INTRODUCTION

- Preceptors for advanced pharmacy practice experiences (APPEs) in primary care routinely assign required readings and/or conduct topic discussions to promote learning.
- Preceptors also often independently develop assessments to measure student learning and knowledge.
- Self-directed teaching-learning methods have been explored during didactic curriculum in both medical and pharmacy education, but evidence of effectiveness in the experiential setting is lacking.\(^1,3\)
- Reported benefits of self-directed learning methods include student satisfaction and enhanced ability to learn independently.\(^2,4\)
- Additionally, the Accreditation Council for Pharmacy Education (ACPE) Standards 2016 state that schools of pharmacy should create an environment and culture that promotes self-directed lifelong learning and that teaching and learning methods should promote student responsibility for self-directed learning.\(^5\)
- It is unknown if students can accomplish knowledge retention of primary care topics and literature evaluation through self-directed activities instead of requiring direct faculty instruction.

RESEARCH QUESTION

Do self-directed activities with pre-post exams for APPEs improve student perception of knowledge of primary care topics, and does student perception reflect actual grades?

STUDY DESIGN

- Retrospective study of P4 students’ performance on primary care APPEs (n=17).
- 17 students on primary care APPEs from May 2016 – February 2017 (seven five-week blocks) were surveyed.

METHODS

- Two faculty collaboratively developed and implemented self-directed activities and the pre-post exam into their APPE in May 2016
  - Content included hypertension, diabetes, dyslipidemia, asthma, COPD, and related landmark trials
  - Types of exam questions included multiple choice, multiple answer, true/false, and patient cases with short answer
- Each student completed:
  - Pre-exam on the first day of rotation
  - Weekly self-directed activities: required readings, patient cases, and a journal scan
  - Post-exam (identical to the pre-exam) during the last week of rotation
- Students completed an anonymous, cross-sectional survey via Qualtrics regarding their perceptions of the activities

RESULTS

- Significant improvement was seen between pre- (65.8%) and post-exam (88.5%) scores with a mean (SD) change of 22.7% (10.9) (p<.001)
- Thirteen (76.5%) students completed the survey.

RESULTS (Continued)

- Students rated their level of knowledge before APPE (n=13)
- Students rated their level of knowledge after APPE (n=13)

CONCLUSIONS

- Significant improvements in exam scores support self-directed activities as an effective method to improve knowledge retention and application on primary care APPEs.
- Student perceptions support self-directed activities as an effective method to improve knowledge retention and application on a primary care APPE and closely reflect actual performance.

REFERENCES