

Implementation and Assessment of an Early Intervention Program Targeting First-Year Pharmacy Students

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Background

- The Accreditation Council for Pharmacy Education (ACPE)'s standard 17 requires the development and implementation of an early intervention policy for academic and behavioral issues in Doctor of Pharmacy students
- ACPE does not provide details or guidelines regarding structure or content of the early intervention program, and available data is heterogeneous
- The College's Progression Committee recognized the need to utilize a standardized approach to identifying at-risk students early during each semester
- The new Academic Early Intervention Program was developed in August of 2020
- Program included
 - Structural overhaul – moving from an informal to formal process
 - Proactive approach with students
 - Enhancement of student experience – organized approach
 - Creation of specific staff positions to support interventions

Intervention Triggers

Assessment Performance

- <60 percent and/or bottom 27% on major assignment or examination

Midpoint Achievement

- Grade of "C" or lower at week 7 or specified midpoint

Other

- Achievement gaps on specific activities
- Pattern of non-compliance/completion
- Discretion of course director
- Self-identification by student



Objective

To evaluate the effectiveness, student utilization, and impact of a multifaceted Early Intervention Program at the James L. Winkle College of Pharmacy for PY1 PharmD students.

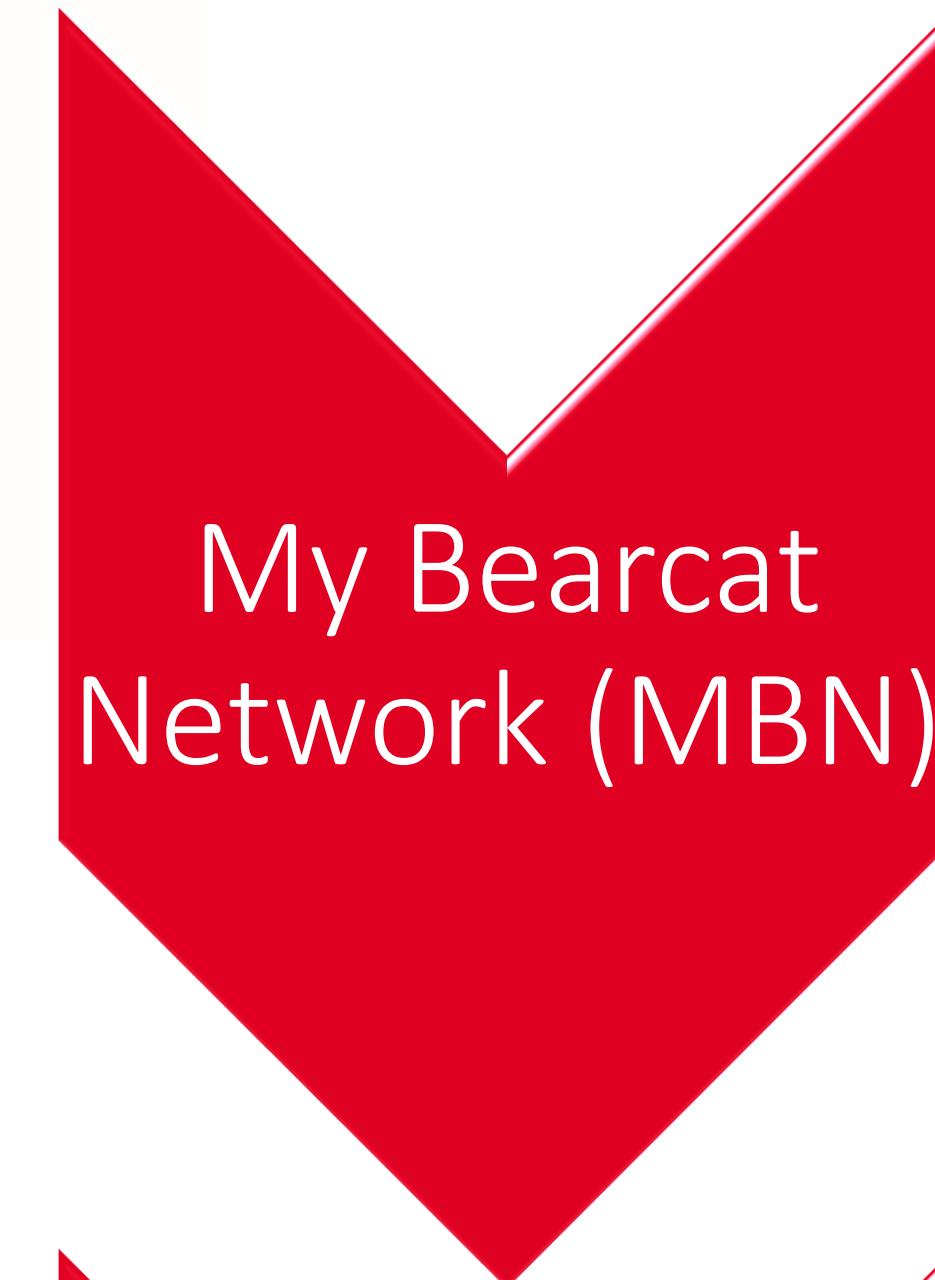
References

Accreditation standards and key elements for the professional program in pharmacy leading to the doctor of pharmacy degree ("Standards 2016"), Accreditation Council for Pharmacy Education (2 February 2015) <https://www.acpe-accredit.org/pdf/Standards2016FINAL.pdf>

Methods



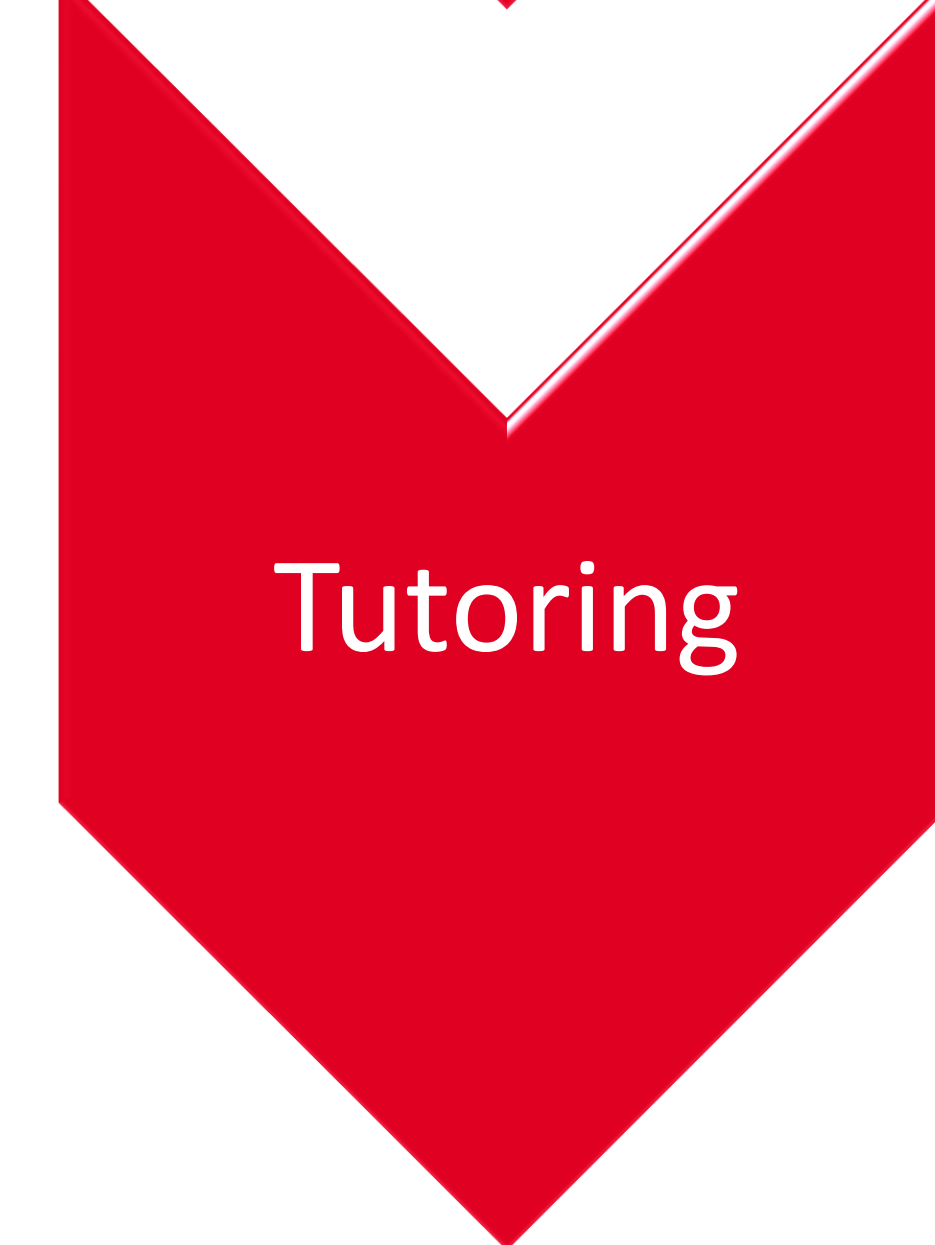
- Admissions team identifies students who may benefit from assistance based on the holistic admissions score.
 - GPA, interview score, and/or accommodations need if disclosed
- Students may self-identify using an interest survey.
 - Questions assessed confidence level, need for extra supports, and possible barriers to academic success.
- Students who fell into Category 1 of Boot Camp (0-7 Modules Completed) were also monitored more closely.



- Embedded Advising System supported by the University of Cincinnati that allows for interaction amongst Academic Advisors, Course Directors/Instructors and Students.
- An alert system for students who trigger early intervention protocols. Course director submits an alert providing information as needed. Alerts notify the academic success team to meet with students and prompt them for more involved conversations with faculty if needed.
- Once a student has met with the academic success team, the alert is "resolved" by submitting meeting notes and action steps for moving forward.



- The Academic Success Team, composed of the Success Coordinator and the Assistant Director of Academic Advising, track student academic progress and remind college faculty of the new MBN alert system.
- Once a student receives an alert, they are notified to meet with the academic success team.
- During the meeting, the Academic Success Team works with the student to create action items and a plan for progression.
- Once a student received an alert, their exam progress in that specific course were tagged for the "Watchlist" and other course grades were monitored.



- The Tutoring Program is coordinated through the Academic Success Team in conjunction with the Rho Chi Honor Society.
- Historically, Rho Chi handled the majority of tutoring responsibilities. As the demand for tutors grew, it became increasingly important to maximize the resources available (adding peer tutors, starting small groups, etc).
- Students were able to request a tutor through the Academic Success Team with priority going to those at highest risk.
- Tutor Assignments primarily came at the discretion of the Academic Success Team, but in some cases the students chose mentors or those they were familiar with.

Results

Bootcamp Module Completion and Semester GPA for PY1 Students

# of Modules Completed	# of Students	Fall 2022 Avg GPA (16 hrs)	Spring 2022 Avg GPA (13 hrs)	Avg Core CPA
Group 1 (38)				3.016
0	24	2.972	2.836	2.929
1 to 3	8	3.195	3.071	3.139
4 to 7	6	3.347	2.992	3.188
Group 2 (36)				3.237
8 to 10	8	3.219	3.077	3.155
ALL	28	3.278	3.239	3.261

Fall

- Students attended 27/30 (90%) academic success meetings.
 - 1 Student with multiple alerts did not respond to requests to meet.
- Only 4 students had multiple meetings, all required remediation.
- 10/15 (67%) of students had a higher exam average after being tutored in Metabolism/Molecular Biology/PGx (MMP)
- 7/15 (47%) of students had a higher exam average after being tutored in Pharmacology/Immunology (PPI).

Spring

- Students attended 39/49 (80%) academic success meetings
 - 1 Student with multiple alerts did not respond to requests to meet.
- 13 students had multiple meeting requests/alerts. Only 3(23%) required remediation.
- 2/3 (67%) of students had a higher exam average after being tutored in Pharmaceutics.
- 8/8 (100%) of students had a higher exam average after being tutored in Therapeutics I.

Overall

- 7/18 (39%) students were tutored both semesters.
 - 3/7 (43%) raised their CORE GPA from the first semester.
- 1/4 students in danger of suspension received a 3rd D (suspended).
- 6 Unique Students needed remediation. 3 students required 2 remediations
 - MMP = 2, PPI = 3, Therapeutics I = 2, Pharmaceutics = 2
- Tutored students were less likely to receive another alert vs students who received an alert but opted out of tutoring.
- After implementing the program, the matriculation success rate without remediation increased from 89% to 92% of PY1 students.

Limitations

- Engagement
- Faculty and student engagement in program is voluntary
- Long-term outcome and NAPLEX success correlation lacking

Conclusions

- Preliminary data suggests the successful implementation of the Early Intervention Program. After participation in the program, students showed improvement in exam scores and grades, as well as staying in-phase with coursework
- The data provides insights into the impact of new resources and provided implications for future enhancements

Disclosures

The authors have no actual or potential conflict of interest, financial or otherwise, in relation to this presentation.