

# Enhancing Interprofessional Healthcare Team Dynamics, Collaboration, and Communication Through Art

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### Introduction

Studies have shown differing views on the importance and quality of interprofessional collaboration between physicians and nurses.

Inadequate communication has been shown to interfere with interprofessional collaboration, negatively impacting patient outcomes.

Inadequate communication and the resulting ineffective interprofessional healthcare team collaboration leads to

- medical errors
- poor patient satisfaction
- preventable adverse outcomes
- increased health care costs
- increased staff burnout and higher attrition rates

### Aim

To explore the impact of an art museum team-building session on interprofessional team collaboration and communication between physicians, nurses, care coordinators, social workers, and physical therapists.

### Methods

Led by an art educator, the art museum team-building sessions used various pieces of art as a medium to help promote and encourage interprofessional teamwork, collaboration, and communication.

The sessions were open to all members of the interprofessional team assigned to a designated intermediate-care adult medical unit.

Employment records of 272 physicians, nurses, care coordinators, social workers, and physical therapists were used to identify potential participants.

Potential participants were contacted via email to complete a single questionnaire. 88 participants completed the questionnaire.

Descriptive statistics (using frequencies) were used to analyze the data.

### Questionnaire

To assess the impact of the art museum sessions on interprofessional collaboration and communication, a questionnaire was developed from three validated tools:

- 1- TeamSTEPS™ "Teamwork Attitudes Questionnaire" -- Cronbach Alpha's (range .88 and .95)
- 2- TeamSTEPS™ "Teamwork Perceptions Questionnaire" -- Cronbach Alpha's (range .70 and .83)
- 3- University of West England Interprofessional Questionnaire (UWE IPQ) -- Cronbach's alpha coefficients (range 0.71 to 0.84)

A 16 item questionnaire was developed with minor modifications to the original questions. Table 1 provides an example of how the questions were modified. Before it was administered, the questionnaire was reviewed by 2 expert clinicians for clarity and content.

**Table 1: Questionnaire Modifications**

TeamSTEPS™ "Teamwork Perceptions Questionnaire"	
Original item: - Feedback between staff is delivered in a way that promotes positive interactions and future change	Modified item: - Feedback between interprofessional team members is delivered in a way that promotes positive interactions and future change

The questionnaire was divided into 4 sections:

#### Section 1: Demographics

- Professional role on interprofessional healthcare team
- Verified participant had worked on the participating unit
- Confirmed attendance at least 1 session

#### Section 2: 16 modified items from TeamSTEPS and UWE IPQ

- Focused on participants' general perception of interprofessional teamwork, collaboration, and communication.

#### Section 3: 19 items developed by project leader

- Items were created to elicit additional information on the impact of the sessions on interprofessional collaboration and communication. In developing these items, the project leader linked the items from section 2 to the team-building sessions.
- For example, in section 2 participants were asked "To be effective, team members should understand the work of their fellow team members." This was then modified for section 3 into "Attending the art museum team-building session: Improved my understanding of the distinction between my role and the role(s) of other team members."

#### Section 4: Follow-up

- If the participant would attend and/or recommend an art museum team-building session in the future
- 2 open-ended questions related to attending the sessions

**Figure 1: Example of art work used during sessions to discuss theme of "touch" in healthcare**



Pan and Psyche, by Sir Edward Burne-Jones

### Sample

**Table 2: Participants' Demographics**

Role on the healthcare team	Number of Participant(s)
N = 88	
Physicians	52
Nurses	30
Care Coordinators	2
Social Workers	1
Physical Therapists	3

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### Results & Summary

Perceived benefits varied between the physician and non-physician team members.

Nurses perceived greater benefit in attending the sessions when compared to physicians. Nurses reported the sessions:

- Improved their communication and teamwork skills
- Enhanced their skills and confidence in giving feedback to other members of the interprofessional team
- Increased their comfort level in expressing their opinions in a group, even when they know that other people don't agree with them

One nurse notes, "There was a true sense of 'team' after the group went to the museum session together, and you could almost see the change on rounds the next day. There is more of a personal closeness as opposed to strictly professional in nature."

In agreement, a physician states, "It was a chance to get to know one another personally, which I think helps break down barriers and stereotypes. It was also a chance to just have fun together, which improves a working relationship and makes it easier to communicate in the future."

However, another physician states, "Not sure it impacted the team interaction directly as there were only residents present and no other nursing staff. We had a great rapport as a team going into the museum sessions, so don't think it did much to change the dynamic."

A perceived benefit for all participants was the opportunity to discuss professional similarities and differences, including role, competencies, and stereotypes. Almost 66% of the participants agreed the art museum sessions allowed for the chance to interact as an interprofessional group and have open dialogues regarding their current position within the team.

80% of physicians and 100% of nurses reported they would likely attend another session in the future if invited.

### Conclusions/Further Study

The art museum sessions were valued by many but not all participants. Based on the participants responses, there are several ways the program could be improved upon. Mainly, participants noted that nursing presence at the sessions was not consistent, often only having physicians in attendance. The lack of organizing the sessions in a way that allowed greater interprofessional team member attendance, particularly nurse attendance, served as an obstacle. Future work should be focused on increasing interprofessional attendance, finding a valid and reliable tool to evaluate the program, and conducting a qualitative study to evaluate intangible benefits from attending the session.