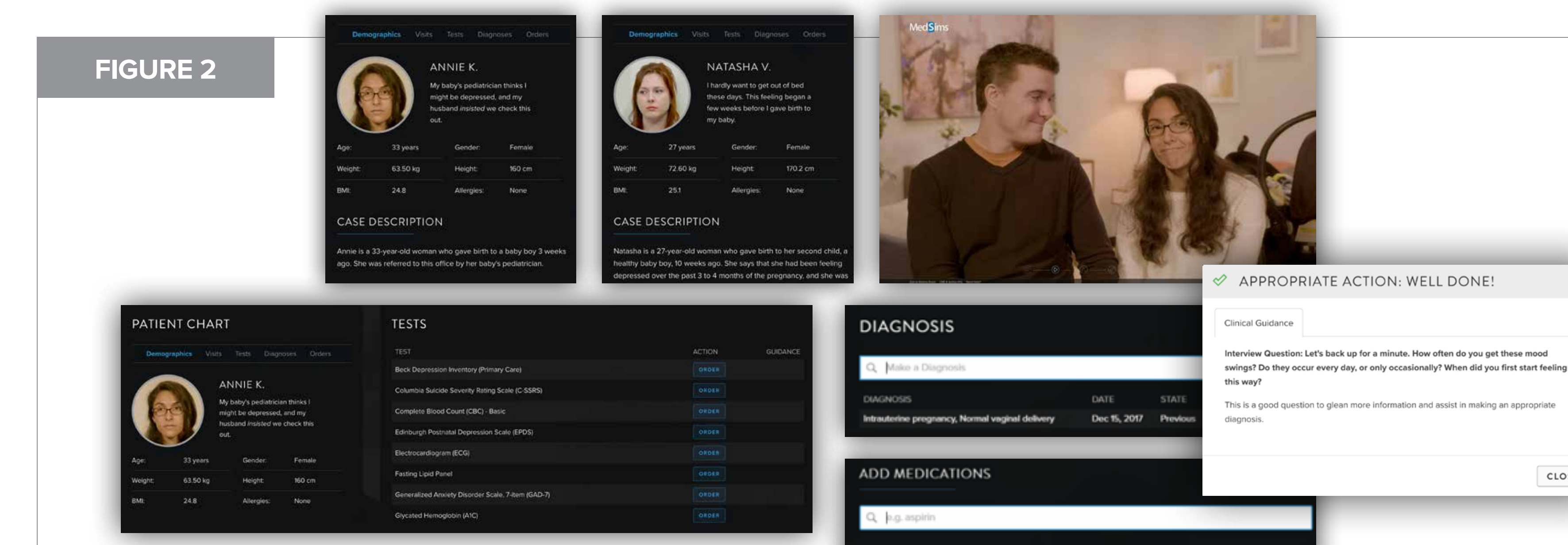


METHODS

- A continuing medical education activity was delivered via an online VPS learning platform that offers a lifelike clinical care experience with complete freedom of choice in clinical decision-making and expert personalized feedback to address learner's practice gaps (Figure 1)



- Physicians including psychiatrists, primary care physicians (PCPs), and obstetricians/gynecologists (ob/gyns), were presented with two cases of PPD designed to model the experience of actual practice by including use of electronic health records (Figure 2)



- Following virtual interactions with patients, physicians were asked to make decisions regarding assessments, diagnoses, and pharmacologic therapies. The clinical decisions were analyzed using a sophisticated decision engine, and clinical guidance (CG) based on current evidence-based recommendations was provided in response to learners' clinical decisions
- Impact of the education was measured by comparing participant decisions pre- and post-CG using a 2-tailed, paired t-test; $P < .05$ was considered statistically significant
- The activity launched on Medscape Education on April 26, 2018, and data were collected through to June 17, 2018

RESULTS

From pre- to post-CG in the simulation, physicians were more likely to make evidence-based clinical decisions related to:

- Ordering appropriate baseline tests including tools/scales to screen for PPD: in case 1, Psychiatrists (n=705) improved from 30% to 38% on average ($P < .05$); PCPs (n=217) improved from 34% to 43% on average ($P < .05$); and, OB/GYNs (n=227) improved from 29% to 35% on average ($P < .05$) (Figure 3)
- Diagnosing moderate-to-severe PPD: in case 2, Psychiatrists (n=609) improved from 44% to 59% ($P < .05$); PCPs (n=175) improved from 41% to 53% ($P < .05$); and, OB/GYNs (n=147) improved from 52% to 46% ($P < .05$) (Figure 4)
- Ordering appropriate treatments for moderate-to-severe PPD such as selective serotonin-reuptake inhibitors: in case 2, Psychiatrists (n=609) improved from 42% CG to 70% ($P < .05$); PCPs (n=175) improved from 50% to 69% ($P < .05$); and, OB/GYNs (n=147) improved from 50% to 76% ($P < .05$) (Figure 5)

- Top rationales for selection of selective serotonin-reuptake inhibitors for Psychiatrists and PCPs were better tolerability/safety profile, cost-effective option, more familiarity with its use. For OB/GYNs, they were more familiarity with its use, better tolerability/safety profile, and cost-effective option

- Interestingly, a small percentage of physicians (average of 5%) chose investigational agents for PPD which were in clinical trials pre-CG, and this increased to an average of 9% post-CG

FIGURE 3

Ordering appropriate baseline tests (including tools/scales) to diagnose mental health issues and severity level as it relates to PPD

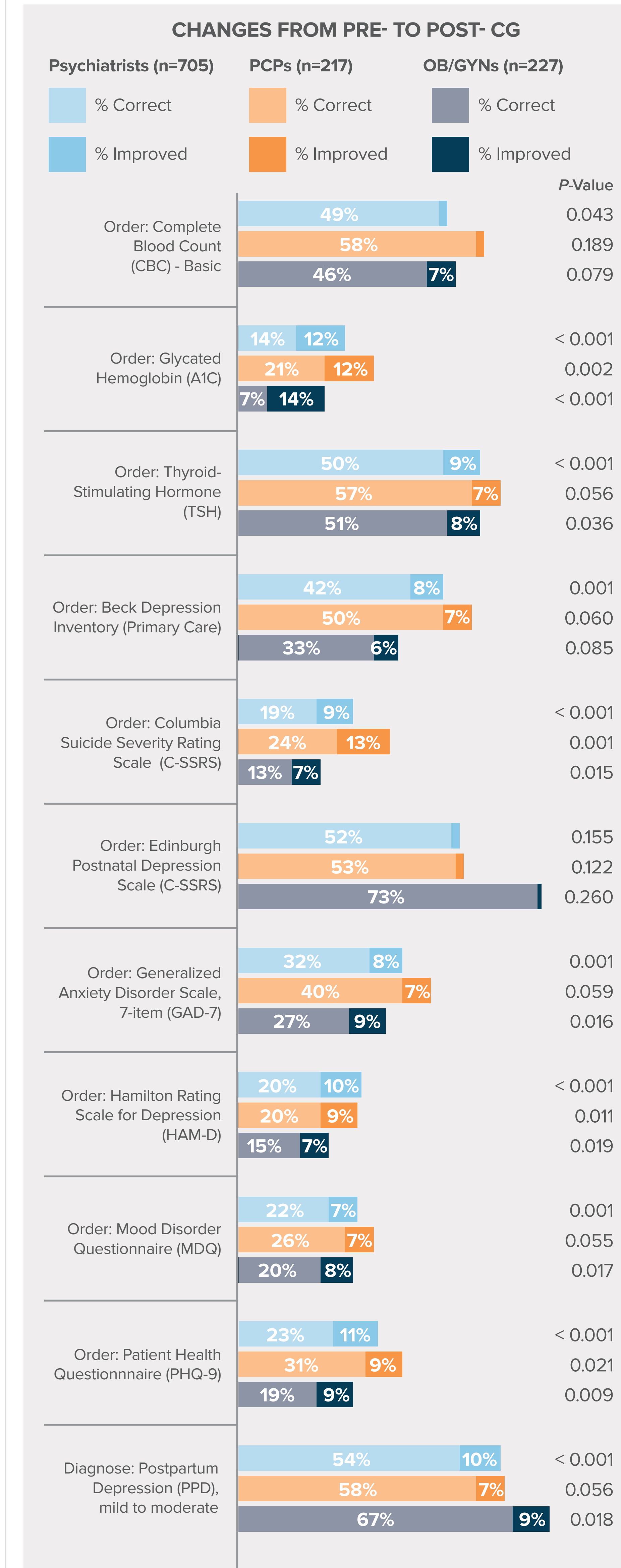


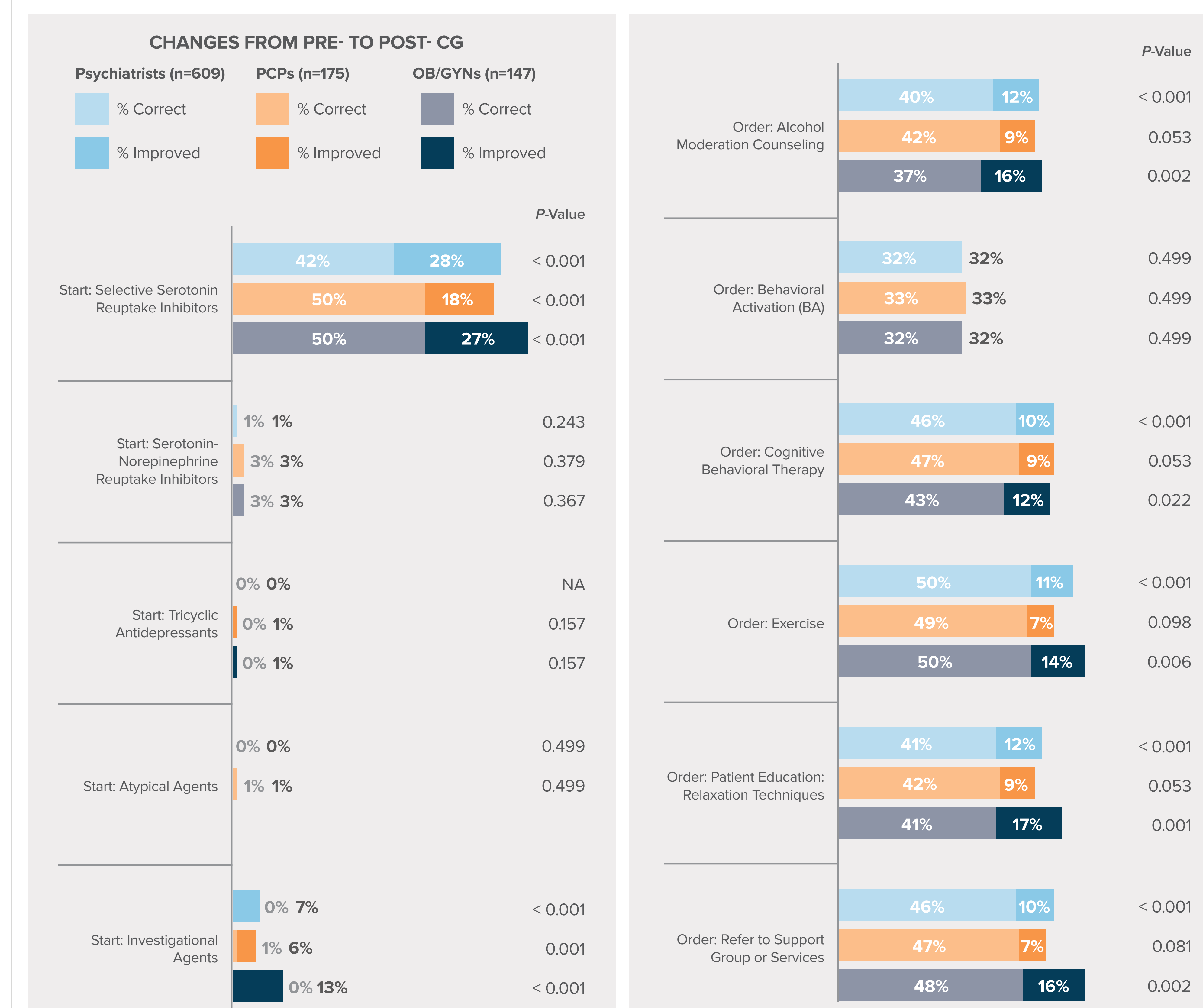
FIGURE 4

Diagnosing moderate-to-severe PPD



FIGURE 5

Ordering appropriate treatments for moderate-to-severe PPD such as selective serotonin-reuptake inhibitors



CONCLUSION

Physicians who participated in VPS-based education significantly improved their clinical decision-making in PPD, particularly in selection of validated screening tools/scales, diagnosis, and pharmacologic treatments based on severity. Given that VPS immerses physicians in an authentic, practical learning experience matching the scope of clinical practice, this type of intervention can be used to determine clinical practice gaps and translate knowledge into practice.

ACKNOWLEDGMENTS

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REFERENCE

Freeman MP, McIntyre RS. Is It Baby Blues or Something Else? A Virtual Patient Challenge. April 26, 2018. <https://www.medscape.org/viewarticle/891808>. Accessed October 5, 2018.

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