BACKGROUND

- Assessment of student progress and practice readiness is an important aspect of student and curricular development
  - The United States Accreditation Council of Pharmaceutical Educators Standards and the Center for the Advancement of Pharmacy Education 2013 Educational Outcomes address the need for these types of assessments.1,2
  - Formal assessments designed to evaluate students’ ability to connect the multiple components of their academic experiences, also known as capstone assessments, are increasingly common in health professions education
  - Within pharmacy education, there have been several published reports describing the implementation of capstones within the doctor of pharmacy curriculum.3-7
  - To date, there has not been a holistic review of capstone use within pharmacy education

OBJECTIVE

- To describe the current state of capstone assessments within pharmacy education literature

METHODS

- Literature review:
  - Search terms – [capstone, “pharmacy education”]
  - Database – PubMed
  - 15 articles from 13 different institutions were found that described the institution's capstone experience
  - Articles published between 2007 and 2017
  - Information extracted from each relevant article included:
    - Capstone purpose
    - Capstone utility
    - Incentive(s) associated with capstone
    - Consequence(s) associated with capstone
    - Capstone logistics
    - Capstone assessment strategy
    - Capstone resource requirements

RESULTS

Capstone Purpose and Utility

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<tr>
<th>Evaluate rotation readiness</th>
<th>Assess student ability to synthesize content from multiple courses</th>
<th>Identify areas of student weakness</th>
<th>Provide student with research/scholarship experience</th>
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Capstone Assessment Feedback

- Use of capstone results:
  - Curriculum development and optimization
  - Targeted student feedback and remediation

Capstone Implementation and Variability

- Majority of capstones implemented as a course within the institution’s curriculum
- Majority of capstones were resource intensive in relation to:
  - Faculty hours required for development and execution
  - Teaching assistants required for instruction and assessment
- Variability between capstone experiences found within:
  - Content evaluated during capstone assessment
  - Student incentives and consequences associated with assessment
  - Outcomes used to define capstone experience

CONCLUSIONS

- A variety of capstone designs are utilized within pharmacy education to evaluate student readiness for clinical rotations and provide specific feedback for student and curriculum development
  - Majority of capstone assessments were courses that utilized case-based learning to prepare students for rotations
  - The following gaps in the literature were identified:
    - Use of capstones as a threshold for student progression
    - Identifying a standard definition of clinical rotation readiness
    - Determining the cost effectiveness and sustainability of a capstone

REFERENCES