

# Interprofessional Oral-Systemic Health Standardized Patient and Case Study Experience

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## Purpose

The goal of the Teaching Oral-Systemic Health (TOSH) Program Interprofessional Oral-Systemic Health Standardized Patient and Case Study Experience, 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 nurse practitioner (NP), nurse-midwifery (NM), dental (DDS), and medical (MD) students in interprofessional oral-systemic health simulation and clinical experiences.

### Core Competencies for Interprofessional Collaborative Practice (IPEC, 2011)

Competency Domain 1: • Values/Ethics for Interprofessional Practice

Competency Domain 2: • Roles/Responsibilities

Competency Domain 3: • Interprofessional Communication

Competency Domain 4: • Teams and Teamwork

### Integration of Oral Health and Primary Care Practice (HRSA, 2014)

Competency Domain 1: • Risk Assessment

Competency Domain 2: • Oral Health Evaluation

Competency Domain 3: • Preventive Intervention

Competency Domain 4: • Communication and Education

Competency Domain 5: • Interprofessional Collaborative Practice

## Learning Objectives

The learning objectives of the TOSH Interprofessional Oral-Systemic Health Standardized Patient and Case Study Experience are for students to:

- 1) Practice oral health history and exam.
- 2) Understand the roles and responsibilities and shared values of members of the team and their unique contributions to team-based care.
- 3) Practice interprofessional communication to support a team approach to management of oral-systemic health problems.
- 4) Develop a management plan to meet the patient's oral health and general healthcare needs in collaboration with other healthcare professionals.

## Methods

During the Fall 2013 and 2014 semesters, a total of 618 medical (n= 310), NP/ NM (n=150) and DDS (n=158) students from NYU participated in an interprofessional simulation experience featuring a standardized patient (SP) and case study teaching-learning strategy to expose students to both an oral-systemic and IP clinical experience in order to advance their competence in both areas. Students were asked to complete or review *Smiles for Life* modules 1, 3 and 7 and view a 9 minute video about the IPEC competencies prior to the experience.

The Interprofessional Collaborative Competencies Attainment Survey (ICCAS) was selected to evaluate the degree to which students report a change in perceived attitude about IP competencies following the IP learning experiences, using a pre-test/post-test approach. The items are categorized using the following IP competency domains: Communication, Collaboration, Roles and Responsibilities, Collaborative Patient/Family-Centered Approach, Conflict Management/Resolution, and Team Functioning. Students completed the ICCAS prior to and following completion of the IP experience.

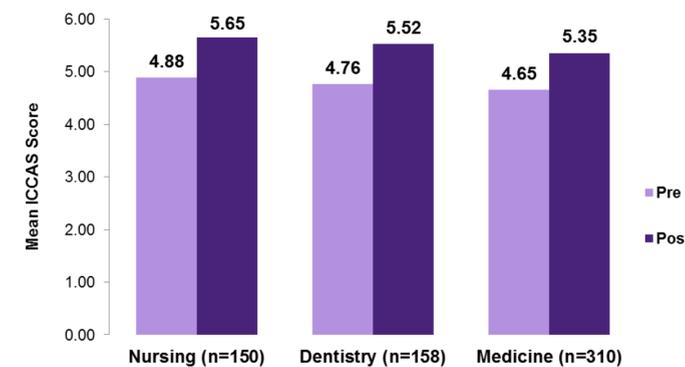
Faculty from the College of Nursing, College of Dentistry, and School of Medicine served as the facilitators for the experience. They were asked to complete an evaluation after the experience that included items about attitudes toward interprofessional education (IPE) and about the value of the TOSH clinical simulation event.



## Outcomes

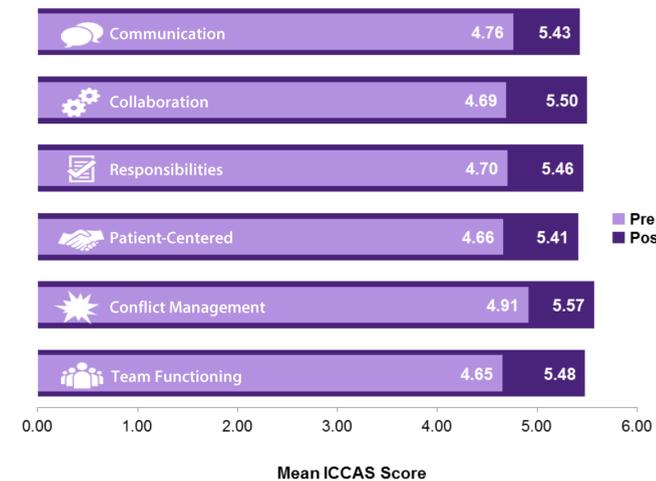
For all three student types, the changes in ICCAS mean scores from pre to post were significant (p<0.001, two-tailed) (See Exhibit 1).

**Exhibit 1. TOSH Event ICCAS Mean Pre and Post Scores by Student Type (2013 & 2014)**



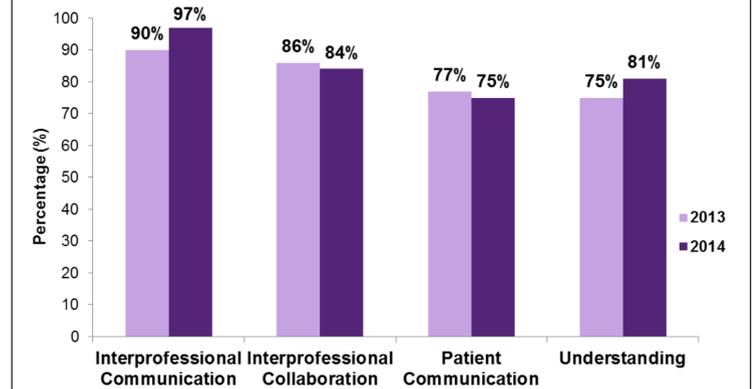
There was a statistically significant change in mean scores from pre-test to post-test in each of the six interprofessional competency domains measured by the ICCAS. (p<0.001, two-tailed) (See Exhibit 2).

**Exhibit 2. TOSH Event ICCAS Mean Pre and Post Scores by Topic Area (2013 & 2014) (n=618)**



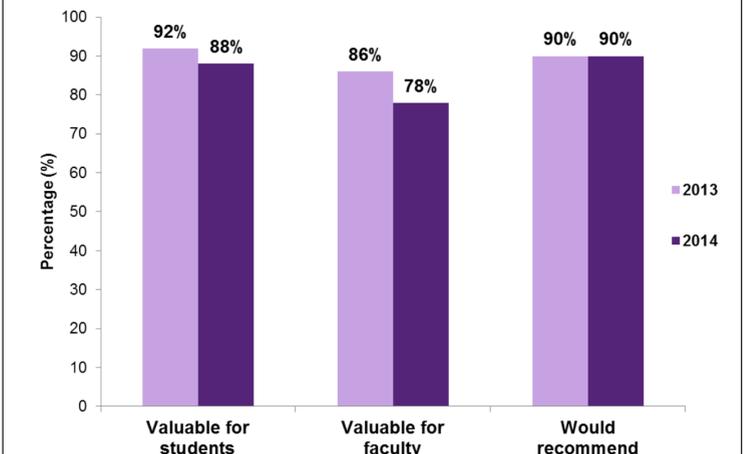
The faculty across disciplines reported high levels of agreement that IPE positively influences a number of characteristics, specifically communication between participating health professions students, collaboration between participating health professions students, student communication with a patient, and student understanding of the different health professionals roles in terms of patient care (See Exhibit 3).

**Exhibit 3. Percentage of Faculty Who Agree that IPE Increases these Characteristics (2013 n=49; 2014 n=32)**



Faculty across disciplines reported high levels of agreement that the TOSH clinical simulation event was valuable for students and valuable for faculty. Ninety percent reported that they would recommend participation in the event for learners in their profession (See Exhibit 4).

**Exhibit 4. Percentage of Faculty Who Agree with Value of the TOSH IPE Experience (2013 n=49; 2014 n=32)**



## Conclusions

These findings suggest that the TOSH IP simulation and case study experience was similarly effective among all three student types in increasing the students' favorable perception of their own interprofessional competencies. Topics in which mean post-survey scores were lower are potential opportunities for curriculum refinements to further emphasize those competencies. A clinical approach appears to be an effective strategy for influencing the development of interprofessional competencies and improving students' reported attitudes toward interprofessional collaboration.