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May 4th, 12:00 AM

### Analysis of Implementing Best Practices for Co-Prescribing Naloxone in Your Agency Online CME Training Module via Pre- and Post- Knowledge Assessment.

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Podwojniak, Alicia; Venkataraman, Arvind; and Jermyn, Richard, "Analysis of Implementing Best Practices for Co-Prescribing Naloxone in Your Agency Online CME Training Module via Pre- and Post- Knowledge Assessment." (2023). *Stratford Campus Research Day*. 8.  
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## Introduction

The opioid epidemic poses substantial risk to society. Providers must ensure that their patients understand the uses and risks of both opioids and Naloxone. One way to analyze this concept is via metacognition. This refers to a person's knowledge about cognitive phenomena, and thus it regulates self-awareness abilities in decision making, such as planning and evaluating. It is not only important for providers to have knowledge on best practices, but also to have self-awareness, and confidence in their decision making to ensure optimal patient outcomes.<sup>1</sup> True-false confidence weighted scoring can be utilized, whereby various levels of confidence are assessed from "I am confident this is true," to "I think, but am unsure, if this is true," and similarly for false answers. This study analyzed the efficacy of an online training module, regarding best practices for co-prescribing Naloxone, and used a metacognitive analysis approach to determine efficacy.

## Methods

*Implementing Best Practices for Co-Prescribing Naloxone in Your Agency* pre- and post- test intervention was administered to a variety of providers at Inspira Health Network on 9/12/22 and 9/13/22.

With a total of 106 responses, Excel was used for statistical analyses via T-Test and ANOVA.

## Results

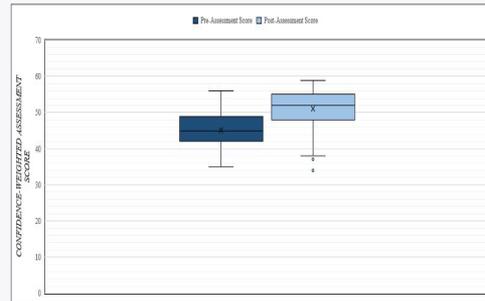


Figure 1: Representation of improvement in pre-test (dark blue), and post-test (light blue) knowledge scores after assigning point system to confidence questions. ( $P < 0.01$ )

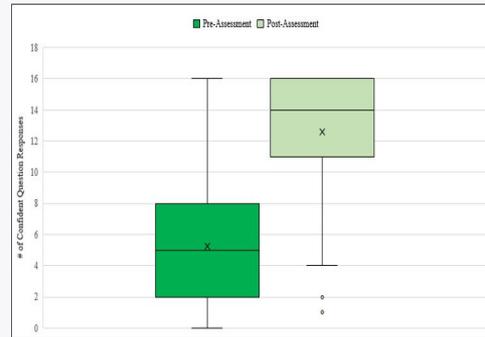


Figure 2: ANOVA analysis of improvement of provider confidence level in answer choice selection. ( $P < 0.01$ )

## Discussion & Conclusion

This analysis identified:

- A significant improvement in pre- and post- intervention scores ( $P < 0.01$ ) (Fig 1), as well as significant improvement in provider confidence in their answer choice ( $p < 0.01$ ) (Fig 2).
- This training module successfully improves provider knowledge in Best Practices for Co-Prescribing Naloxone.
- A confirmed notion that there is profound value to using metacognitive approach to such analyses.

Applying metacognitive concepts to evaluating interventional programs allows for increased understanding of not only provider knowledge, but also provides insight to the likelihood of providers' implementation of new understanding to their practice.

Limitations include a small sample size and lack of a control group, which increases the chance of confounding variables influencing the post- test scores.

## Citations

1. Akturk AO, Sahin I. Literature Review on Metacognition and its Measurement. *Procedia - Social and Behavioral Sciences* [Internet]. 2011 Jan 1 [cited 2022 May 25];15:3731–6. Available from: <https://www.sciencedirect.com/science/article/pii/S1877042811009104>
2. The Neuromuscular Institute. *Implementing Best Practices for Co-Prescribing Naloxone in Your Agency* | Rowan Online Marketplace [Internet]. Rowan University. 2020 [cited 2022 Jun 14]. Available from: <https://shop.rowan.edu/store/events/items/33340>

Thank you to Rowan SMRF, Rowan NMI, Dr. Jermyn, Arvind, and Corey & Michael from Rutgers NJ Collab for the opportunity to participate in this year's summer research program.