An Analysis of Self Assessed Confidence Pre and Post APPE Rotation in the Ambulatory Care Setting

Tayla Rose, PharmD, RPh, BCACP, CDE, Assistant Clinical Professor; Kaitlyn Gallant, Pharmacy Student, Class of 2019 and Tiffany Moy, Pharmacy Student, Class of 2019, Danielle M. Miller, PharmD, RPh, BCACP, Assistant Clinical Professor

Northeastern University - School of Pharmacy

Background & Significance

- Ambulatory care pharmacists are essential members of the health care team who help improve patient outcomes by optimizing medication regimens, managing chronic disease states, and promoting health and wellness.
- Assessment of student's knowledge and skills related to the ambulatory care practice setting is crucial to prepare practiceready pharmacists.
- The Accreditation Council for Pharmacy Education (ACPE) 2016 Accreditation Standards outline expectations of student competency in the ambulatory care practice setting.¹
- Northeastern University (NU) School of Pharmacy student pharmacists begin to gain first hand experience in other areas of pharmacy practice (institutional and community) early on in the pharmacy program through required cooperative educational experiences (co-ops/ IPPEs), but generally do not get exposed to ambulatory care pharmacy practice until they enter their advanced pharmacy practice experience (APPE) curriculum.

Objectives

The primary objective of this study was to assess if there was an increase, decrease, or no change in students' self-reported confidence regarding ambulatory care-related knowledge and skills after completion of a six week ambulatory care APPE rotation. The secondary objective was to determine whether more exposure to ambulatory care pharmacy practice is needed in the NU School of Pharmacy didactic curriculum.

Methods

Inclusion criteria: all fourth professional year (P4) student

Eligible students were invited to participate

Pre surveys administered prior to beginning rotation or during the first week.

Post surveys administered during the last week of

Paper survey participants: Students of

two ambulatory care preceptors during the 2016/2017 academic year

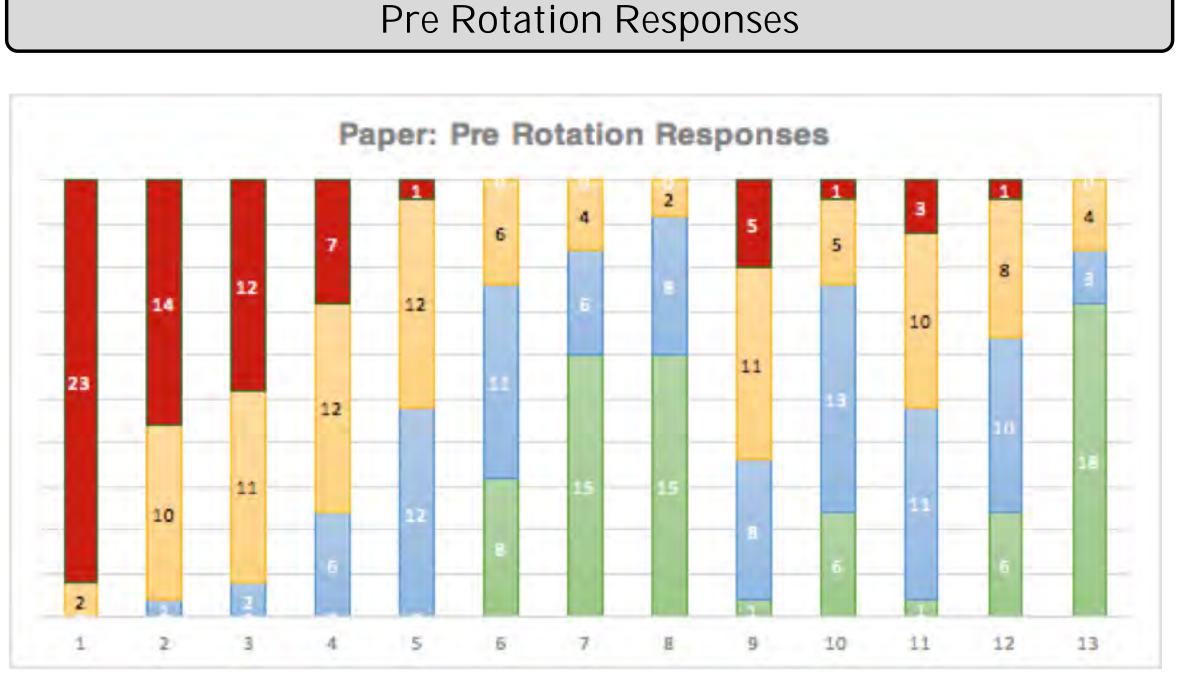
pharmacists at NU on an ambulatory care APPE rotation

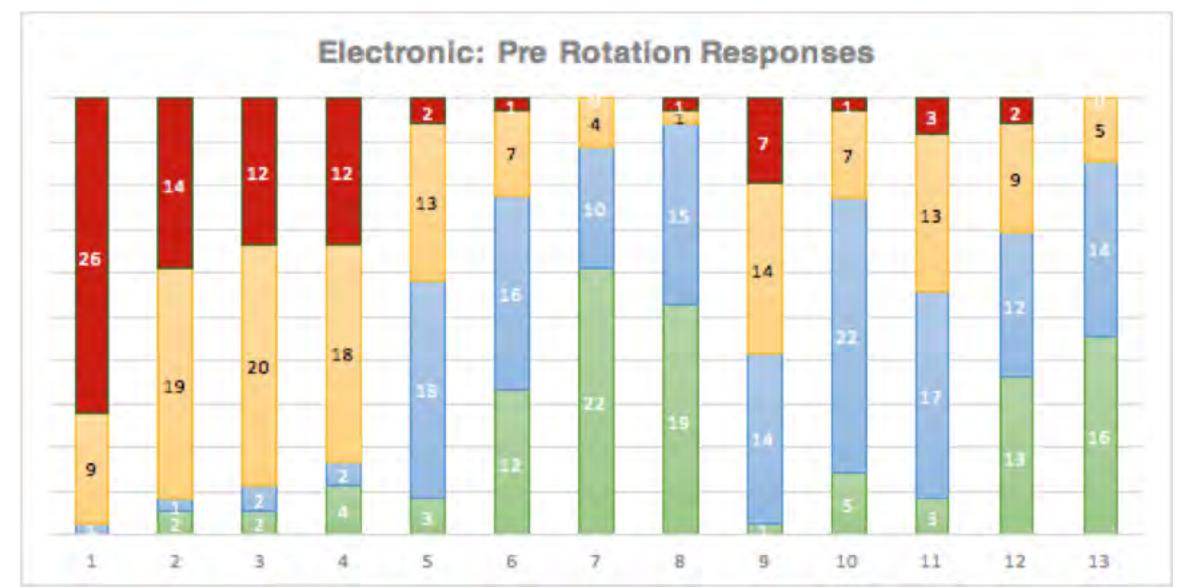
Methods (cont.)

	Survey
I am a (please check one): APPE student (P4)	AmCare elective student (P3)
I am completing this survey as (please check one): pre-si	urvey post-survey

		Strongly Disagree	Disagree	Agree	Strongly Agree
lan	aware that ambulatory care pharmacists				
1	conduct one-on-one and/or group visits				
2	complete advanced post-graduate training as a required credential				- 1
3	conduct physical assessments				
4	engage in non-direct patient care activities				
		Not very confident	Somewhat confident	Confident	Very confident
5	Defining ambulatory care pharmacy practice				
6	Defining CDTM, MTM, and CMM				
7	Explaining the difference between credentialing and privileging as well as how they relate to an ambulatory care pharmacist's ability to practice				
8	Explaining how CDTM, MTM, and CMM inter-relate and differ				
9	Explaining the difference between medication reconciliation, medication review and medication adherence				
10	Explaining the difference between compliance, adherence and concordance				
11	Describing the role of an ambulatory care pharmacist as part of an interdisciplinary team				
12	Obtaining vital signs (BP/HR, RR)				
13	Performing POC testing (BG, A1c, INR)				

Results (cont.)





Post Rotation Responses

Paper: Post Rotation Responses

Discussion

- Completion of an ambulatory care APPE rotation resulted in an upward trend of increased confidence in all areas assessed
- Pre-survey results indicated that the majority of students (>50%) strongly agreed or agreed that ambulatory care pharmacists conduct face-to-face visits and complete post-graduate training.
- ❖ Electronic post- surveys showed almost 40% of students were found to be not confident or somewhat confident in defining CDTM, MTM, and CMM, explaining how they interrelate, and explaining the difference between credentialing and privileging. Only 1 participant (< .05%) expressed this in the paper postsurvey. It is possible that a wider variety of confidence levels in defining these terms was demonstrated in electronic post- surveys because of the larger sample size encompassing multiple preceptors. Some NU preceptors dedicate a topic discussion to defining ambulatory care terminology, while others do not.
- Greatest areas of change in confidence included hands-on activities such as measuring vital signs and performing POC testing (BG, A1C, and INR). These skills can be more easily learned in an experiential setting versus a didactic setting.

Conclusions

- Survey results show that a majority of NU pharmacy students lack confidence in knowledge and skills specific to ambulatory care pharmacy prior to entering their ambulatory care APPE
- delivery of ambulatory care pharmacy education in the didactic setting at NU. Options for improvement may include: expanded access to an elective course in ambulatory care pharmacy, a required introductory ambulatory care pharmacy course, or the addition of more intensive ambulatory care focused activities in skills lab.
- The greatest limitation of this study was the small sample size. It

- rotation. ❖ These findings will be used to recommend changes in the
- would be beneficial for future studies to recruit a larger sample size by exclusively utilizing electronic surveys available to all students on ambulatory care APPE rotations.

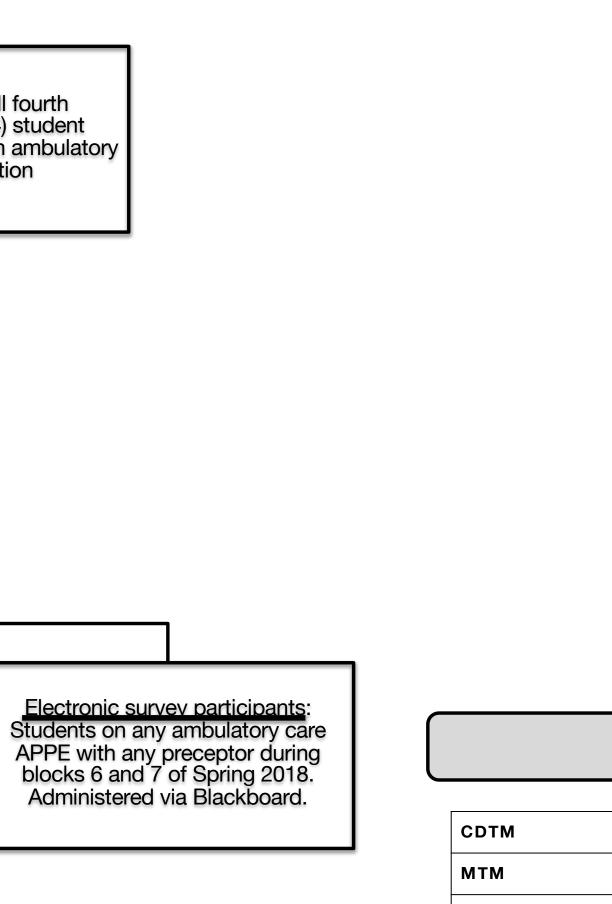
References

1. Accreditation standards and key elements for the professional program in pharmacy leading to the doctor of pharmacy degree. ACEP-accredit.org. https://www.acpeaccredit.org/pdf/Standards2016FINAL.pdf. Published February 2, 2015. Accessed October 25, 2017.

Results

alycosylated hemoglobin

nternational Normalized Ratio



	CDI
	MTN
	СМІ
	ВР
	HR
	RR
Monthogatom I Iniversity	POC
Northeastern University	BG
	A1c
Bouvé College of Health Sciences	INR

