

# A Qualitative Analysis of Student Understanding of Team Function through the use of the Jefferson Teamwork Observation Guide (JTOG)

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## BACKGROUND

Several early IOM reports identified the need to educate medical and health professions students in delivering patient-centered care as members of interprofessional teams (IOM, 2001; IOM, 2003). Evidence shows that conducting interprofessional education during education and training prepares student learners for collaborative practice when they enter the workplace, which in turn helps to achieve the Triple Aim of 1) enhancing the patient experience; 2) improving the health of populations; and 3) decreasing costs (WHO, 2010; Berwick, et al., 2008). One way to prepare students for collaborative practice is to have them observe real teams in action. Thus, the Jefferson Teamwork Observation Guide (JTOG) was created to serve as an educational tool in aiding students to better recognize the characteristics of effective teams. It has since been used to assess teams in the majority of clinical observation, simulation and collaborative practice activities offered by Jefferson Center for Interprofessional Education (JCIPE).

The JTOG is a two-part assessment comprised of identifiable characteristics of well-functioning teams drawn from the literature about teamwork. The first part consists of Likert Scale questions (strongly disagree to strongly agree) regarding the behavior of the interprofessional team observed in the domains of Values/Ethics in Interprofessional Practice, Roles/Responsibilities, Interprofessional Communication, Teams and Teamwork, and Leadership (IPEC, 2011; IPEC 2016). The second part includes qualitative questions relating to team-based care, patient-centered care, and teamwork.

## METHODS

Thomas Jefferson University students from the Colleges of Health Professions, Nursing and Pharmacy and Sidney Kimmel Medical College who participated in interprofessional education and collaborative practice activities were asked to fill out the JTOG after completing an IPE/CP activity. A total of 403 responses were collected from 141 students from these activities.

Students were asked the following qualitative questions (QQ):

- 1) Describe one aspect of team based care that you observed today.
- 2) Describe one aspect of patient centered care that you observed today.
- 3) Describe one new thing, either positive or negative, that you observed today about teamwork.

Qualitative Data Analysis:

Data was analyzed using a coding process to identify the Interprofessional Education Collaborative (IPEC) core competency domains and subdomains reflected in the student responses. A two-person team was assigned to code responses from each qualitative question. The responses were coded individually and then in pairs to determine reliability. Fifteen samples from each question were randomly chosen and coded individually by all seven members of the research team. Consensus was then reached by the team and the remaining responses for each question were coded by a trained research assistant.

## RESULTS

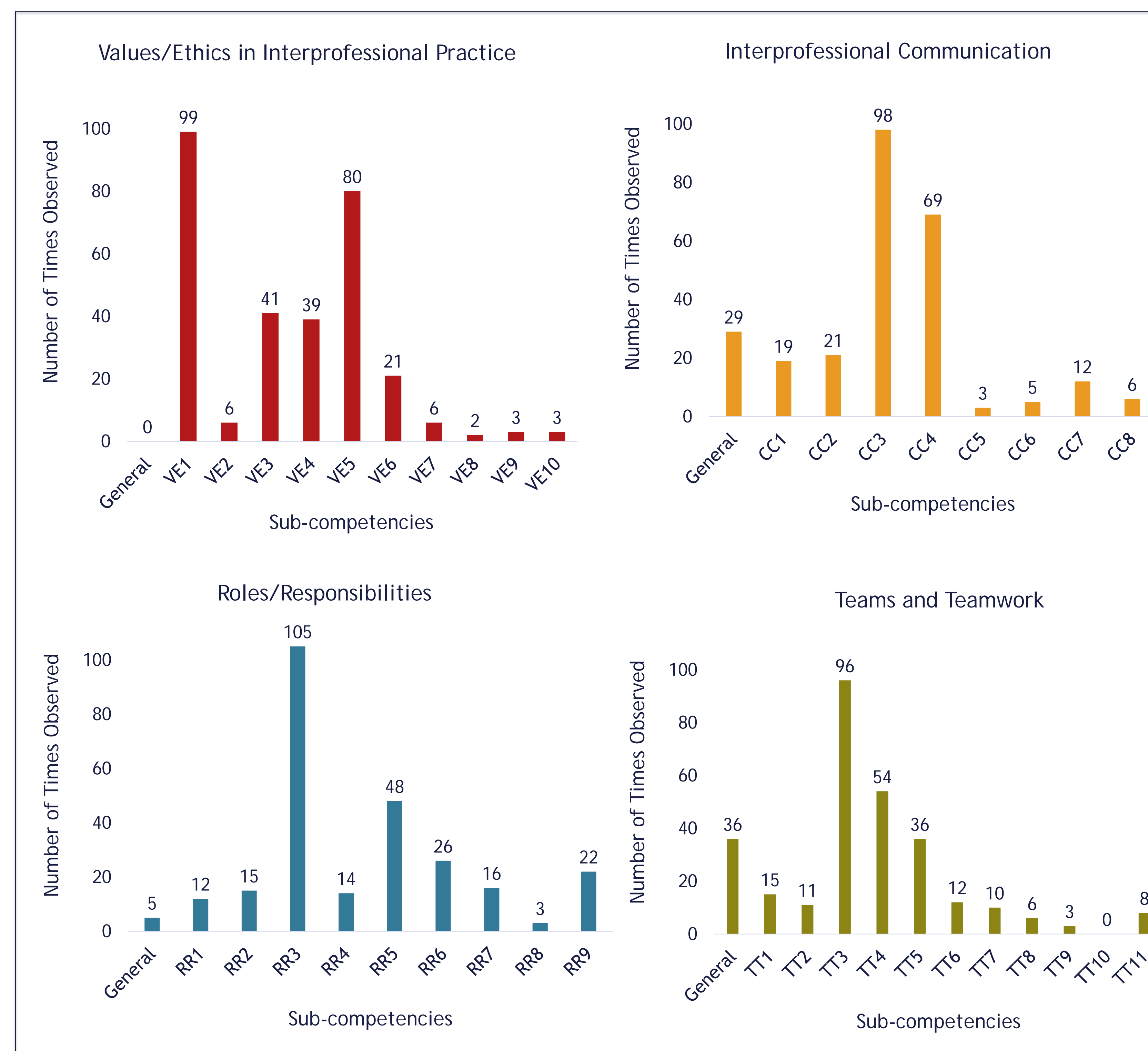


Figure 1. Frequency of each sub-competency as reflected in all of the responses (n=403).

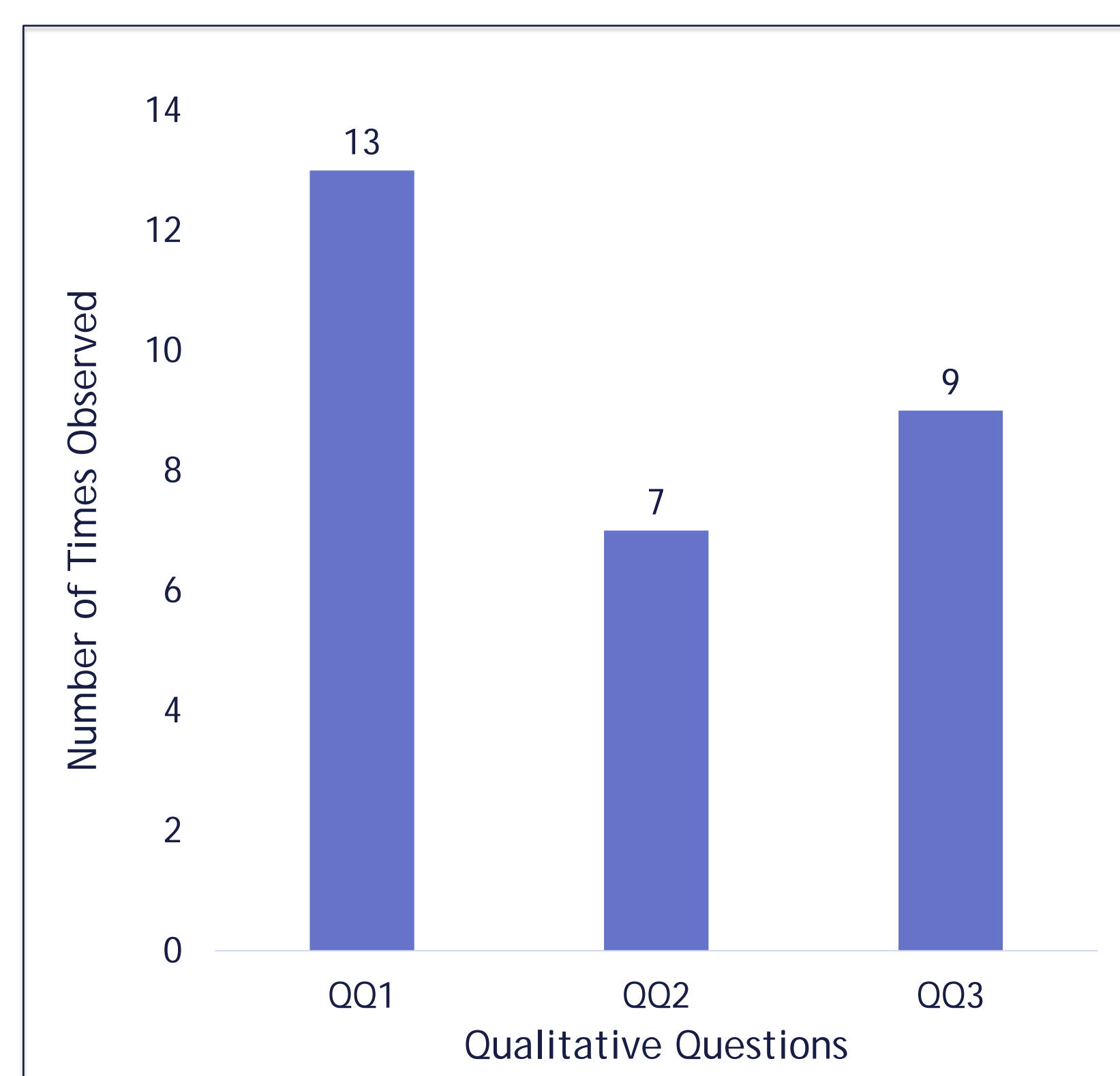


Figure 2. Frequency of overlap among sub-competencies as reflected in the sample responses (total n=45).

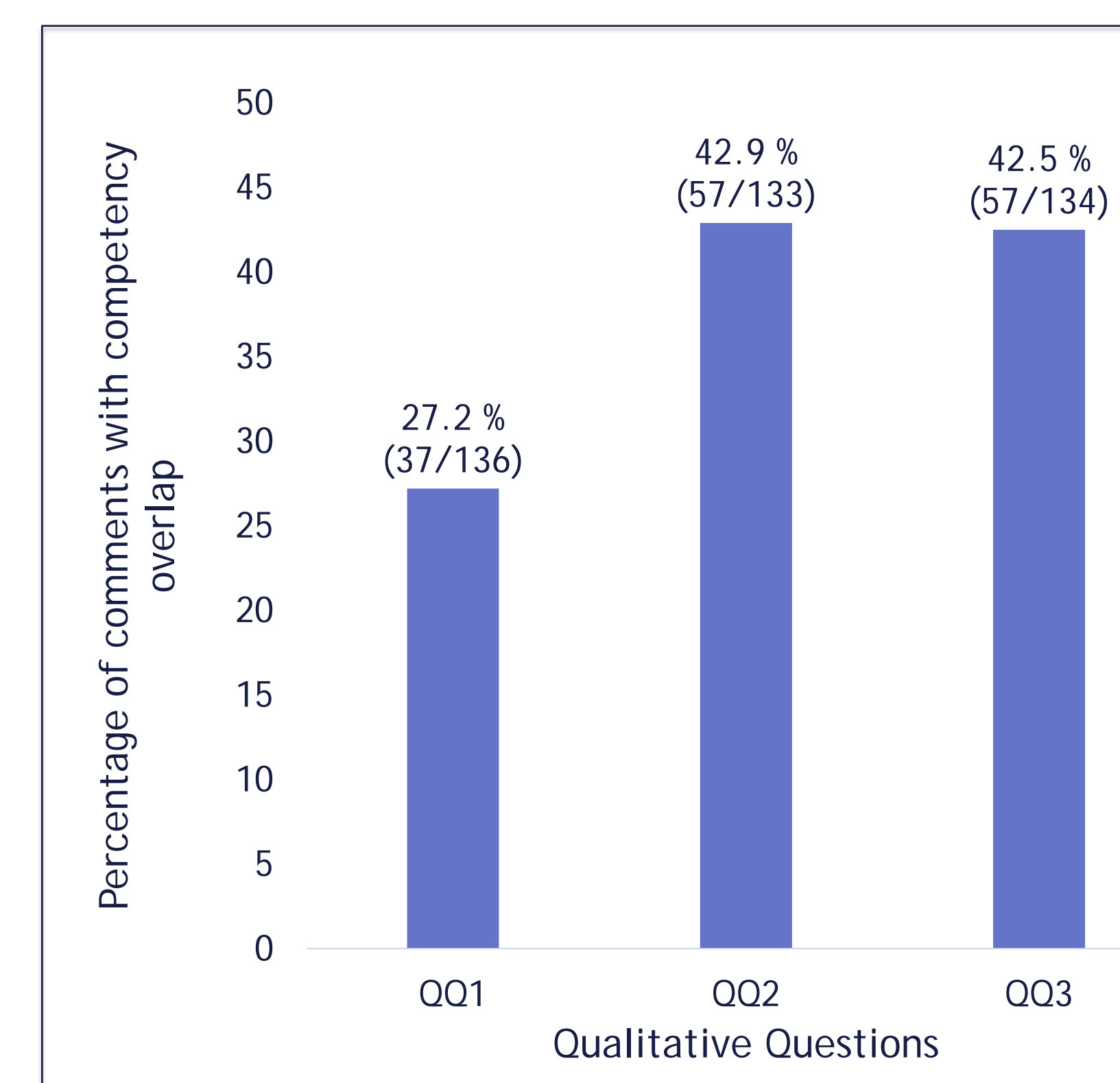


Figure 3. Frequency of overlap among sub-competencies as reflected in all of the responses.

## DISCUSSION

- All four core competencies were well represented: Values/Ethics in Interprofessional Practice (74.4%), Teams and Teamwork (71.2%) Roles/Responsibilities (66.0%), and Interprofessional Communication (65.0%).
- Overlap among sub-competencies was observed in the sample responses: 13 out of 15 (86.7%) in QQ 1; 7 out of 15 (46.7%) in QQ2; 9 out of 15 (60%) in QQ 3.
- In all of the responses, overlap among sub-competencies was observed as follows: 37 out of 136 (27.2%) in QQ 1; 57 out of 133 (42.9%) in QQ2; 57 out of 134 (42.5%) in QQ 3.
- Among the sub-competencies, TT10 (Use available evidence to inform effective teamwork and team-based practices) was the only one not observed.

## CONCLUSIONS

- The JTOG can serve as a guide for students when observing interprofessional teams in action.
- It elicits student understanding of the IPEC core competencies and sub-competencies.
- There is significant overlap among the sub-competencies, which reinforces the recent update to the IPEC competencies (2016).

## STUDENT TAKEAWAYS

"I saw that teamwork is clearly the best way to provide comprehensive, holistic care for a patient. Each member of the team had something unique to say about each patient that really added to the picture of that patient's health. Without even one of those disciplines, the picture would be incomplete. They all appeared to take each other's comments seriously and hopefully allowed others' comments to help them know and care for the patient that much better." -Medical student

"One positive thing that I observed was that each team member's perspective and input is necessary in order to provide the patient with the best and safest care. Every professional provides a unique perspective to the patient's situation and thus the interaction of all of these professionals is necessary so that the best care can be provided." - OT student

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