

# A Novel Interprofessional Education Experience for Pharmacy and Dental Students in an Oral Surgical Setting



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## BACKGROUND

- UT Health San Antonio (UTHSA) dental students operate an oral surgery clinic for geriatric patients with complex oral health needs
- Many dental students may not have significant experience developing post-operative pain management regimens
- Many pharmacy students lack familiarity of dental procedures which can make it difficult to assess appropriate analgesia needs
- While opioids may be necessary in certain circumstances, non-opioid pain medications are considered to be as effective as opioids following oral surgery
- The standard UTHSA oral surgery clinic post-operative pain regimen includes scheduled acetaminophen 325mg plus ibuprofen 600mg for 48 hours

## OBJECTIVES

- Optimize postoperative pain regimens to improve pain outcomes
- Increase student clinical knowledge regarding the management of postoperative oral pain
- Enhance student competency in interprofessional education (IPE) behaviors

## PARTICIPANTS

- 4 Pharmacy Faculty Mentors  
15 Pharmacy Students
- 2 Dental Faculty Mentors  
33 Dental Students

## METHODS

- From 2020-2022, third-year pharmacy and dental students collaborated once weekly in a geriatric oral surgery clinic to provide surgical care and post-operative pain management for patients
- Pharmacy students reviewed patient medical histories and provided medication and non-medication-related interventions with the team
- Following procedures, students provided medication counseling to patients and followed up by telephone to assess pain control

## METHODS CONTINUED

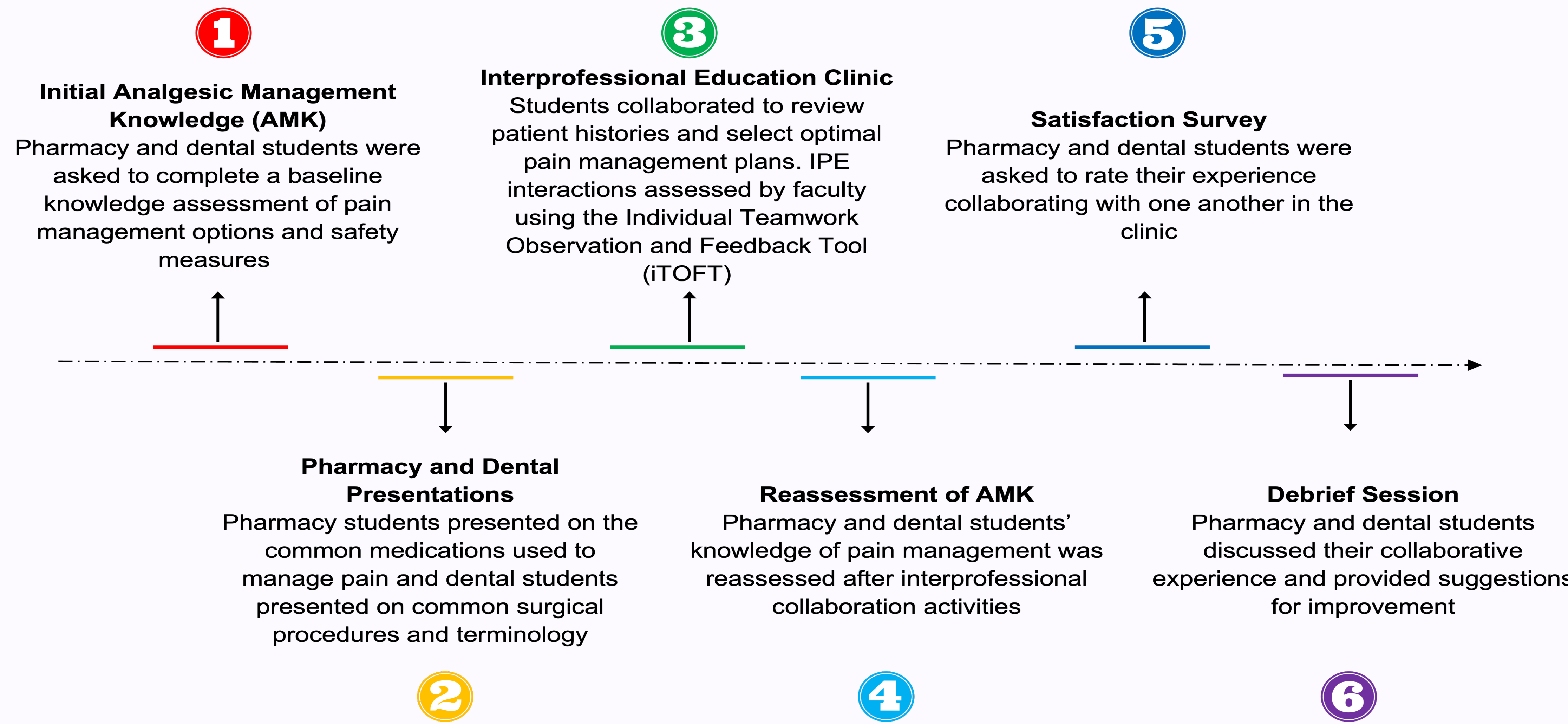


Figure 1: Activity timeline throughout academic year

## RESULTS

### Clinic-Related Data

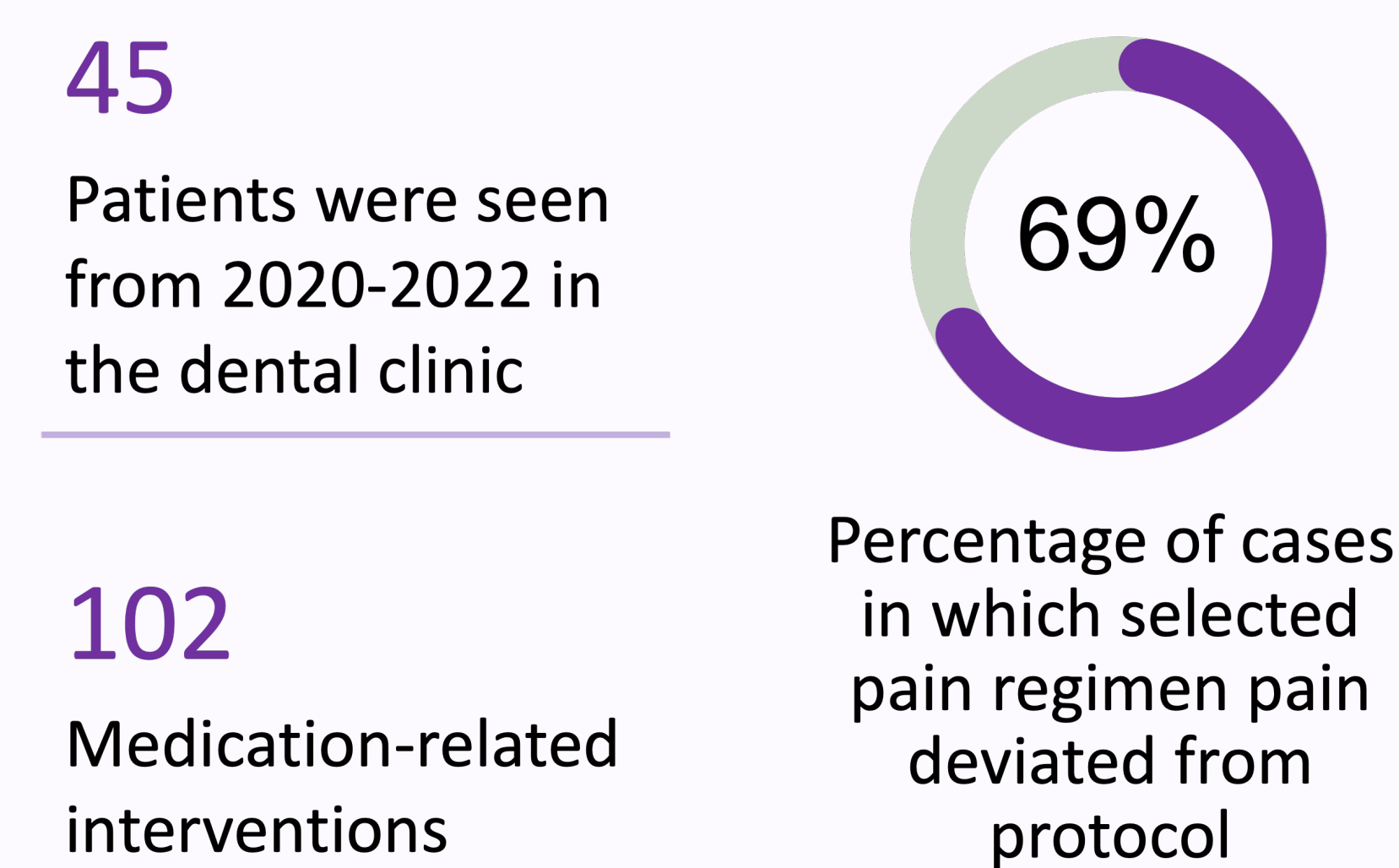


Figure 2: Assessment of pharmacy-dental student collaboration prior to IPE experience

### Assessment of Interprofessional Interactions

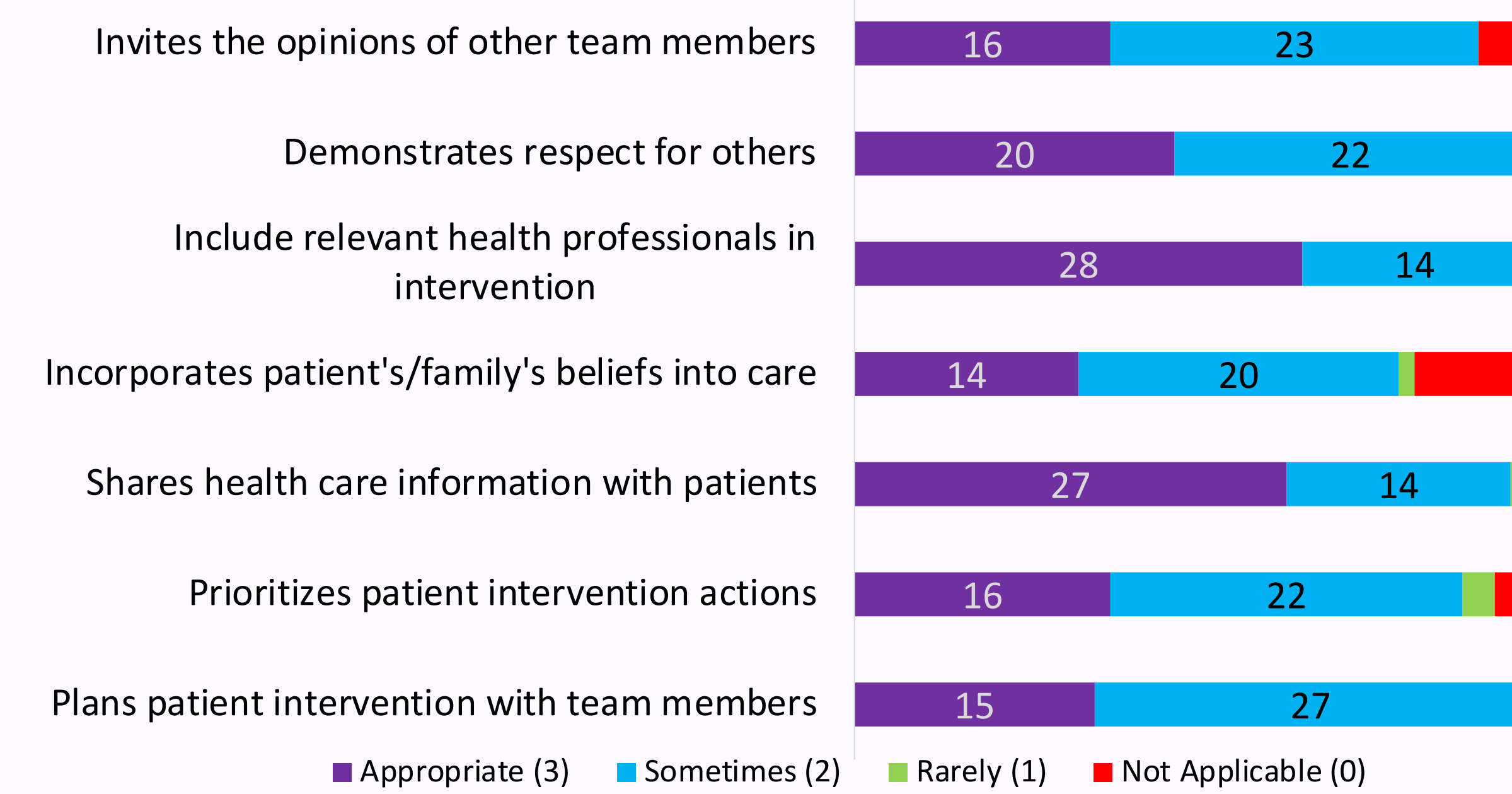


Figure 3: Evaluation of interprofessional interactions as assessed using iTOFT

### AMK Survey Scores

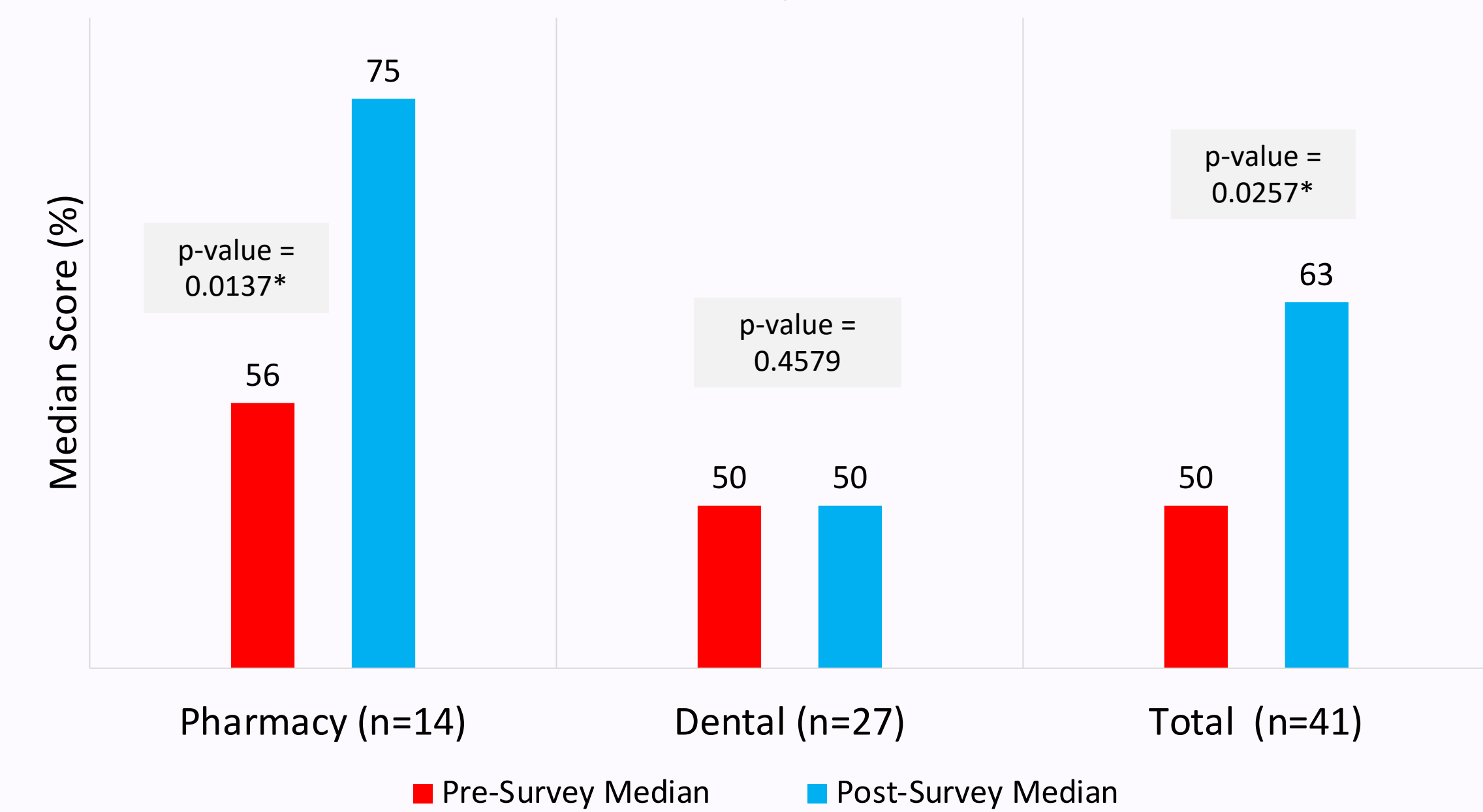


Figure 4: Pain knowledge scores by profession and composite as assessed by students who completed both a pre- and AMK post-survey. \*Denotes statistical significance

### Comprehensive Prior Pharmacy-Dental Student IPE Experiences

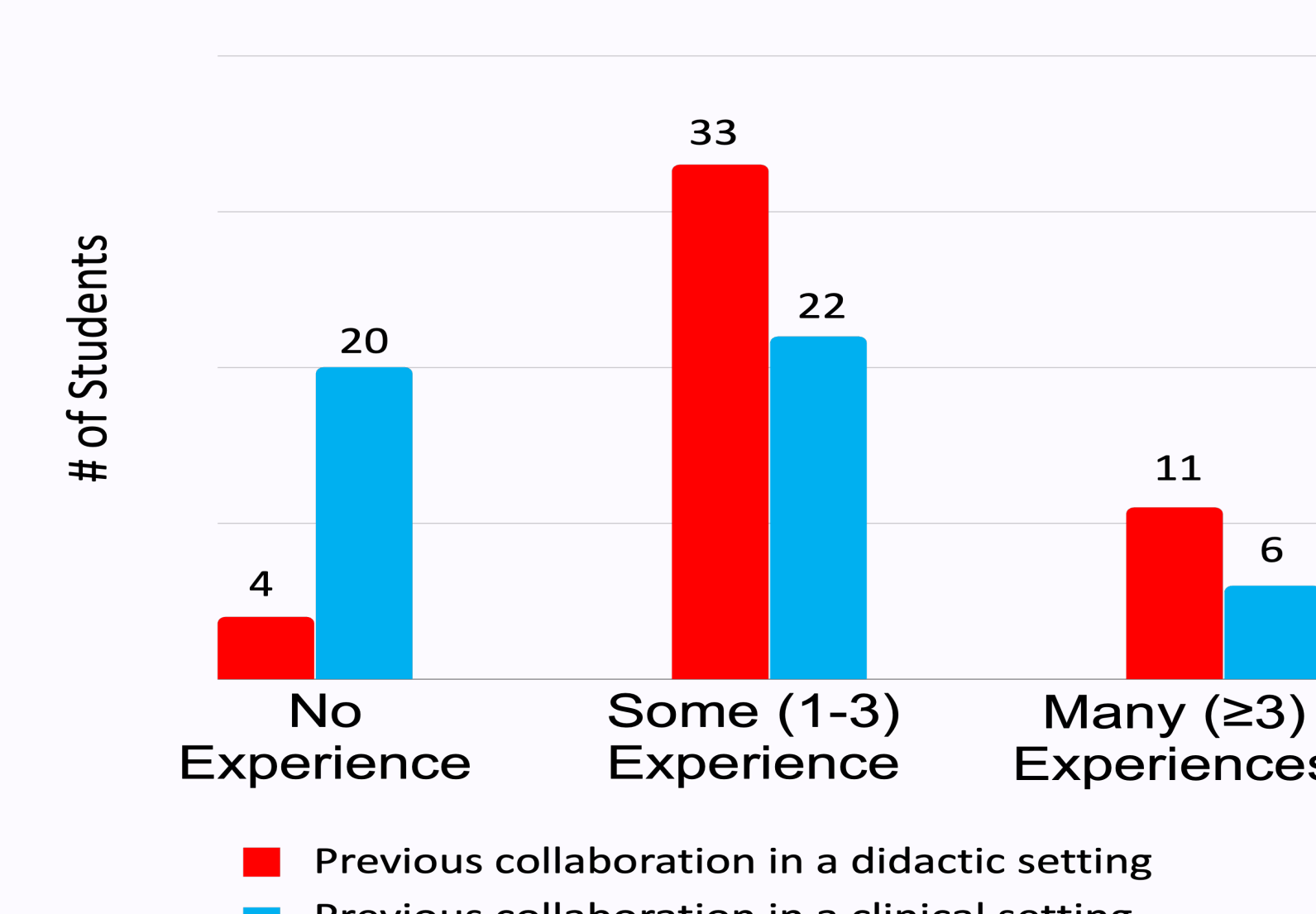


Figure 5: Clinic-related information about patients and drug-related interventions

## DISCUSSION

- Prior to this experience, there was little interprofessional collaboration between pharmacy and dental students at this institution
- On average, each pharmacy student attended 2 clinic sessions per academic year
- Students in both professions displayed positive teamwork behaviors in 43 clinical observations assessed by the iTOFT tool
- Postoperative pain protocol deviations included the removal, substitution, or dose change of non-opioids
- Pharmacy students provided medication counseling to 43 patients seen in the oral clinic
- Student knowledge of pain management increased significantly between pre- and post-AMK survey, though this change was only observed in pharmacy students
- 84% of students "Strongly Agreed" that pharmacy-dental collaborations may lead to improved clinical care for patients
- 85% of students "Strongly Agreed" that they had a better understanding of other health professional roles
- 95% agreed that pharmacy-dental collaborations are beneficial overall

## FEEDBACK & REFLECTIONS

- The use of iTOFT by faculty observers accounted for some variability in the assessment of IPE interactions
- In order to develop and apply interprofessional skills, pharmacy students need more clinical experience
- Dental students expressed that they valued collaborating with pharmacy students and gained a greater appreciation for pharmacists' expertise

## CONCLUSIONS

- Pharmacy-dental collaborations may improve patient care
- This innovative IPE experience provided opportunities for collaboration, interprofessional learning, and optimizing pain regimens

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