



# The Impact of a Multidisciplinary, Student-Run, Free Clinic on Health Professional Students' Attitudes Towards the Underserved and Interprofessionalism

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## Objective/Hypothesis

To determine the impact of a multidisciplinary, student-run, free clinic on health professional students' attitudes towards the underserved and interprofessionalism attitudes and skills. We hypothesize that these students will show better attitudes and skills than those students not volunteering in the clinic.

## Background

Many health professional schools find it challenging to teach interprofessionalism in a way that is both valued by students and impactful on the outcome of changing the attitudes and behaviors towards students from other professions. Another challenge these schools face is fostering a positive attitude towards underserved patients who lack access to adequate health care. A multidisciplinary, student-run, free clinic, such as the Phillips Neighborhood Clinic in Minneapolis, Minnesota provides an ideal setting to study our hypothesis.

## Survey Statistics

Health Professional Students		Survey			
		Before 1st Year	After 1st Year	After 2nd Year	
1085 Students from 6 Schools	Applied to PNC (214)	Accepted (157)	120 (44.6%)	78 (44.3%)	28 (38.9%)
		Not Accepted (57)	37 (13.8%)	19 (10.8%)	9 (12.5%)
	Did Not Apply (871)	Did Not Apply (871)	112 (41.6%)	79 (44.9%)	35 (48.6%)
			269 (100%)	176 (100%)	72 (100%)

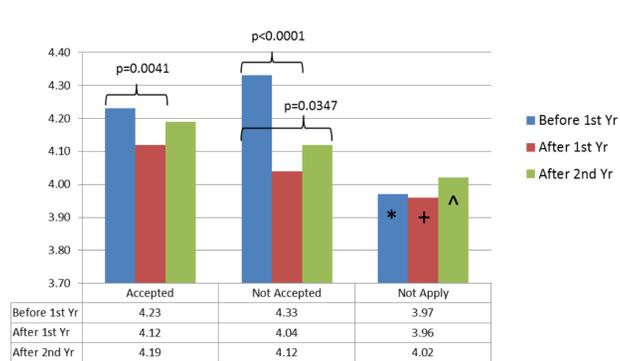
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## Survey Tools

The University of West England Interprofessional Questionnaire (UWE IPQ) is a self assessment of communication and teamwork skills and assesses attitudes toward interprofessional learning, interactions and relationships. The Health Professionals' Attitudes Toward the Homeless Inventory (HPATHI) was used to assess their attitudes towards the underserved with the word "underserved" replacing the word "homeless" in the questions. The responses were on a five-point Likert scale from Strongly Agree to Strongly Disagree. A higher score indicates better attitudes and skills.

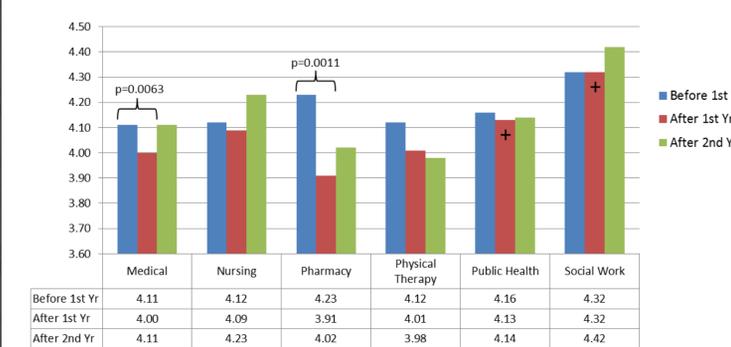
Attitudes Towards the Underserved by Application Status



\* Before 1st Year: Not Apply had worse attitudes than Accepted (p<0.0001) and Not Accepted (p=0.0003)  
 + After 1st Year: Not Apply had worse attitudes than Accepted (p<0.0008)  
 ^ After 2nd Year: Not Apply was nearly significantly worse than Accepted (p=0.073)

Differences were not statistically significant unless otherwise stated.

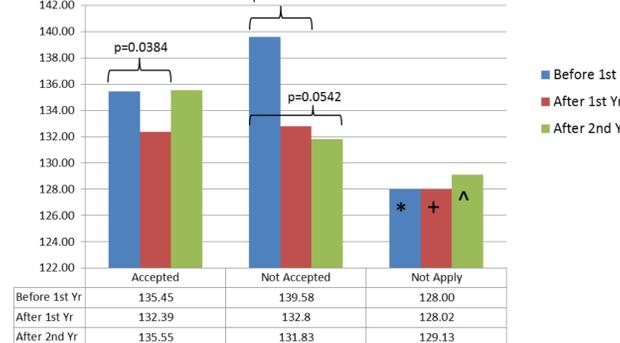
Attitudes Towards the Underserved by School



\* Before 1st Year: Social Work had better attitudes compared to Medicine (p=0.0243) and Physical Therapy (p=0.0234).  
 + After 1st Year: Social Work had better attitudes compared to Medicine (p=0.0132), Pharmacy (p=0.0007) and Physical Therapy (p=0.0213). Public Health and better attitudes than Pharmacy (p=0.0183)  
 After 3rd Year: No statistically significant results

Differences were not statistically significant unless otherwise stated.

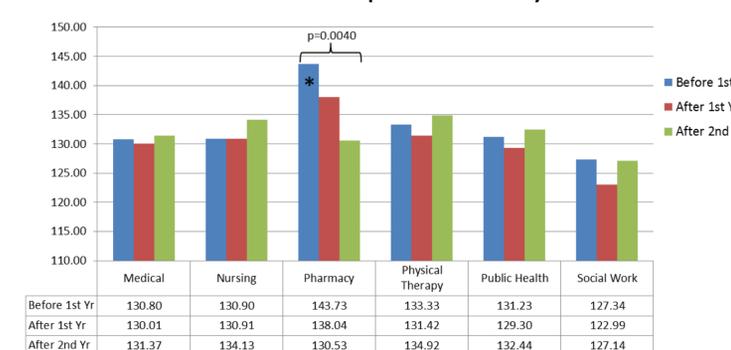
Attitudes Towards Interprofessionalism by Application Status



\* Before 1st Year: Not Apply had worse attitudes than Accepted (p<0.0001) and Not Accepted (p=0.0024)  
 + After 1st Year: Not Apply had worse attitudes than Accepted (p=0.0249)  
 ^ After 2nd Year: Not Apply had worse attitudes than Accepted (p=0.0153)

Differences were not statistically significant unless otherwise stated.

Attitudes Towards Interprofessionalism by School



\* Before 1st Year: Pharmacy had better attitudes than Medicine (p=0.0056) and Public Health (p=0.0137).  
 After 1st Year and After 2nd Year: No statistically significant results.

Differences were not statistically significant unless otherwise stated.

## The Phillips Neighborhood Clinic

The Phillips Neighborhood Clinic began in 2003 at the University of Minnesota as a student-generated initiative to better serve the underserved patients of Minneapolis and to provide health professional students with the skills they need to effectively care for these patients. It operates two nights per week for 3 hours each out of a church basement.

**Students:** medicine, nursing, pharmacy, physical therapy, public health, and social work  
 Accepted after rigorous application and interview process in first year.  
 Commit to three shifts and three community outreach activities per semester for 2 years.

**Preceptors:** medicine, mental health, nursing, nutrition, pharmacy and physical therapy

**Care model:** patients seen concurrently by a medical student, a pharmacy student, a medicine preceptor, and a patient advocate from one of the other schools. As needed, the patient is seen by the other specialties and an interpreter.

**Services:** entirely free health care visits, physical therapy, medications, laboratories, mental health counseling, health care education, and referral services

**Administration:** 13 member board -12 students from the 6 schools and a medical director

**Finances:** fundraising, grants, support from affiliated schools and faculty practice plan



## Conclusions

Attitudes towards the underserved and interprofessionalism attitudes and skills declined after the first year in students who were accepted into the PNC but increased by the end of their second year. This is likely a result of student doing more career-specific roles in their second year of volunteering in the clinic. The clinic seems to be protective against a decline in attitudes and skills.

Those who applied to the clinic had better attitudes towards the underserved and better interprofessionalism attitudes and skills.

Social work students had better attitudes towards the underserved. This is not surprising given the nature of their future work. Pharmacy students had better interprofessionalism attitudes and skills. This may be explained by the increased emphasis on this in the application process and early in their first year curriculum.

The study will continue to assess the same students over time plus new cohorts each year. It is expanding to cover two other experiences students have with care of the underserved on multidisciplinary teams. Focus groups will be done to analyze the differences seen amongst the schools.