Optimizing Opioid Safety: The Impact of Pharmacists in Interprofessional Education and REMS Programs

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Clinical Education Alliance

Background

- The opioid epidemic continues to pose a significant public health challenge, with approximately 108,000 overdose-related deaths in 2022, primarily driven by fentanyl and synthetic opioids.[1]
- In 2018, the FDA approved the Opioid Analgesic Risk Evaluation and Mitigation Strategies (OA REMS) program to ensure safe prescribing and dispensing practices by requiring continuing education for healthcare providers.[2]

Purpose

- To assess the effect of pharmacist faculty on knowledge acquisition, collaboration, and barrier recognition in REMS-aligned interprofessional education (IPE) programs.

Methods

- A retrospective comparative analysis was conducted using learner data from 3 REMS-compliant continuing professional development (CPD) programs.
- Programs were delivered as live events or on-demand webcast hosted by Clinical Education Alliance's (CEA's) learning management system.

Data Collections

- Learners completed pretests/posttests, Likert-scale collaboration, and reported barriers (peer, time, cost, access).
- Only those who completed ≥75% of content and claimed continuing education credit were included.

Statistical Analysis

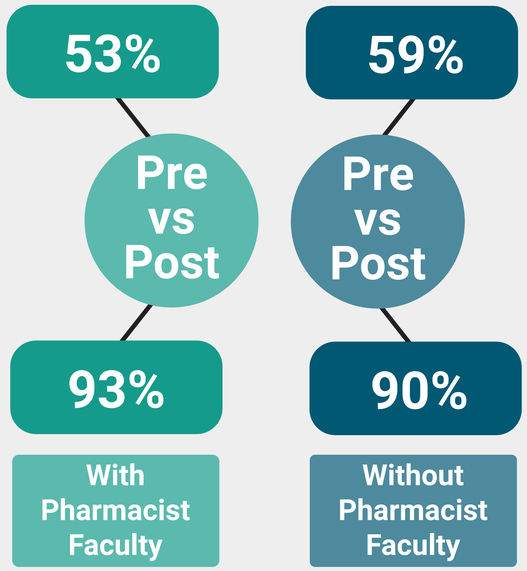
Outcomes	Test Used
Knowledge gain	Welch's T-test
Interprofessional collaboration	Mann–Whitney U test (group comparisons)
Barriers and demographic	Chi-square test

Pharmacist-led REMS education enhanced knowledge gains and reveals discipline-specific barriers, highlighting its potential impact in interprofessional learning.

Perception of Interprofessional Collaboration

Collaboration Outcome	With Pharmacist Faculty	Without Pharmacist Faculty
Understanding Roles	1.486 ± 0.699	1.452 ± 0.592
Communication	1.481 ± 0.711	1.500 ± 0.595
Contributions	1.461 ± 0.693	1.452 ± 0.592

Scale: 1 = Strongly Agree, 5 = Disagree; pharmacist-led sessions showed slightly more consistent agreement (not significant). Group comparisons analyzed using Mann–Whitney U test.



Pharmacist-led sessions showed higher knowledge gain (+8.4%) than those without pharmacists. (*P* <.05) analyzed by Welch's T-test

Barriers to Implementation

Peer Acceptance:
Pharmacist = 59%
Advanced Practice Nurses = 41%

Cost:
Pharmacist = 21%
Advanced Practice Nurses = 15%

Time Constraint:
Pharmacist = 46%
Advanced Practice Nurses = 43%

Access:
Pharmacist = 30%
Advanced Practice Nurses = 26%

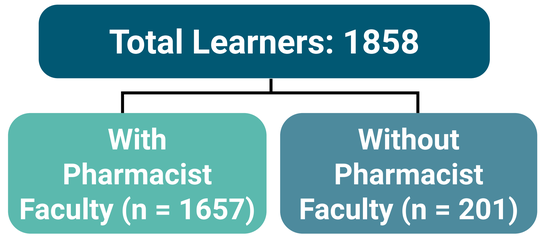
Reported barriers to implementation were summarized by profession and analyzed using Chi-square test

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Overall Program Metrics



Learner Demographics

Profession	With Pharmacist Faculty	Without Pharmacist Faculty
Pharmacists	634 (49%)	117 (66%)
Advanced Practice Nurses	434 (33%)	25 (14%)
Physicians	131 (10%)	23 (13%)
Nurses	105 (8%)	13 (7%)

- Distribution of learner professions across sessions with and without pharmacist faculty involvement using Chi-square test.

Limitation

- Differences in sample size and professional composition among groups may limit generalizability, and the use of self-reported collaboration data may introduce response bias.

Conclusion

- Pharmacist-led REMS education significantly improved learner knowledge and revealed unique barriers to implementation, underscoring the pharmacist's role in interprofessional opioid safety training and informing the design of future CPD strategies.

References

1. Volkow ND, Blanco C. The changing opioid crisis: development, challenges and opportunities. Mol Psychiatry. 2021;26:218-233.
2. US Food and Drug Administration. Risk Evaluation and Mitigation Strategy (REMS). https://www.fda.gov/drugs/drug-safety-and-availability/risk-evaluation-and-mitigation-strategies-rems. Accessed May 14, 2025.

This activity is supported by an independent educational grant from the Opioid Analgesic REMS Program Companies. Please see https://www.opioidanalgesicrems.com/Resources/Docs/List_of_RPC_Companies.pdf for a listing of REMS Program Companies. This activity is intended to be fully compliant with the Opioid Analgesic REMS education requirements issued by the U.S. Food and Drug Administration (FDA).