

# The Perceived Impact of University of Arizona College of Pharmacy Student Projects on Education, Professional Practice, and the Community: A Retrospective Review

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## BACKGROUND

- Health research provides empirical evidence for pharmacy education, practice, and the community
- The Buxton and Hanney Payback Framework (PF) qualitatively measures the impact of study outcomes
- Opportunities for student research occur in Quality Improvement (QI) and senior research projects
- To date, the impact of pharmacy student projects on education, professional practice, and the community has not been investigated

## OBJECTIVE

- Describe the perceived impact University of Arizona College of Pharmacy (UA CoP) student projects have on education, professional practice, and the community

## METHODS

- This was a retrospective, observational study
- Posters, written reports, and slide presentations for QI and senior research projects by students who completed their education in May 2020 were included in the review
- Three independent reviewers used a standardized data extraction form mapped to the Buxton and Hanney PF categories
- The five impact categories measured were
  - Knowledge production
  - Benefits to future research
  - Informing policy and product development
  - Benefits to health and health systems
  - Broader economic benefits
- Frequencies and percentages were calculated for total and specific category data
- Descriptive and demographic data were also collected and summarized

## RESULTS

	n (%)*
<b>Pharmacy Practice Site Location</b>	
Tucson	44 (60)
Phoenix	11 (15)
Tucson and Phoenix	6 (8)
Other	12 (16)
<b>Pharmacy Practice Setting</b>	
Community	11 (15)
Ambulatory Care	9 (12)
Health and Hospital Systems	21 (29)
College of Pharmacy	20 (27)
Other	12 (16)
<b>Project Classification</b>	
Pharmacy Surveys and Education	7 (10)
Student Surveys and Education	6 (8)
Patient Surveys and Education	8 (11)
Clinical Care	13 (18)
Literature or Media Based	6 (8)
Pharmacy Services	16 (22)
Laboratory Based Studies	1 (1)
Retrospective Chart Reviews	9 (12)
Other	7 (10)
<b>Target Audience</b>	
Educators	1 (1)
Patients	29 (40)
Pharmacists	6 (8)
Pharmacy Technicians	2 (3)
Students	6 (8)
Other	28 (38)
Multiple	1 (1)
<b>Intervention with Statistically Significant Outcome</b>	
Yes	8 (11)
No	63 (86)
Other	2 (3)
<b>Project Type</b>	
Quality Improvement	34 (47)
Senior Research Project	39 (53)

\*Percent may not equal 100% due to rounding

	n (%)*
<b>Knowledge Production</b>	
Conference presentations	12 (16)
Peer-reviewed journal publications	4 (6)
Other products (e.g., toolkits or facilitation guides)	8 (11)
<b>Benefits to Future Research</b>	
Institutional-level capacity building	2 (3)
Qualifications gained or expected to be gained by project members	0 (0)
Led to generation of subsequent research activities by team members	0 (0)
Contributed to research by others	0 (0)
<b>Benefits to Health and Health Systems</b>	
Quality improvements in service delivery	4 (6)
Increased effectiveness of services	3 (4)
Gains in equity (e.g., better accessibility of services)	1 (1)

Perceived impact was not demonstrated in the following two categories: Informing policy and product development, and Broader economic benefits  
\*Percent may not equal 100% due to rounding

## CONCLUSIONS

- Projects conducted by UA CoP pharmacy students were associated with benefits to education, professional practice, and the broader community
- Student projects demonstrated benefits beyond the usual academic outcomes of poster presentations and publications
- The assessment of the impact of pharmacy student projects can be conducted using a modified version of the PF to capture outcomes data
- Further research is needed with continued refinement of existing frameworks to comprehensively assess the impact of pharmacy student projects

## LIMITATIONS

- The study represented the impact of pharmacy student projects from a single cohort
- Assumptions were made regarding the accuracy of the data represented in the posters, written reports, and short slide presentations
- Qualitative measures used to determine impact may have not been comprehensive enough to encompass the outcomes found
- The study may have occurred too early to assess the impact of pharmacy student projects

## REFERENCES

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