## OBJECTIVE

To design and evaluate the effectiveness and practicality of a Medication Therapy Managements (MTM) elective course utilizing an experiential model in partnership with a community pharmacy.

# INTRODUCTION

Performance of MTMs and Comprehensive Medication Reviews (CMR) are rapidly becoming commonplace in the community pharmacy setting and are anticipated to count towards a pharmacy's Center for Medicare and Medicaid Services (CMS) Star Rating in 2016. The goal of an MTM program is to give pharmacists another outlet to provide quality and cost effective healthcare to patients while improving therapeutic outcomes and receiving reimbursement for these services. However, many pharmacies are struggling to find the time and resources to add performing MTMs into their daily work flow.

To prepare future pharmacists for the growing demand and need for MTM services in the community setting, a group of Washington State University students have developed an elective course to give student pharmacists practical MTM experience before they graduate. This course developed a partnership with a community pharmacy chain that allowed student pharmacists to go to their practice sites and perform MTM services alongside their pharmacists. This not only provided an excellent opportunity for pharmacy students but strengthened the relationship between WSU and the community pharmacy chain.

## **METHODS**

The MTM elective course and project design began as a group project for five Washington State University College of Pharmacy PY2 student pharmacists. The goal of the group project was to foster leadership in student pharmacists through the design and implementation of a community pharmacy-based service that was sustainable and positively impacted patient outcomes.

The elective course was designed as a combination of didactic learning, a standardized patient skills assessment, and live practical experience. Didactic learning included two one-hour lectures focused on how to perform a MTM and how to utilize a common online platform for documentation. This was followed by a On the mid-semester survey students rated the effectiveness of the classroom preparation at 3.53 out of 5 practical assessment utilizing a standardized patient case. Once the students registered in the course on average. On the end-of-semester survey students rated how receptive other medical professionals were achieved competency on the standardized patient case they were given 10 weeks to complete a total of 20 to their clinical judgement, resulting in a mean of 3.75 out of 5. On average each student completed 13 hours providing MTM services with an assigned community pharmacy preceptor. After 10 weeks, the stu-MTM services over the ten weeks spent at their practice site. dents returned to the classroom to reflect on their experience and to share a patient case of their choos-The preceptors working at the practice sites were asked to rate how effective the students were conducting ing. Students utilized a tracking sheet to document MTMs performed as well as time involved from review MTMs at the completion of the semester on a scale of 1 to 5, with 1 being ineffective and 5 being excepof the patient case through the patient encounter. Preceptors were asked to submit an evaluation of the tionally effective. Their confidence was rated on average a 4.19. The pharmacists were also asked openly student pharmacists and the program as a whole. what comments they had about the program. Feedback from the preceptors includes comments such as "This is an amazing program for increasing patient care. Thank you!" and "I love the program and think it is the end of the semester to gauge the effectiveness of the teaching model and their experience as a whole. a great idea."

In addition, students registered in the course were required to complete a survey midway through and at Data was analyzed using a one-tailed t-test with a significance level of 0.05. This project received exempt \status from IRB.

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### RESULTS

At the beginning of the semester, students were asked about their previous community pharmacy experience as well as their experience performing MTMs. Of the original 18 students signed up to take the course, 14 had previous experience working in a community pharmacy. Only 3 students stated they had experience performing MTMs in a community pharmacy prior to taking the elective course. Students were assigned to preceptors based on the geographical location of the store the preceptors were located at and the script count of that store. Stores with high script count were given students who had previous experience working in a community pharmacy to accommodate with the environment of the store.

After 5 weeks of performing MTM services in their designated practice sites, students were asked to rate their MTM experience and confidence conducting them on a scale of 1 to 5, with 1 being minimal, and 5 being maximal (mid-semester survey). At that time, the students' confidence conducting MTMs was rated a to give advice to those who enroll in this course in the future. 3.83 out of 5 on average. After 10 weeks at the practice site (end-of-semester survey), the students' confidence conducting MTMs increased by 0.29, which was statistically insignificant. The students' response to how receptive patients were to their clinical judgment while performing MTMs increased from 3.44 to 4.19 out of 5, a statistically significant increase of 0.75.

Question	Mid-Semester Average	End-of-the Semester Average	Difference (P-value)
How comfortable are you at conducting MTMs?	3.83	4.12	0.29 (0.134676)
How receptive were pa- tients to you and your clinical judgement while performing MTMs?	3.44	4.19	0.75 (0.014828)

Washington State University College of Pharmacy

### CONCLUSION

An experience-based teaching model was demonstrated to have the capacity to improve student confidence and knowledge of effectively conducting MTMs. When asked, 10 out of the 15 students who completed the course would continue on with the course if given the opportunity. Feedback given from students about the structure of the course will also help improve the implementation of this course in future semesters. Additionally, the students' presentations provided the instructors with positive feedback from patients regarding their interactions during the MTM services. This served to emphasize the importance and need of providing this care to patients in a community pharmacy setting and the need to ensure future pharmacists have the training and experience to effectively perform MTMs. At the end of the semester student pharmacists who completed the course were asked

"Print out a medication history from the computer to see which medication she is taking to cut down the time."

> "Not all cases are as complicated as we think they are."

#### **FUTURE PLANS**

The course will be offered in the fall semester at WSU College of Pharmacy. The course is looking to grow and expand by forming more partnerships with other community pharmacy chains.



"My advise for future students is to think about how to handle each situation and being mindful about how you address things (i.e. adherence– you never want to accuse the patient that their not taking their medications."

"To not be afraid to make those calls and let go of being scared of rejection"

Pharmacy

WASHINGTON STATE UNIVERSITY

HEALTH SCIENCES

"Come with an open mind and be eager to learn!"

**END OF SEMESTER ADVISE TO FUTURE STUDENTS** 

"Don't be afraid. Just dive right in."