

Using an Interactive Module to Teach Role and Responsibility Competencies

Libby Moberg, Medical Student, Class of 2023

Liliana Bronner, MHSA, MBA

Furquan Khattak, MD

Neil Kalsi, MD

Abbey Fingeret, MD, MHPTT, FACS

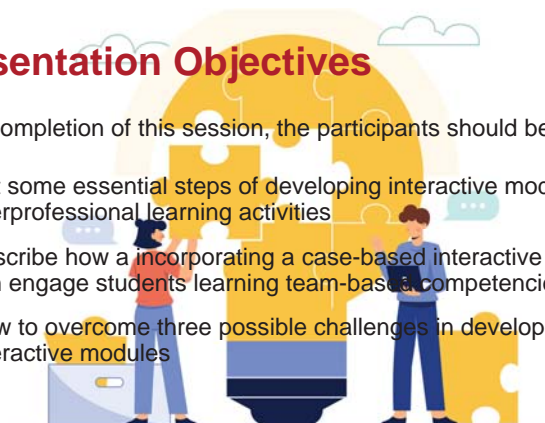


To assure the highest quality continuing education activities free from commercial bias, all persons involved in the development and presentation of this session signed a declaration disclosing they have no actual or potential conflict of interest.

Presentation Objectives

Upon completion of this session, the participants should be able to:

1. List some essential steps of developing interactive modules for interprofessional learning activities
2. Describe how incorporating a case-based interactive approach can engage students learning team-based competencies
3. How to overcome three possible challenges in developing interactive modules





Core Competencies

Roles and Responsibilities (module)

Use the knowledge of one's own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of populations.

- **RR3.** Engage diverse professionals who complement one's own professional expertise, as well as associated resources, to develop strategies to meet specific health and health care needs of patients and populations.
- **RR4.** Explain the roles and responsibilities of other providers and how the team works together to provide care, promote health, and prevent disease.



Interactive Training eModules

- Course building block
- Teach a specific topic or skill
- Incorporates interactive elements on each slide



Benefits of eModules



Benefits

- Self-learning
- Engaging and meaningful
- Gain real life perspectives
- Non-intrusive assessment
- Increase comprehension & retention
- Sharpen critical thinking and analytic skills

Steps in Developing an eModule



Add Interactive Elements

Add Digital Storytelling

Include Videos

Devise branching scenarios

What You Will Learn

Upon successful completion of this learning module:

- ✓ Recognize the role of interprofessional healthcare team members in the screening, evaluation, and management of an acute myocardial infarction
- ✓ Recognize the evaluation of a myocardial infarction, including presentations, tests, and procedures
- ✓ Describe the management of myocardial infarction

Case Presentation

100°F
150/90 mm Hg
RR 22/min
HR 70
O2 sat 92% on room air

Menu

- Case Presentation
- Course Objectives
- The Emergency Room
- The Catheterization Laboratory
- The Catheterization Laboratory
- Interferential Cardiology
- Catheterization Laboratory ...
- Invasive Cardiology: Technic...
- Review Question
- The Catheterization Laborat...
- The Operating Room
- The Operating Room
- Clinical Professional
- Cardiothoracic Surgeon
- Review Question
- The Operating Room
- Pre-Operative and Outpatien...
- Post-Operative and Outpatie...
- Cardiac Sonographer
- Cardiac Rehabilitation
- Primary Care Physician
- Review Question
- Outpatient Case

Menu

- Case Presentation
- Course Objectives
- The Emergency Room
- The Catheterization Laboratory
 - The Catheterization Laboratory
 - Interventional Cardiology
 - Catheterization Laboratory
 - Intensive Cardiology Technicians
- Review Question
- The Catheterization Laboratory
- The Operating Room
 - Clinical Perfusionist
 - Cardiothoracic Surgeon
- Review Question
- The Operating Room
- Post-Operative and Outpatient
 - Cardiac Sonographer
 - Cardiac Rehabilitation
 - Primary Care Physician
- Review Question
- Outpatient Care

What You Will Learn

Upon successful completion of this learning module:

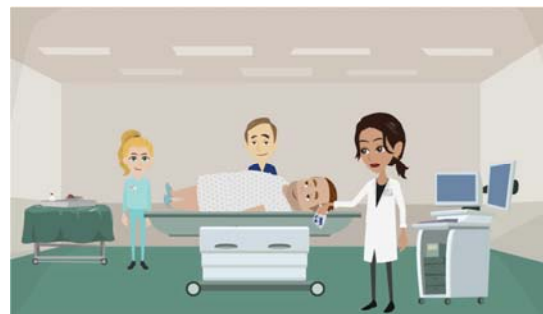
- ✓ Recognize the role of interprofessional healthcare team members in the screening, evaluation, and management of an acute myocardial infarction
- ✓ Recognize the evaluation of a myocardial infarction, including presentations, tests, and procedures
- ✓ Describe the management of myocardial infarction

Case Presentation

Emergency Room Scenes



Cath Lab Scene



Operating Room Scene



Post Operative & Outpatient Scenes



Pop-up Windows





Show Sample Clips of eModule Here

Student Assessment



- Student attitudes measured
- In module review questions assess the management and evaluation of MI, including presentation, tests, and understanding of procedures performed

Overcoming Challenges



Creating a timeline

Storyboarding

Background research



Acknowledgements

Collaborators: Special thanks to all the collaborators that made this project possible (listed in alphabetical order)



Amber Brown Kiebler, MD
Internal Medicine and Pediatrics



Emily Cates, MS, CEP
Clinical Exercise Physiologist



Amy Cutright, MD
Emergency Medicine Physician



Lance Fristoe, CCP
Clinical Perfusionist



Elizabeth Graham, BSN, RN
Cardiac Cath Lab



Richard Dillon Heckendorn, RTR
Invasive Cardiology Technician



Michael J Moulton, MD, FACS
Cardiothoracic Surgeon



Joan Olson, RDCS, RVT, FASE
Cardiac Sonographer



Poonam Velagapudi, MD, MS, FACC, FSCAI
Interventional Cardiologist

UNMC eLearning Lab Staff

- Peggy Moore, MEd - Director
- Stephanie Langel, Instructional Designer
- Tuggen Even, MEd - Instructional Technologist

UNMC Medical Student Peer Reviewer

- Morgan Harris, class of 2022



Sources

Websites:

- IPEC Interprofessional Education Collaborative

- Core Competencies, 2016 update:

<https://nebula.wsimg.com/2f68a39520b03336b41038c3704974737?AccessKeyId=DC06780E69ED19E2B3A5&disposition=0&alloworigin=1>

Articles:

- Danielson, J., Moore, M., O'Connor, S., Kaplan, E., Manookin, K., Kim, A., & McDonough, K. (2015). Coordinating care across settings: roles and responsibilities in the primary care clinic (IPE training module for students). *MedEdPORTAL*, 11.
- Johnson, E. O., Charchantli, A. V., & Troupis, T. G. (2012). Modernization of an anatomy class: From conceptualization to implementation. A case for integrated multimodal-multidisciplinary teaching. *Anatomical Sciences Education*, 5(6), 354-366.
- Lumague, M., Morgan, A., Mak, D., Hanna, M., Kwong, J., Cameron, C., ... & Sinclair, L. (2006). Interprofessional education: the student perspective. *Journal of Interprofessional Care*, 20(3), 246-253.
- Moreno, R., & Mayer, R. (2007). Interactive multimodal learning environments. *Educational Psychology Review*, 19(3), 309-326.
- Ohtake, P. J., Lyons, A., Glogowski, M., Stellrecht, E., Aronoff, N., Grabowski, J., & Zafron, M. L. (2018). Using an interprofessional flipped classroom educational strategy for developing evidence-based practice knowledge and skills. *Journal of Interprofessional Education & Practice*, 11, 7-11.
- Slusser, M. M., Padden-Dennead, M. L., McGinnis, P. Q., & Galantino, M. L. (2018). Using a Common Reading as an IPE strategy. *Journal of Interprofessional Education & Practice*, 12, 48-50.
- Soubra, L., Badr, S. B., Zahran, E. M., & Aboul-Seoud, M. (2018). Effect of interprofessional education on role clarification and patient care planning by health professions students. *Health Professions Education*, 4(4), 317-328.
- Willhaus, J. (2010). Interdepartmental simulation collaboration in academia: Exploring partnerships with other disciplines. *Clinical Simulation in Nursing*, 6(6), e231-e232.



Libby Moberg, Medical Student, Class of 2023

libby.moberg@unmc.edu

Liliana Bronner, MHSA, MBA

lbronner@unmc.edu

Abbey Fingeret, MD, MHPTT, FACS

abbey.fingeret@unmc.edu

Furquan Khattak, MD

fkhattak@unmc.edu

Neil Kalsi, MD

neil.kalsi@unmc.edu



 University of Nebraska
Medical Center

