

Purpose

The goal of the Teaching Oral-Systemic Health (TOSH) Program Pediatric Oral Health Interprofessional Clerkship, which is funded through a grant from the Health Resources and Services Administration (HRSA), is to promote acquisition of the *Core Competencies for Interprofessional Collaborative Practice* (IPEC, 2011) and the *Interprofessional Oral Health Core Clinical Competencies* (HRSA, 2014) among future primary care providers by engaging family nurse practitioner (FNP), dental (DDS), and medical (MD) students in an interprofessional oral-systemic health clinical experience.

Learning Objectives

The learning objectives of the Clerkship are for students to:

- (1) Apply pediatric oral health assessment (health history, risk assessment, exam, prevention, education and referral)
- (2) Identify the pediatric oral-systemic connection
- (3) Practice a team-based approach to improve oral-systemic health outcomes

Methods

- Family Nurse Practitioner, Medical, and Dental students participate in a half-day clinical experience to develop oral health assessment and teamwork and communication skills
- Student Home Assignment:
 - Smiles for Life modules 2, 6 & 7
 - IPEC competencies
- Pre-conference (facilitated by pediatric dental resident)
 - Introductions and discuss previous IPE experiences
- Protocol:

Patient 1	Patient 2	Patient 3
NP reviews chart	MD reviews chart	DDS reviews chart
NP takes history	MD takes history	DDS takes history
DDS does HEENOT exam and FV	NP does HEENOT exam and FV	MD does HEENOT exam and FV
All collaborate for plan	All collaborate for plan	All collaborate for plan
MD gives patient education, prevention, anticipatory guidance, handouts, referral and follow-up	DDS gives patient education, prevention, anticipatory guidance, handouts, referral and follow-up	NP gives patient education, prevention, anticipatory guidance, handouts, referral and follow-up

- Post-conference (facilitated by pediatric dental resident)
 - Students discuss how working together as a team resulted in better patient care
- Evaluation
 - Interprofessional Collaborative Competencies Attainment Survey (ICCAS) given before and after experience



Outcomes

In the Spring-Summer 2014 Clerkship there was an increase in ICCAS mean scores from pre- to post-test for all three student types. Mean changes from pre to post were significant for students in the School of Medicine ($p < 0.05$); however, mean changes were not significant for students in the College of Nursing and the College of Dentistry (See Exhibit 1).

Exhibit 1. Pediatric IPE Clerkship ICCAS Mean Pre and Post Scores by Student Type Spring-Summer 2014 Clerkship

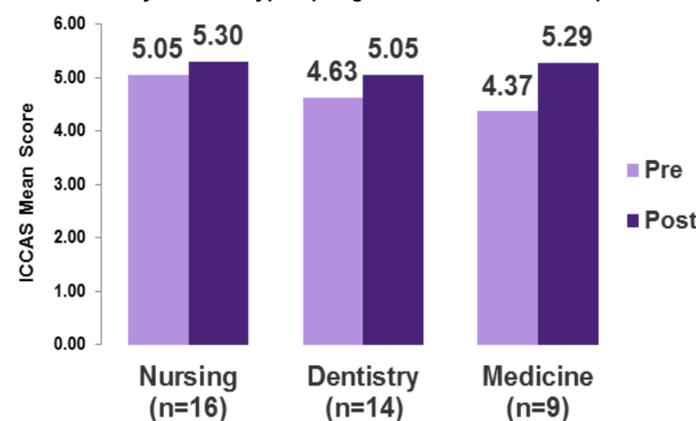
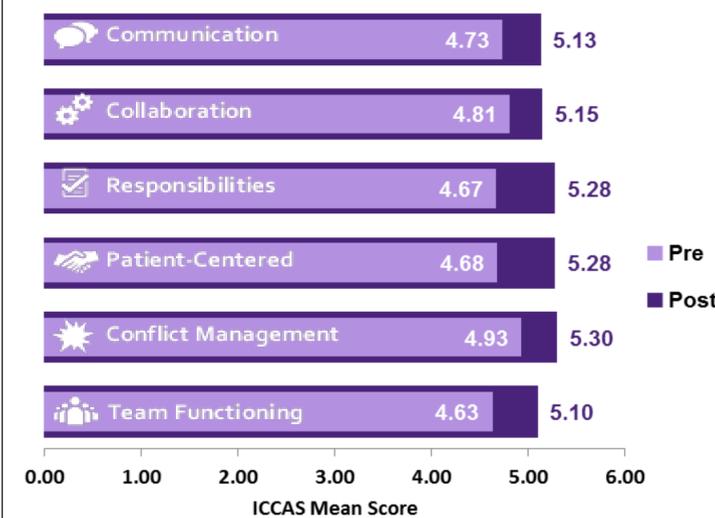


Exhibit 2 shows mean pre and post scores for each ICCAS topic area. For all six topic areas, there was an increase in mean scores from pre- to post-test. The topic areas of Responsibilities and Patient-Centered had mean changes from pre to post that were significant ($p < 0.05$).

Exhibit 2. Pediatric IPE Clerkship ICCAS Mean Pre and Post Scores by Topic Area (n=39) Spring-Summer 2014 Clerkship



In the Fall 2014 Clerkship, there was an increase in ICCAS mean scores from pre- to post-test for all three student types. For all three student types, mean changes from pre to post were not significant at the $p < 0.05$ level (See Exhibit 3).

Exhibit 3. Pediatric IPE Clerkship ICCAS Mean Pre and Post Scores by Student Type Fall 2014 Clerkship

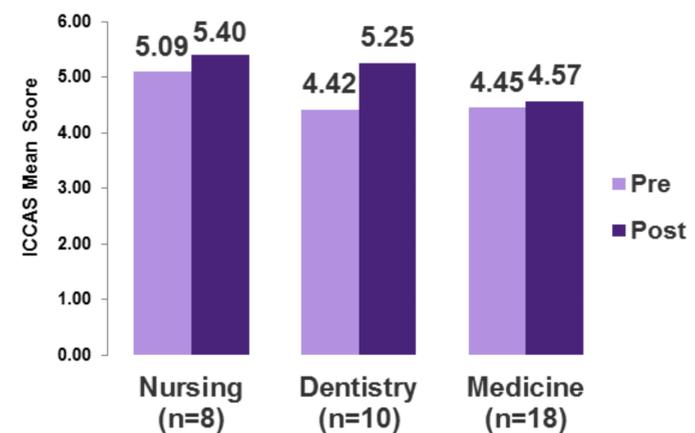
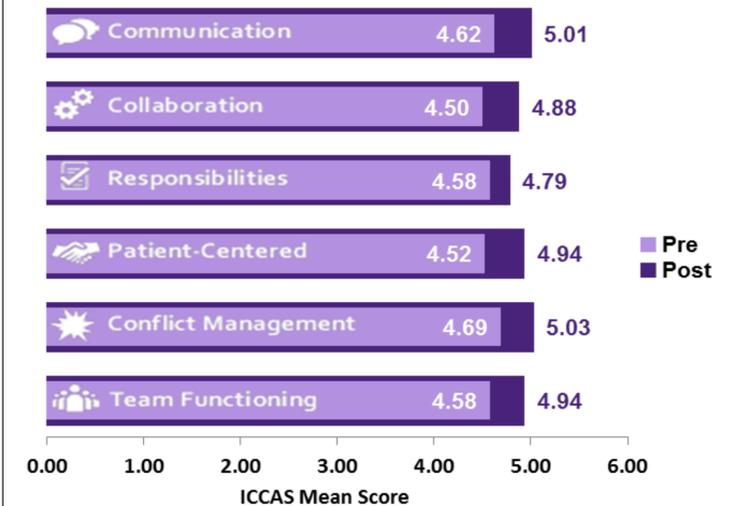


Exhibit 4. shows mean pre and post scores for each ICCAS topic area. For all six topic areas, there was an increase in mean scores from pre to post; however, the changes were not significant at the $p < 0.05$ level.

Exhibit 4. Pediatric IPE Clerkship ICCAS Mean Pre and Post Scores by Topic Area (n=36) Fall 2014 Clerkship



Conclusions

Students' attitudes toward interprofessional competencies improved during the TOSH Pediatric Oral Health Interprofessional Clerkship. However, it was less possible to detect differences pre-test to post-test scores that are not due to chance because the numbers of each student type were fairly small. As this IPE experience will be an ongoing component of the NYU nurse practitioner, medical, and dental curricula, the sample size will increase making it more likely to detect an effect that is not due to chance. A clinical approach appears to be an effective strategy for influencing the development of interprofessional competencies and improving students' reported attitudes towards interprofessional collaboration; however, further data collection is needed in order to confirm this.

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