Difficult Interprofessional Conversations: Developing a Feedback Tool for Nursing Students

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THESIS

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HD

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LIST OF ABBREVIATIONS

CC   Interprofessional Communication

IPE   Interprofessional Education

RR   Roles/Responsibilities

SBAR   Situation-Background-Assessment-Recommendation

SC   Standardized Colleague

VE   Values/Ethics

SUMMARY

Failure to engage in difficult interprofessional conversations is a source of patient care errors. Nursing students rarely practice and get feedback on these "crucial conversations." This study was designed to create and pilot a formative feedback tool for second-year nursing students to facilitate practice of difficult interprofessional conversations with standardized colleagues. The tool was developed through an iterative process. Content validity was derived from a review of the interprofessional education and difficult conversations literature as well as review by faculty content experts. Further validity evidence was ascertained by calculating interrater reliability, user feasibility and utility, and member-checking of the final tool.

The development of an easy-to-use tool for difficult interprofessional conversations identified specific areas for consistent feedback across a variety of situations. The tool identified opportunities for conflict resolution, specifically in the areas of problem identification, nonverbal communication, and respectful communication. A common challenge was providing a safe environment for these conversations.

I.   INTRODUCTION

The Institute of Medicine's vision for health professions education in the 21st century stated:

"All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics"[1].

Responding to the this call for enhanced communication and teamwork in healthcare , in 2011 the Interprofessional Education (IPE) Collaborative (a consortium of six leading health professional education organizations) developed a set of core competencies for interprofessional collaborative practice [2]. The four major domains for the competencies include values/ethics for interprofessional practice, roles/responsibilities, teams and teamwork, and interprofessional communication.

The importance of communication skills for future pharmacists, nurses, and physicians is highlighted in numerous educational practice and competencies documents [3-5]. In each of the respective curricula, students are taught to practice the principles of good provider-with-patient communication. However, pre-licensure students are rarely afforded opportunities to learn or practice provider-to-provider communication.

Research in practice shows a link between poor colleague-with-colleague communication and medical errors [6-8]. The Joint Commission on Accreditation of Healthcare Organizations suggests that poor communication among healthcare professionals contributed to approximately 60% of sentinel events between 2004 and 2014 [9]. Thus, it is critical to teach learners about clear and effective interprofessional communication, particularly around difficult conversations such as when providers make a mistake or are not respecting a fellow professional.

In a landmark study in 2004 researchers from the American Association of Critical Care Nurses and the organization VitalSmarts collected data from 1,143 nurses, 106 physicians, 266 clinical-care staff, and 175 administrators. A qualitative analysis of the data revealed that there were seven "crucial conversations" that either led to or could lead to poor patient outcomes: conversations addressing broken rules, mistakes, lack of support, micromanagement, poor teamwork, incompetence, and disrespect [10]. A follow up study in 2010 entitled "The Silent Treatment" further narrowed these to concerns about dangerous shortcuts, disrespect, and incompetence [11].

Many of the published curricula on interprofessional communication focus on developing comprehensive care plans for patients using standardized patients [12]. Frequently these curricula include didactics or small group opportunities to learn about other health professions' scope of practice and some communication skills, but they are not focused specifically around the difficult conversations. Consequently, these "undiscussables" (the topics that professionals often avoid but which contribute to poor patient outcomes) are rarely taught in school.

One method for experiential learning is by using standardized colleagues (SC). Akin to standardized patients, SCs are persons trained to portray a health care provider, including the provider's professional role and emotional and behavioral characteristics [13]. SCs provide an opportunity for direct observation of learners' behavior in an interprofessional conflict scenario, creating a context for formative feedback. This methodology provides a safe environment for learners to practice new communication skills and to correct miscommunication without harm to patients or an interprofessional relationship.

Prior studies of interventions to improve conflict resolution and interprofessional communication have been aimed at the resident/attending and practicing nurse level or at other health professionals such as pharmacists [13]. For example, Gangopadhyaya et al. outlined a SC intervention designed to assess resident skills in conflict resolution with patients and nurses [14]. This study focused on encouraging residents to use resources such as patient advocates or charge nurses to help defuse tense interactions.   There are few published curricula geared toward interprofessional conflict [15]. Of those that used the case portrayal method, both used faculty for role play, not true standardized colleagues [12]. One curriculum used standardized patients and SCs with residents as the participants [16]. Other curricula included role-playing physician-nurse conflicts with an emphasis on avoiding gender stereotyping [17] or video-based exercises[18]. We found no curricula leveraging standardized colleagues with nursing students to create a safe environment for practicing difficult interprofessional communication skills. Further, the paucity of published assessment tools for difficult interprofessional communication situations made it challenging to systematically assess learners or provide detailed formative feedback regarding learners' ability to communicate effectively in an interprofessional conflict situation.

In response to the lack of curricula in difficult interprofessional communication skills, in 2009 faculty of the University of Pittsburgh Schools of Medicine, Pharmacy, and Nursing developed an experiential learning activity using SCs. Each SC was an actual healthcare professional with an interest in interprofessional communication skills and significant previous curricular and practical experience with standardized patient methodology, who was trained to portray a specific role and give behaviorally-based feedback, in character, for the interaction that occurred.

The experiential activity was provided to second-year nursing students as part of their introductory clinical care course. It began with a one-hour lecture on Crucial Conversations [10] and the

key elements of conflict resolution. Students were taught a common format to present patient information, specifically, the Situation–Background- Assessment-Recommendation (SBAR) [19,20] format, in order to transmit information efficiently in these challenging conversations. The lecture was followed by one small-group (5-6 students/group) session where students were introduced to three scenarios each incorporating one of the five crucial conversation conflicts: disrespect, micromanagement, mistakes, broken rules, or poor teamwork (see Table III, Appendix). For each scenario, one student was asked to have the difficult conversation with a SC while the others observed.

Students could request a time-out at any point in the interaction if they were unsure of their next steps or recognized that the conversation was going poorly and wanted to try an alternative strategy. Once the student developed a new strategy based on feedback and suggestions from faculty and peers the student timed in to resolve the conflict, and then immediately sought specific feedback regarding their strategy from the SC.

At the end of the 60-minute session, faculty facilitators provided each student with reinforcing and corrective feedback about the behaviors observed during the interactions. Facilitators gave verbal feedback on areas of their choosing without guidance as to what should be addressed. After debriefing the original session, course directors suggested that the exercise would benefit from more structure to the formative feedback. Consequently the authors created and validated a formative feedback tool to provide students targeted feedback that also helped them demonstrate areas that had improved over the course of an encounter.

II.   THEORETICAL FRAMEWORK

Black and Wiliam in their theoretical framework for formative assessment, discuss the key elements as understanding "Where the learner is going, where they are right now, and how to get there."[21]. To move the learner forward, they recommend that assessments help students to understand the goals of an activity as well as the indicators of success. Teachers should facilitate both learning activities and feedback that activates students to progress. This feedback tool had two purposes: 1) to reinforce student behaviors that helped move a difficult conversation forward and 2) demonstrated students' self-efficacy. By reinforcing positive behaviors the tool helped students understand how to successfully resolve a conflict. Further, on the tool faculty facilitators actually showed students that when they changed their approach to a difficult conversation they moved from a fair (Level 1) performance to a good/excellent performance (Level2/3).

The purpose of this study was to develop and pilot an observational aid to assist workshop faculty in providing specific, behaviorally-based, formative feedback to nursing students practicing communication skills in the context of simulated interprofessional conflict conversations.

III. METHODS

Development of the feedback tool (see figure 1):

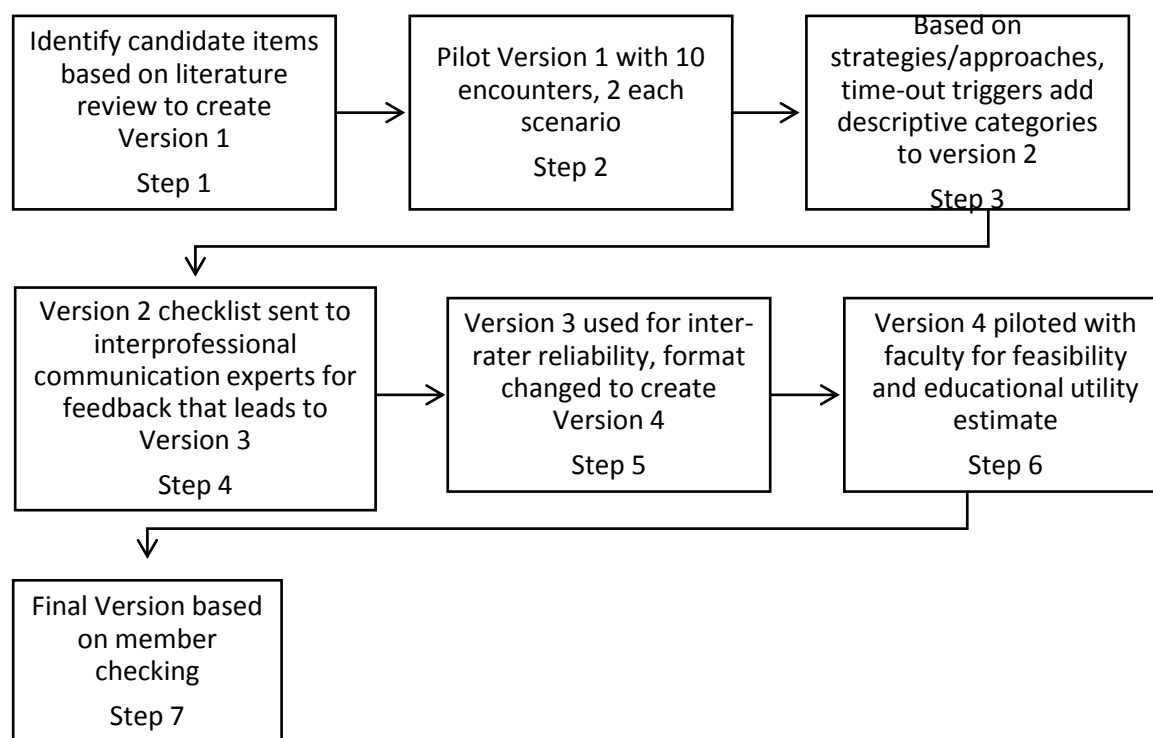| Identify candidate items based on literature review to create Version 1 Step 1	→	Pilot Version 1 with 10 encounters, 2 each scenario Step 2	→	Based on strategies/approaches, time-out triggers add descriptive categories to version 2 Step 3
↓				
Version 2 checklist sent to interprofessional communication experts for feedback that leads to Version 3 Step 4	→	Version 3 used for inter-rater reliability, format changed to create Version 4 Step 5	→	Version 4 piloted with faculty for feasibility and educational utility estimate Step 6
↓				
Final Version based on member checking Step 7				

Figure 1: Instrument Development Flowsheet

A. **Phase 1: Initial tool development**

1. **Step 1: Identifying candidate items from the literature**

The initial set of fifteen candidate items for the feedback tool was developed based on a review of (a) the IPE core competencies [2] and (b) the critical elements of a difficult conversation [22] about an "undiscussable" topic [11]. These critical elements included focusing on the behavior not the person; creating a safe environment in which to have the conversation; listening to the other party; and working to find a solution to the conflict. The IPE core competencies are categorized in four domains: (1) Values/Ethics for Interprofessional Practice, (2) Roles/Responsibilities, (3) Teams and Teamwork, and (4) Interprofessional Communication. Many competencies within each of the domains relate to effective interprofessional communication. For example, in the Value/Ethics domain, a sample competency is "Place interests of patients and populations at center of interprofessional health care delivery and population health programs and policies..."[2] This competency translated to a candidate feedback item entitled "Patient focus" with levels of achievement identifying whether the student placed the patient's interests at the center of the conflict resolution (see Figure 2). Items informed by crucial conversation principles included items such as active listening, focusing on the behavior rather than the person, identifying the situation, and suggesting alternatives for handling the situation [22]. A 3-point behaviorally-anchored rating scale was developed for each item.

Figure 2: **Formative feedback tool** for assessment of nursing student/SC difficult conversation

| Student Name | Place ✓ mark on behavior level after first attempt |
| Case | Place * by behavior level reached at encounter end |

Behavior	Level 1	Level 2	Level 3
Self-Identification	Failed to give name AND role	Gave name OR role	Gave both name AND role
Safe environment to hold conversation	Did not offer to move conversation to private space or see if good time	Asked if good time OR move to private space	Asked if this was good time, AND move to private space
Patient identification	Patient name and location not stated	Patient name OR location stated	Patient name AND location stated
Problem identification	Problem not stated OR stated vaguely	Problem stated clearly but no resolution recommended	Problem stated clearly AND resolution recommended
Patient focus (VE1*)	Didn't place patient at center of discussion	Alluded to patient in resolution of conflict	Directly related resolution of conflict to patient
Professional engagement (CC4*)	Fails to acknowledge SC's role/expertise	Actively acknowledges SC's role/expertise	Explicitly solicits SC's role/expertise
Role responsibility (RR6*)	Doesn't clarify follow-up expectations from SC or self	Clarifies either SC OR self-expectations for follow up	States what both SC AND self will do in follow up
Respectful communication (CC6*)	Heated or talks over SC	Listens briefly	Listens and respectfully summarizes what they heard
Body language	Closed (e.g. arms crossed, leaning away, minimal eye contact, aggressive tone of voice)	Stiff, minimally confident (e.g. moderate eye contact, unsure tone of voice)	Leaning forward, maintains eye contact appropriately, confident tone of voice
Global score (*at end of encounter*)	Did not identify problem OR did not practice effective problem resolution	Practiced but unsuccessful in some elements of problem resolution	Exhibited a skillful approach to resolving problem

Please circle hindering/facilitating behaviors below and comment on other behaviors not listed

Hindering behavior	Facilitating Behavior
Too deferential ("just a nurse/student")	Use of humor
Offended SC	Thanks/apologizes to SC where appropriate

Hindering behavior	Facilitating behavior
Vague language	Use of clear direct language
Use of "you" rather than problem/situation statements	Identified importance of collaboration/teamwork
Other (be specific):	Other (be specific):

*Related competency from IPEC *Core Competencies for Interprofessional Collaborative Practice*.

2. <u>Step 2: Content validity</u>

Two of the authors (HD,SM), applied the first version of the instrument (i.e. the initial set of fifteen literature-based IPE and conflict-related items) to two encounter video-recordings per scenario (disrespect, micromanagement, mistakes, broken rules and poor teamwork) for a total of ten encounters. We compared ratings after viewing each encounter and discussed whether the instrument adequately provided prompts for appropriate feedback and whether items should be added or modified. HD and SM came to consensus about behaviors that were noted across all of the scenarios. Version 2 of the checklist included only those nine items that were deemed key to successful resolution of the problem and generalizable to nursing students in a similar stage of training across the country.

3. <u>Step 3: Identifying effective and ineffective strategies</u>

Student behaviors that facilitated or hindered a difficult conversation were determined via video review of encounters, identifying communication strategies and common triggers for requesting a time out. When students requested a time out, the first step in the ensuing discussion was for the facilitator to ask why. One common trigger, for example, was the student's apprehension about directly confronting a difficult topic (e.g. mistake, broken rule, or poor teamwork). Another trigger was when students realized that an approach they had tried was ineffective at deescalating a conflict but couldn't identify why the approach didn't work. For example a student might use poorly timed humor to which a SC responded negatively. Common effective and ineffective strategies and time-out triggers were identified and coded qualitatively by authors HD and SM during the video review, and subsequently added to the tool to trigger behaviorally-based feedback around the difficult conversation. An open comment field was included so that the facilitator could provide additional detailed feedback for the student.

B.   Phase 2: Piloting the initial observational tool items and gathering initial validity evidence

"Validity evidence is case and time specific…for the specific uses specified by the assessment user and the purpose of the assessment" [15]. We sought to identify evidence for use of this tool with nursing students in their introductory clinical course, as part of a workshop-based formative assessment to develop their skills in difficult interprofessional conversations. Using Messick's framework [23] with the available dataset and the formative purpose of the exercise, we obtained validity evidence for content, inter-rater reliability, and potential learning impact or utility.

1.   Step 4: Content validity: faculty expert review

Version 2 of the instrument was sent for feedback to three health professionals who were members of an interprofessional educational working group and taught extensively about interprofessional communication and conflict; hereafter referred to as faculty experts. The relevant SC cases were provided in written format for context. These experts were asked to comment on the tool's ability to capture interprofessional communication best practices, improve feedback, and identify behaviors critical for resolution of the scenarios. They were asked to rate the importance of each item and provide suggestions to improve the structure and content of the tool. Based on their feedback, we clarified three of the behavioral anchors and removed an initial behavioral category called "confidence." A global score was added, as well as the ability to rate the student both at the beginning and end of the encounter to allow identification of behaviors that changed after coaching and peer feedback. With these changes we created version 3.

2. **Step 5: Response process validity evidence: inter- rater reliability**

Two of the authors (HD, SM) used version 3 of the tool to rate three video-recorded encounters for each of the five scenarios for a total of fifteen encounters. We calculated a weighted kappa for interrater reliability.

The tool with minor modifications in format became Version 4. Version 4 included nine behaviorally-anchored items, a global score, a set of communication-facilitating and hindering behaviors to circle, and room for open- ended comments (See Figure 2). The instrument encouraged faculty to rate behaviors both before and after a time out, in order to visually emphasize for the student the changes in behavior leading to a better outcome in the scenario.

3. **Step 6: Consequences evidence: Feasibility and educational utility estimate by faculty users**

Version 4 was piloted by three faculty users who had taught in the original course, which is no longer being offered. Each faculty user was given the tool and an opportunity to review it and ask any clarifying questions. The user then applied the instrument to individually rate one video encounter for each of the five scenarios (all faculty rated the same five encounters). Faculty users viewed only the encounters, not the time-out discussions. Investigators HD and SM together sat with individual faculty users while they watched and rated the videos. At the end of viewing and rating each encounter we asked the faculty user (1) what feedback they would give the student based on their free text comments, (2) how much training they felt was needed to use the tool effectively, and (3) whether this tool provided them with the ability to generate more specific, behaviorally-based feedback. After viewing all five encounters faculty were given a written survey about the usability of the tool as well as the importance of the behaviors being assessed. A summary of these findings is presented in the results.

4. **Step 7: Member checking**

After extracting themes about the use of the tool and summarizing the results we performed a member check by sharing de-identified colleagues' responses and asking the faculty users involved if the summary of their free text comments and the final version of the tool captured their thought process and comments accurately. The member checking resulted in minor adjustments in format made to create the final tool seen in Figure 2.

Institutional Review Boards at the University of Pittsburgh and the University of Illinois designated this study as an exempt protocol.

IV. RESULTS

A. <u>Content validity evidence: review by experts and faculty users</u>

On average, IPE faculty experts and faculty users rated each item as at least "very important"; item averages ranged from 3.7-5 on a 5-point scale (Table I). Experts unanimously considered items regarding student self-identification, respectful communication, nonverbal communication and identification/naming of the problem to be crucial to the successful conflict resolution of the scenarios.

TABLE I: ITEM IMPORTANCE RATINGS[A] BY EXPERT REVIEWERS (N=3) AND FACULTY USERS (N=3)

Items	Experts		Faculty	
	Mean (SD)	Range	Mean (SD)	Range
Self-Identification	5 (0)	5	4.3 (1.2)	3-5
Patient identification	4 (1)	3-5	5 (0)	5
Conflict identification	4.7 (0.6)	4-5	4.3 (1.2)	3-5
Safe Environment	4.3 (0.6)	4-5	4.3 (1.2)	3-5
Nonverbal	5 (0)	5	4.7 (0.6)	3-5
Patient focus	4.3 (0.6)	4-5	5 (0)	5
Professional engagement	4.3 (0.6)	4-5	4.3 (0.6)	4-5
Confidence	4 (1.7)	2-5	3.7 (0.6)	3-4
Suggested Solution	4 (1)	3-5	4.3 (1.2)	3-5
Role responsibility	4.7 (0.6)	4-5	3.7 (0.6)	3-4
Respectful Communication	5 (0)	5	4.7 (0.6)	4-5

[a]Scale of ratings:1=not important 2= somewhat important 3= important 4= very important 5=extremely important

B. **Observed performance patterns**

　　"Ensuring a safe environment for having the difficult conversation" was not a skill routinely

employed by the students in any of the cases. Similarly, "professional engagement that acknowledged a

SC's expertise" and "role responsibility for defining expectations for follow up" were areas in which

students struggled across cases. Students had the most difficulty across all domains in the poor

teamwork case, suggesting that interprofessional peer-to-peer communication was especially unfamiliar

or challenging. Table II summarizes student performance.

TABLE II: ITEM RATINGS OF STUDENTS AND INTER-RATER RELIABILITY, BASED ON 15 ENCOUNTERS: 3 FACULTY EACH RATED THE SAME 5 ENCOUNTERS

Item	Mean rating (SD) on 3-point scale						Weighted Kappa[a]
	Disrespect	Micro-management	Mistake	Broken rules	Poor teamwork	Overall	
Self-identification	2.7 (0.6)	3 (0)	2.3 (1.2)	2.7 (0.6)	2.3 (0.7)	2.6 (0.6)	0.77
Safe Environment	1 (0)	1 (0)	1 (0)	1 (0)	1 (0)	1 (0)	1.00
Patient Identification	3 (0)	2.3 (1.2)	3 (0)	3 (0)	1 (0)	2.5 (0.9)	0.88
Problem Identification	1.7 (0.6)	2.3 (0.6)	1.7 (0.6)	2.3 (0.6)	2.3 (1.0)	1.8 (0.6)	0.72
Patient Focus	1.7 (0.6)	2.3 (0.6)	2.7 (0.6)	2.3 (0.6)	1 (0)	2.0 (0.8)	0.55
Professional Engagement	1 (0)	1 (0)	1.3 (0.6)	1.3 (0.6)	1.3 (0.6)	1.2 (0.4)	0.65
Role Responsibility	1 (0)	2.3 (0.6)	1.3 (0)	2 (0)	1.3 (0.6)	1.6 (0.6)	0.60
Respectful Communication	2 (0)	2.3 (0.6)	3 (0)	2.3 (0.6)	1.7 (0.6)	2.3 (0.6)	0.76
Body Language	2 (1)	2 (0)	n/a[b]	2.3 (0.6)	2 (0)	2.1 (0.5)	0.74
Global Score	2 (0)	2 (0)	2 (0)	2.3 (0.6)	1.3 (0.6)	1.9 (0.5)	0.71

[a] Weighted Kappa based on two author raters
[b] n/a This was a telephone case so body language was not assessed

C. Response process

Interrater reliability (IRR): Weighted kappa for individual items, based on two (author) raters, ranged from 0.55-1.0; see Table 1. Items such as "Patient focus" and "Role responsibility" had more discordance. Post-rating conversations illuminated some of the reasons for lack of concordance. For example, if a student mentioned patient care being a priority during the conversation, there was disagreement among author raters (HD, SM) about whether that constituted patient focus since the student was not referring to the specific patient involved in the case. This disagreement was true of faculty users as well. Faculty users also disagreed on scoring "Professional engagement": they were not sure how to rate a student who casually noted that a colleague might have expertise to help a given problem versus explicitly soliciting the colleague's expertise and input about handling a situation. Lastly discrepancies in rating "Role responsibility" were usually due to students suggesting possible resolutions to a situation but not clarifying expectations nor definitively stating follow up plans. All interrater discrepancies were within one scoring level of each other. While faculty users agreed that the tool was easy to utilize, all suggested it would be helpful for future faculty to rate a sample video or two to feel comfortable knowing where to locate the behaviors on the form, the different levels of behavior, and to get a sense of the timing, before filling out the form in real time.

D. Feasibility, utility and consequences validity evidence

The three faculty users who piloted the tool all agreed that it provided guidance for giving feedback on specific behaviors and focusing on the competencies that were critical to resolve difficult interprofessional communication. They appreciated the ability to show students what behaviors had improved over the course of the encounter and specifically identifying facilitating and hindering behaviors.

In terms of utility, the consistent feedback that faculty experts would provide to the student was that it was important throughout the entire conversation to be very specific and to do the repeat-back portion of the SBAR mnemonic to make sure that both parties were in agreement about the next steps. Additionally, the three faculty users made a total of 41 free-text comments regarding feedback they would give to students. Of these, 30 were related to the behaviors on the form. The most common feedback topics were about body language (10 comments), respectful communication (9), problem identification (4), patient identification (3), creating a safe environment (2), roles and responsibilities (1) and professional engagement (1). Of those comments that did not map to the form, the most common concerned a student's apparent level of confidence, their tone or manner of speech, and how a change in approach either did or might have improved the SC response to the conflict. Different faculty users tended to focus on different areas. For example, one faculty user focused on confidence (5/16 of their comments) while another focused on body language and nonverbal communication (4/9 comments).

Faculty users noted that the tool prompted them to give feedback specifically on non-verbal communication that did or did not inspire confidence. For example, one faculty member said "The hesitant speech, the lack of eye contact, how they present to someone. It doesn't give you the impression they [the student] know what they're talking about." Another faculty member commented "I'd tell her [the student] to quit playing with her hair, use complete sentences, and not use "uh" so the doctor listens to you."

Faculty commented that the tool was easy to use, short, and provided behaviorally-based anchors upon which to provide feedback. Because this was a formative exercise faculty felt they would want to give the student both verbal feedback and a copy of what they had written on the tool itself.

Finally, the faculty users stated that a novel and useful aspect of the tool was the ability to identify both the level of performance a student displayed at the beginning of an encounter (with the check mark) and where she was after timing out, processing peer feedback, and re-attempting the scenario (indicated with an asterisk). The quick visual provided a stimulus for faculty to identify what behaviors changed, how specific language or non-verbal communication improved the exchange, and where there was room for improvement.

Faculty users commented that the tool worked very well for formative feedback, providing clear descriptions of both verbal and nonverbal behaviors that facilitated conflict resolution. They cited the anchoring behaviors related to body language and respectful communication as being examples of very specific feedback that could be given to students to help them improve their communication skills. An additional theme was that documenting changes in behavior after peer feedback was beneficial to students' self-efficacy, demonstrating to students that they had the ability to quickly improve their skills.

V.   DISCUSSION

This study reports on the development and piloting of a formative feedback tool to assess nursing students' ability to successfully navigate challenging professional conversations with a standardized colleague. Content experts and faculty users agreed that the items were important and relevant; faculty users reported that the tool was easy to use and would facilitate formative feedback to students. The moderate interrater reliability was acceptable for a formative assessment.

A.   <u>Content validity</u>

IPE experts felt that the student's confidence in approaching the conversation or making a recommendation was less important for successful communication and difficult to capture on a behaviorally anchored scale, so the item was removed. However, faculty users' free text comments indicated that the confidence with which a student approached a given situation was an important area on which to give feedback. This disagreement offers several areas of exploration for future curricular development. For example, should the introductory curriculum include a section on how to appear confident and why it matters in these situations? Is confidence a learned behavior and therefore able to be taught? Lastly, what is the best measure for evaluating "confidence" in this setting?

Group-level results also can help guide curricular improvements. Group-level deficits on key elements of a having a critical conversation such as moving to a safe space, a behavior that was universally not performed, are clearly opportunities for teaching.

Students appeared especially challenged by the peer-to-peer case. While this may have been due to the nature of the case, it suggests that it is as difficult to have a difficult conversation with a peer as it is with a superior. It may be easier for students to apply the difficult conversations framework in the

context of cases with clear-cut guidelines (e.g. mistakes, broken rules) than when interpersonal relationships are at the heart of the conflict. Given the small number of observations, these are hypotheses for future exploration.

B. Feasibility and utility validity evidence

Faculty users had different interpretations of some behavioral ratings. A rater training session, practicing using the tool by watching a few videos in a group setting to discuss expectations/behavior ratings could be useful to reach agreement. Such training would also highlight how useful real time, behaviorally based feedback can be in these charged situations. One faculty member stated her concluding feedback to the student would be "We can't fix what [the colleague] is doing so we're concentrating on your behavior. This [feedback] shows when you change *your* approach you get a different response."

C. Limitations

This was a single-center study. The workshop format was unique in that it used standardized colleagues with whom to have these challenging conversations; not all institutions have access to faculty with extensive experience in training standardized patients who could train others to effectively portray standardized colleagues. The tool was developed for novice nursing students without substantial clinical exposure; its utility may not be generalizable to other settings. Development of the tool and its initial pilot were accomplished with video recordings and not in the classroom. The pace at which one fills out the form may be somewhat different in the classroom as time-outs may allow for additional behaviors to be noted or comments made. Finally, validity evidence was based on a convenience sampling of a small number of encounters and may not be generalizable.

D. **Future directions**

The interprofessional core competencies used as the basis for this observational tool are applicable to multiple professions. Consequently, this tool may be useful in similar cases for other health professional students. This tool was developed for formative use. Consequently it will be critical to demonstrate if this tool could be used in real time, direct observation settings to provide immediate formative feedback on interprofessional communication. Further, this tool is not intended for high stakes examinations or grading. There is currently no summative tool that could serve this purpose. Thus this tool could be modified and validated for use in a higher-stakes summative setting.

VI. CONCLUSIONS

Clear and respectful interprofessional communication is critical for patient care, particularly when health professionals disagree. This study provides initial validity evidence for a formative feedback tool to enhance nursing students' ability to navigate challenging interprofessional conflicts. This type of feedback tool could be useful for learners in a variety of health professions undergoing similar training around challenging conversations.

APPENDIX

TABLE III: BRIEF SYNOPSIS OF DIFFICULT CONVERSATIONS CASES

Difficult Conversation Content	Challenging Case Objectives
Mistakes (Physician prescribes the wrong medication)	1. Discuss directly an incident in which a physician made a mistake 2. Demonstrate the ability to state the situation, background, assessment and response
Broken Rules (Physician examines contact isolation patient without required equipment)	1. Discuss directly an incident in which a physician demonstrated broken rules 2. Demonstrate the ability to negotiate a difficult conversation by using behaviors such as identifying a problematic issue rather than attacking the person involved, identifying areas of compromise etc.
Disrespect (Physician challenges a nursing student question about policy)	1. Discuss directly an incident in which a physician demonstrated disrespect for a student health professional 2. Demonstrate the ability to negotiate a difficult conversation by using constructive behavioral strategies (examples: identifying a problematic issue rather than attacking the person involved, identifying areas of compromise)
Micromanagement (Intern rudely tells nursing student how to prevent pressure ulcer)	1. Discuss directly an incident which involves micromanagement 2. Demonstrate the ability to state the situation, background, assessment and response
Poor teamwork (Medical student takes individual credit for the work of interprofessional team)	1. Discuss with another health professions student their poor teamwork 2. Negotiate the difficult conversation using behaviors that will facilitate future teamwork such as providing concrete examples of poor behavior, identifying the consequences of the behavior and suggesting alternative strategies

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