

## **INTERNAL VALIDATION OF A MEDICATION THERAPY MANAGEMENT SCORING INDEX (MTMSI) IN A COMMUNITY HOSPITAL INTENSIVE CARE UNIT**

Andrew Conner, Livia Allen, Karrie Derenski, Cox Medical Center South 3801 S National Ave, Springfield, MO 65807.

[Andrew.Conner@coxhealth.com](mailto:Andrew.Conner@coxhealth.com)

Medication therapy management (MTM) services allow critical care pharmacists the ability utilize their training in managing patient care and optimizing therapeutic outcomes. Currently, in our intensive care units, there is a growing MTM to pharmacist ratio. It has become necessary to streamline the MTM process to maximize pharmacist interventions. The Medication Therapy Management Scoring Index (MTMSI) was developed from evaluating patient characteristics where pharmacists made the most interventions. The MTMSI produces a score based on the weight of each characteristic. Internal validation of the MTMSI is necessary to determine if results from the MTMSI are reproducible with our current critical care pharmacists.

The purpose of this study is to internally validate the MTMSI for our institution to assess if it will be an appropriate MTM triage measure. Next steps include external validation once internal validation is achieved. Fifteen MTM patients will be randomly selected for evaluation. Each patient will be scored by the MTMSI. The score will determine in what order the MTM consultation will be completed. Three critical care pharmacists will evaluate and rank the same fifteen patients, but have been blinded to how the tool scores. The pharmacist ranking will then be compared to the tool ranking. Internal validation will be confirmed when there is a greater than or equal to a 90 percent correlation with the MTMSI vs pharmacist rank.

Results will determine if the MTMSI can be utilized as an MTM triage tool and if external validation can be explored.

### **Learning objective:**

- Recognize the challenges of validating a scoring tool to be used in pharmacy practice