



Learning the Ropes of Inpatient Order Verification: Will They Sink or Swim?

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Background

The ability to effectively and efficiently navigate an electronic health record (EHR) to complete a prospective drug utilization review (DUR) is a vital skill that entry level practitioners must possess. Future pharmacists must be able to identify and analyze pertinent information to recognize medication-related problem (MRPs) in both the community and inpatient settings. The described educational series simulates the inpatient order verification process to review pending medication orders and accurately identify related problems.

Objective

Evaluate the effectiveness of an educational series on preparing students to review pending inpatient medication orders and accurately identify medication-related problems utilizing EHR technology.

Methods

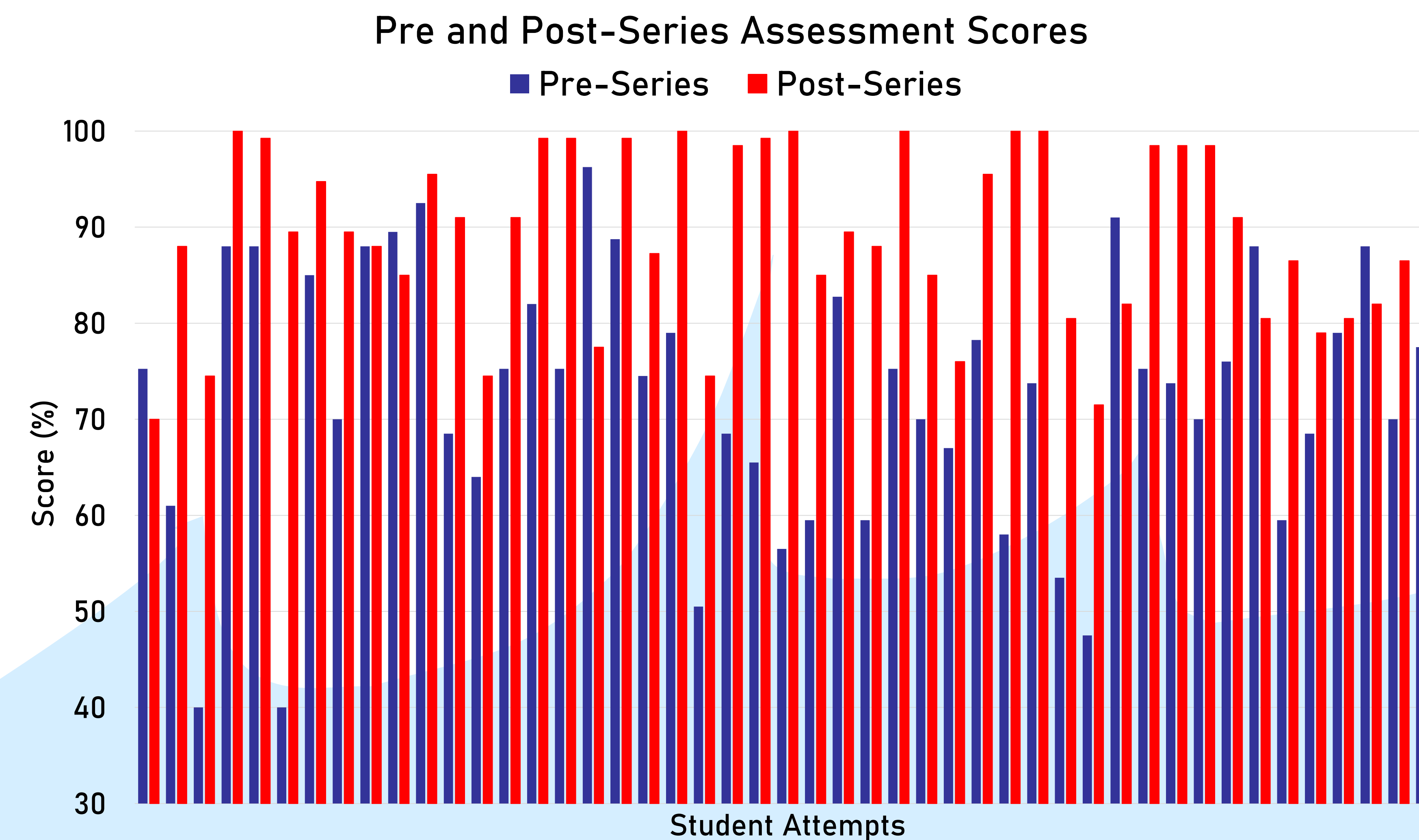
- 3rd year pharmacy students were enrolled in a required skills-based laboratory course during fall semester 2022.
- Paired t-test conducted to determine statistical significance (alpha=.05)

Methods Cont.

Medication-Related Problem Types

- Incorrect formulation, dose, frequency, route, or duration
- Drug allergy
- Duplicate therapy (including unclear or missing administration instructions)
- Inappropriate indication or drug/bug matching
- Lab or vital sign abnormality

Results

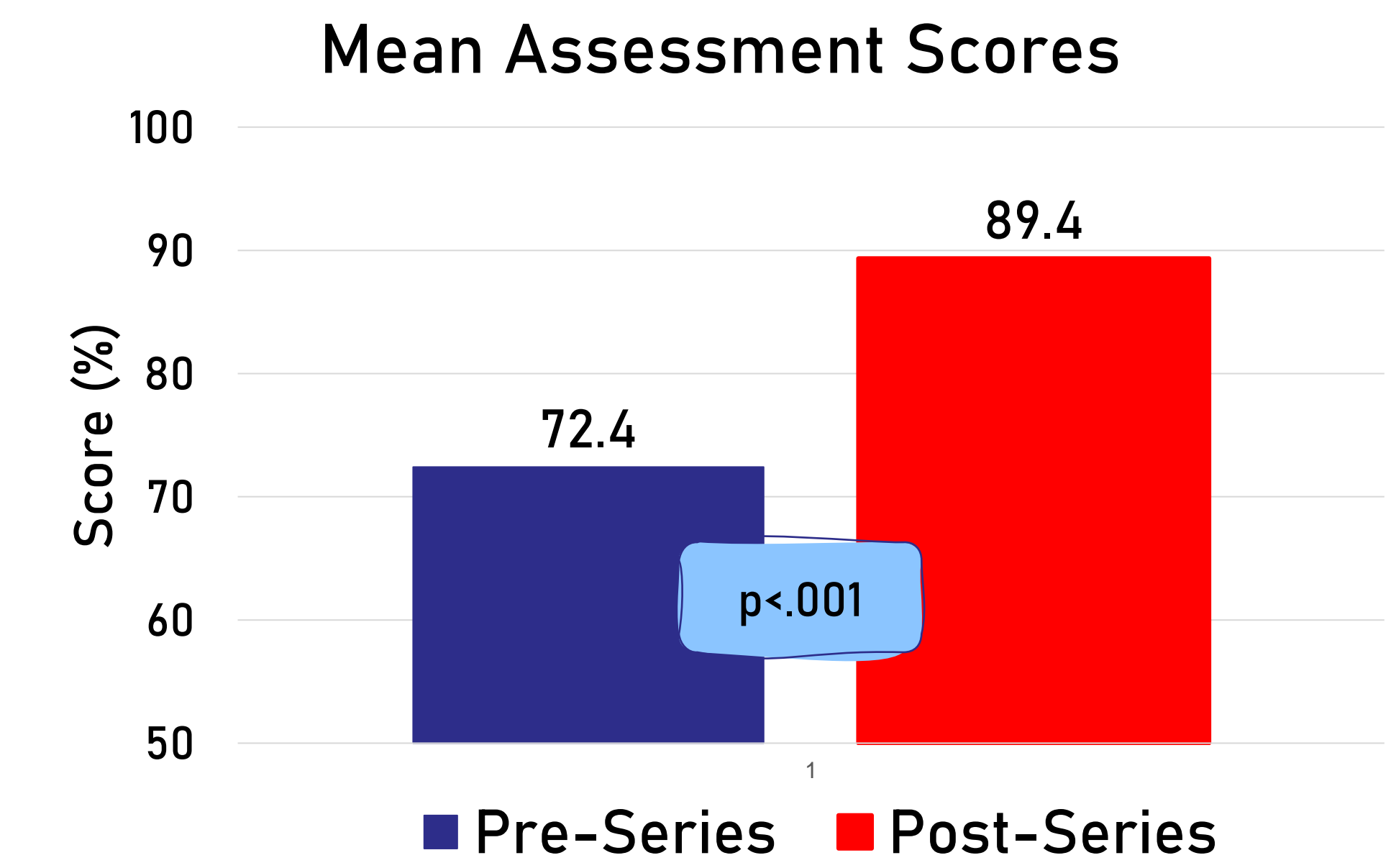


Students' Perception of Preparedness and Confidence when Processing Inpatient Medication Orders

N of Survey 47/49 (96%)

Question	Median Score (1-5)
Rate your level of perceived preparedness if you were asked to independently process an inpatient medication order.	4
Rate your ability to efficiently process an inpatient medication order.	4
Rate your ability to accurately process an inpatient medication order.	4
Rate your ability to efficiently utilize EHR technology.	4
Rate your ability to effectively utilize EHR technology.	4
Rate your ability to effectively provide a verbal recommendation to a healthcare prescriber (i.e., physician).	4
Rate your ability to efficiently provide a verbal recommendation to a healthcare prescriber (i.e., physician).	4

Results Cont.



Discussion

A statistically significant increase in pre- versus post-assessment scores demonstrates the effectiveness of an educational series on preparing students to review inpatient medication orders and accurately identify medication related problems.

Strengths

- Objective data for quantitative results
- High response rate for survey
- Statistically significant increase comparing mean pre- and post-assessment scores

Limitations

- Subjective quality to grading
- Small sample size
- One institution

Challenges of Implementation

- Faculty workload to grade assessments
- Sufficient in-class and assignment time

Conclusion

Following an in-depth skills lab series mimicking the tasks an inpatient pharmacist completes when reviewing pending medication orders, a statistically significant increase in mean assessment scores was identified.

References

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Pre-Series Assessment

30 minutes to review five pending medication orders
2 out of 5 pending orders had MRPs



Educational Series (5 hours)

Introductory presentation
Three cases



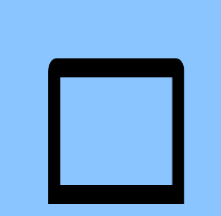
Homework

Two cases



Post-Series Assessment

30 minutes to review five pending medication orders
2 out of 5 pending orders had MRPs



Survey

Voluntary, online
Included 7 Likert Scale questions