

Developing an Asynchronous IPE Event Using Interprofessional Professionalism Collaborative Videos

Matthew Henry, PhD; Amy Morris, PhD; Teri Stumbo, MS, PT, PhD; Julie Ronnebaum, MPT, DPT, PhD; Leslie Wimsatt, PhD
Des Moines University • 3200 Grand Ave • Des Moines, IA 50312

BACKGROUND & PROJECT AIM

- Offering a meaningful Interprofessional Education (IPE) event can be challenged by the number of professions and facilities.
- Hybrid instructional design approaches hold promise in addressing such challenges, but research in IPE settings remains limited.
- Proof-of-concept experiences are needed to explore new ways of delivering meaningful learning experiences and competency assessments.

Project Aim: Develop and implement an IPE event that focused on the observation and practice of competencies while using a flexible, asynchronous format that allowed for exposure to a broad set of health professionals in a video offered by the **Interprofessional Professionalism Collaborative (IPC)** in order for students to meet the following learning goals...

- Use interprofessional communication skills during a team-based experience.
- Apply interprofessional principles in students' respective setting.

PROJECT METHODS

Setting: A required Medical Pharmacology course

Participants: 313 enrolled students from three different programs (Doctor of Osteopathic Medicine, DO; Doctor of Podiatric Medicine, DPM; Physician Assistant, PA)

Program	Number of Participants
DO	211
DPM	50
PA	52
Total	313

Analysis of Participant Data: Assessment data were deidentified and aggregated characterizing both the findings of the groups and the perceptions of the participants on their learning gains.

Instructional Resource: Videos that depict exemplary and substandard reenactments of interprofessional interactions that can be observed and assessed, as well as, included representation of health professionals different from the participating students.



<http://www.interprofessionalprofessionalism.org/>

The mission of the IPC is "to advance interprofessional professionalism". The IPC offers an educational resource that is freely available to health professional educators for the measure of professionalism behaviors using video-based tutorials and scenarios depicting encounters across the health care team.

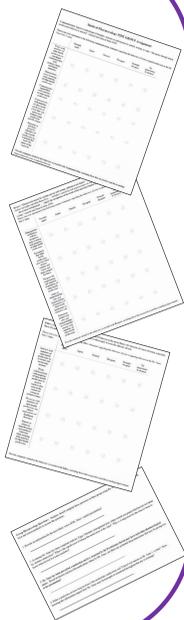
Assessments Implemented:

Observational assessment of video case(s):

- Extrapolated items from pre-existing IPA rubric⁴
- Included statements re: communication and interprofessional interactions observed
- Likert-type response scales coded 1=poor to 5=excellent
- Critical thinking pharmacology questions were included for group work

Pre/post student self-assessments:

- Derived from two-pre-existing, validated assessment instruments^{1,3}
- Targeted three IP communication skill areas
- Post-assessment also captured text-based assessment of the learning activity
- Likert-type response scales coded 1=poor to 5=excellent



EVENT LOGISTICS..The Pharmacology IPE (PIPE)

Team Membership: IP teams consisted of 6-7 assigned students

- Multiple DO students
- At least 1 PA and 1 DPM student

Team Roles: Each group selected its own "scheduler" and "recorder" to handle the following responsibilities:

- Scheduler: Coordinated meeting times to assure robust team member attendance
- Recorder: Collected/submitted team responses to assessment questions

Team Scheduling: Student teams self-determined whether they would meet "live" or "virtually"

Assignment Details:

- Student groups asked to "follow" one profession during a brief clinically related video
 - "Video #3: The Case of Mr. Jones Part II"²
- Student groups used an assessment tool to observationally assess the exemplary and substandard behaviors exhibited by the **pharmacist, physician, psychologist and nurse** managing a patient with signs of a medication overdose
- Students observed, identified and practiced interprofessional skills before/after the video observation and during the post-video discussions

Image from the IPC "Video #3: The Case of Mr. Jones Part II" with the physician, pharmacist, and nurse.
<http://www.interprofessionalprofessionalism.org/toolkit.html>



- Individuals and student teams engaged in the following activities before/after viewing the video encounter:

- Individual student evaluation of the communication and interpersonal interactions demonstrated by the assigned health professional in the video
- Team review and submission of answers to specific pharmacology questions regarding the medication overdose
- Individual student self-assessment of three IP communication skill areas

RESULTS

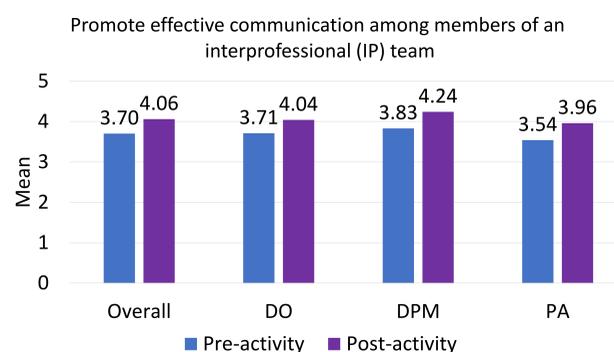


Figure 1. Comparison of the overall, DO, DPM, and PA mean scores for the promote effective communication statement.

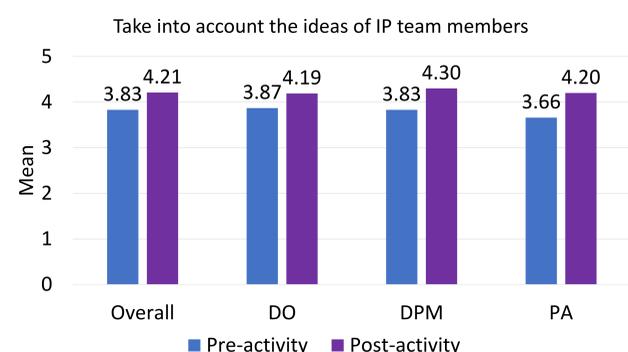


Figure 2. Comparison of the overall, DO, DPM, and PA mean scores for the 'take into account the ideas of team members' statement.

PROJECT FINDINGS

- All students reported improvement in knowledge of IP roles and responsibilities, respect for team member perspectives and personal communication skill development.
- Videos depicting health professional interactions proved essential to broaden student exposure to different professions while also providing an opportunity to work together in teams.
- Offering video-based IPE experiences with a live vs. virtual option increased flexibility for student participation
- Findings indicate promise for replication at institutions interested in expanding IPE offerings while minimizing the administrative burden typically associated with the delivery of IPE

REFERENCES

- MacDonald, C., Archibald, D., Trumppower, D., Casimiro, L., Cragg, B., & Jelly, W. (2010). Designing and operationalizing a toolkit of bilingual interprofessional education assessment instruments. *Journal of Research in Interprofessional Practice and Education*, 1(3). DOI: <http://dx.doi.org/10.22230/jripe.2010v1n3a36>
- Interprofessional Professionalism Collaborators. (2016). *Interprofessional Professionalism Behaviors*. Alexandria, VA: Interprofessional Professionalism Collaborative. <http://www.interprofessionalprofessionalism.org/>
- Schmitz, C. C., Radosevich, D. M., Jardine, P., MacDonald, C. J., Trumppower, D., & Archibald, D. (2017). The Interprofessional Collaborative Competency Attainment Survey (ICCAS): A replication validation study. *Journal of interprofessional care*, 31(1), 28–34. <https://doi.org/10.1080/13561820.2016.1233096>
- Frost, J. S., Hammer, D. P., Nunez, L. M., Adams, J. L., Chesluk, B., Grus, C., Harvison, N., McGuinn, K., Mortensen, L., Nishimoto, J. H., Palatta, A., Richmond, M., Ross, E. J., Tegzes, J., Ruffin, A. L., & Bentley, J. P. (2019). The intersection of professionalism and interprofessional care: development and initial testing of the interprofessional professionalism assessment (IPA). *Journal of interprofessional care*, 33(1), 102–115. <https://doi.org/10.1080/13561820.2018.1515733>

*Des Moines University was granted permission by the IPC to use materials for teaching and scholarly activity on June 23, 2020. Permission notification available upon request.