Using an e-Learning Course to Enhance Student Patient Care Competency Within Interprofessional Settings

Christine Pintz, PhD, FNP-BC, FAANP, Laurie Posey, EdD, Pat Farmer DNP, FNP-BC, and Pearl Zhou PhD, RN

Nursing Education Research Conference, April 20, 2018, Washington, DC

GW Nursing

Using an e-Learning Course to Enhance Student Patient Care Competency Within Interprofessional Settings

Learning Objectives:

This session will prepare participants to:

1. Describe the design and evaluation of an e-Learning module on interprofessional care of people with multiple chronic conditions
2. Discuss the evaluation findings of the Interprofessional Care of People with Multiple Chronic Conditions eLearning module.
3. Access and adopt the Interprofessional Care of People with Multimedia Chronic Conditions within their own nursing curriculum.

GW Nursing

Using an e-Learning Course to Enhance Student Patient Care Competency Within Interprofessional Settings

The project described was supported by Grant Number D09HP26940 from the Health Resources and Services Administration (HRSA), an operating division of the U.S. Department of Health and Human Services. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Health Resources and Services Administration or the U.S. Department of Health and Human Services.

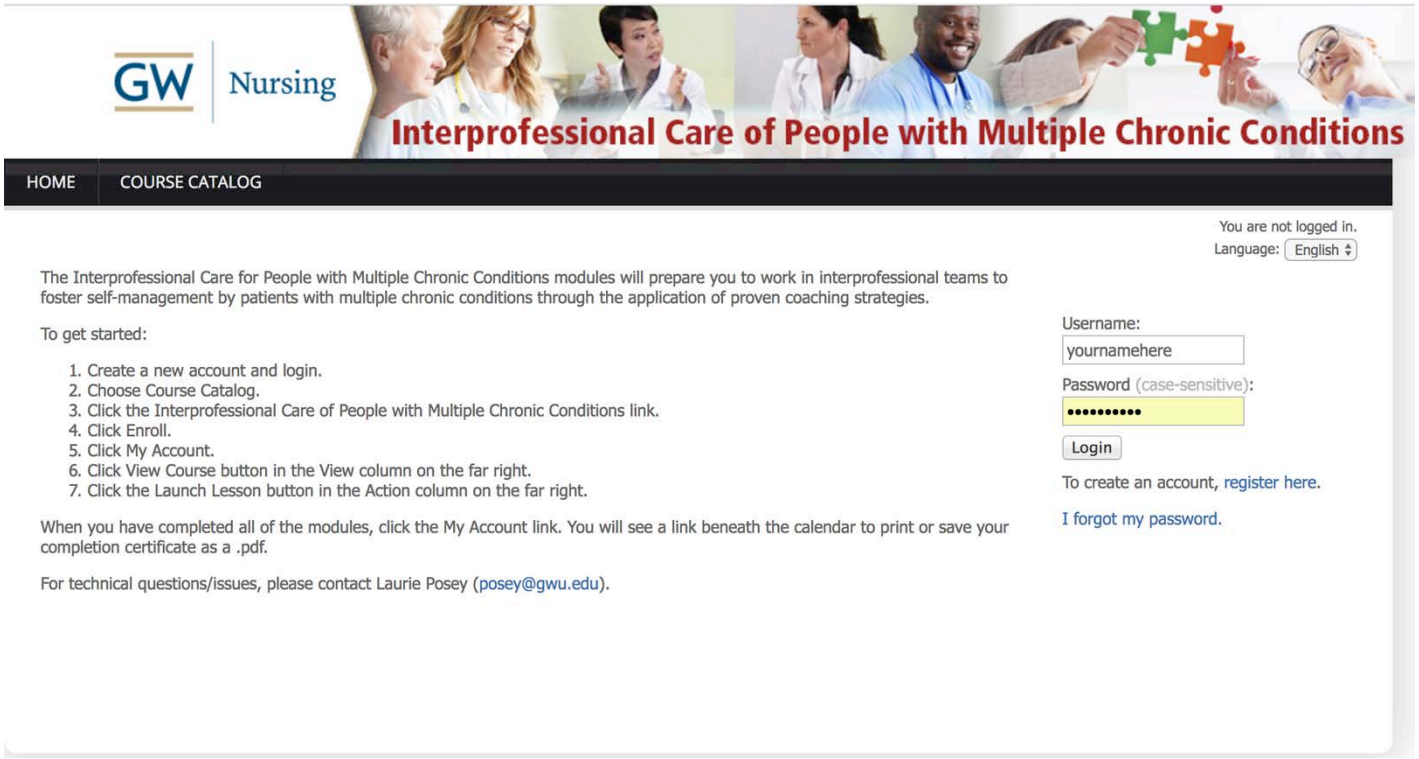
GW Nursing

The Interprofessional Care of People with Multiple Chronic Conditions eLearning Course

- Uses the ***Chronic Care Model*** (Wagner, et al, 2001) and ***Interprofessional Education Collaborative*** (IPEC) competencies (IPEC Expert Panel, 2011) as a framework
- Includes principles of interprofessional collaborative practice and conflict resolution
- Set in a primary care practice
- Focuses on patient and family centered care
- Emphasizes the value of community support services and social determinants of health
- Provides strategies to enhance patient self-management support and shared decision-making

GW Nursing

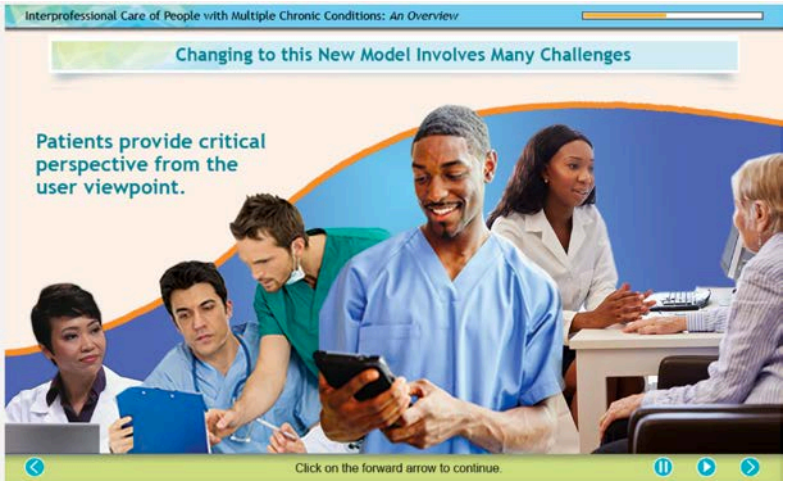
The Interprofessional Care of People with Multiple Chronic Conditions eLearning Course

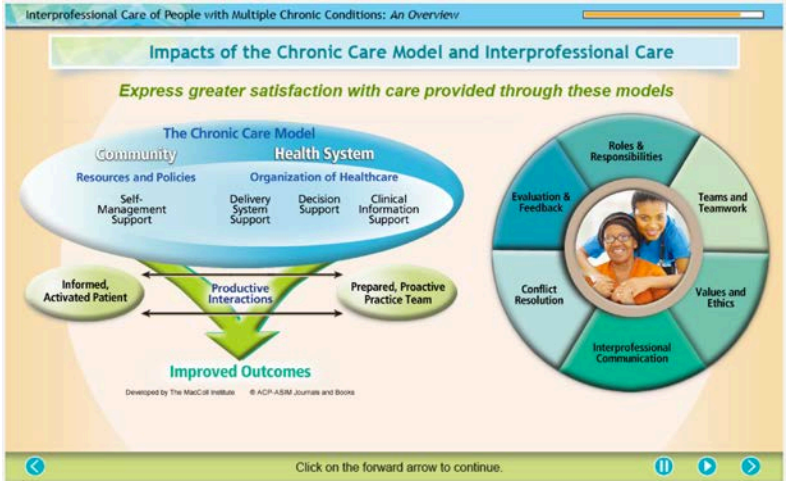


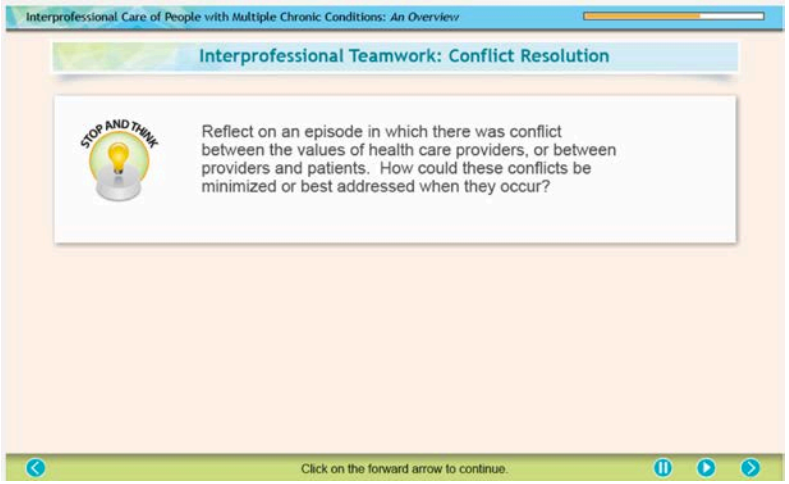
- Open access – available at ipcmcc.gwnursing.org

GW Nursing

Module 1: Overview



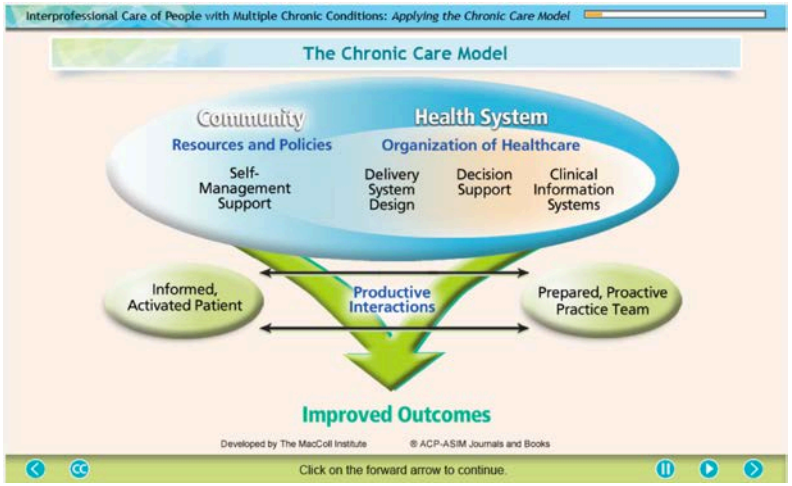


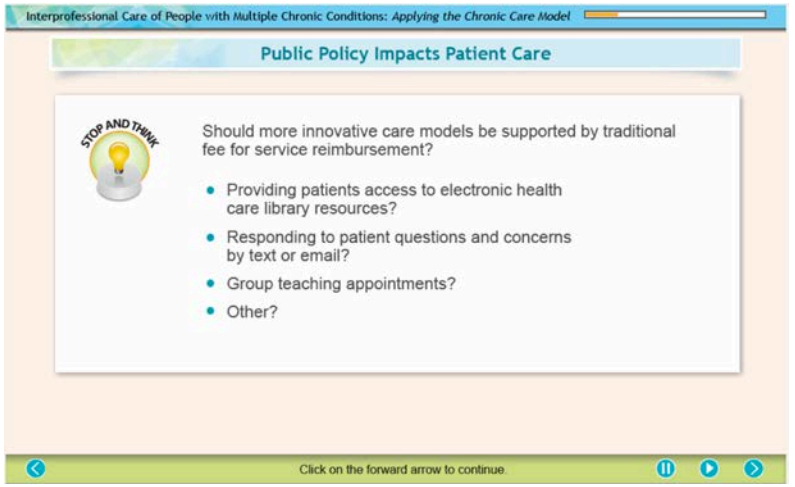


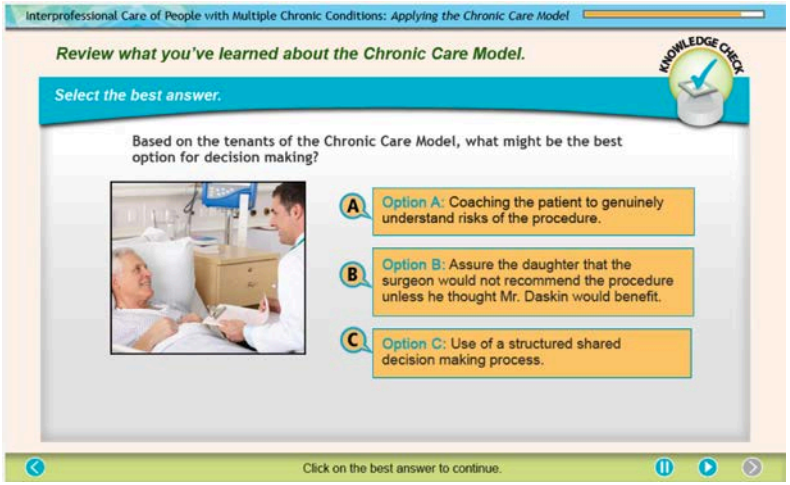
- Provides an overview of the Chronic Care Model and interprofessional practice competencies as a foundation for later modules.
- “Stop and Think” questions prompt reflection (here and in other modules).

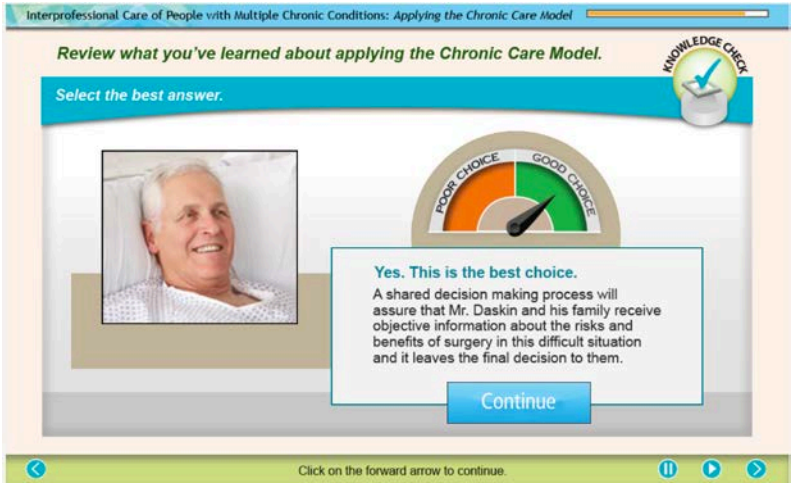
GW Nursing

Module 2: Applying the Chronic Care Model





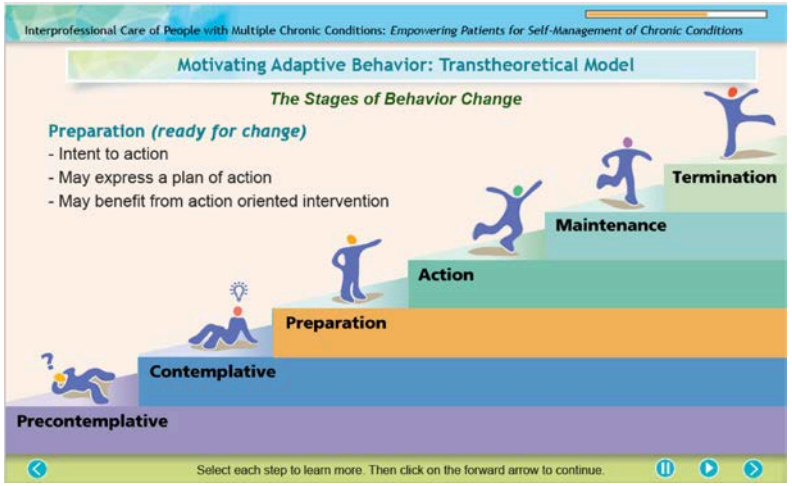


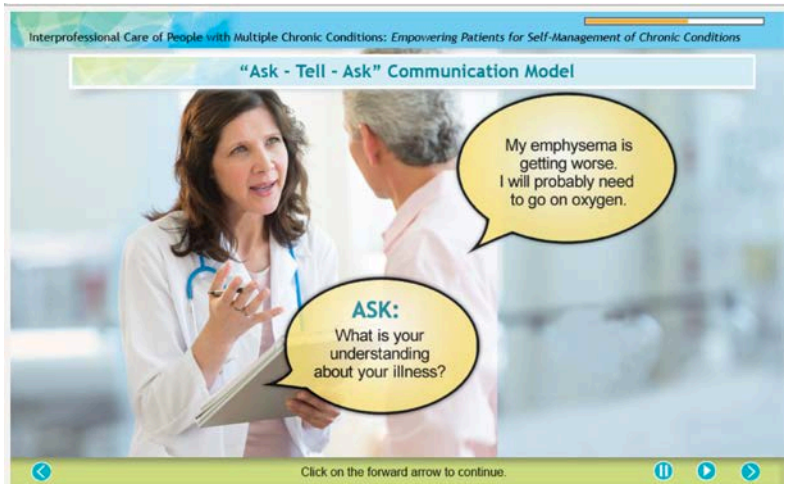


- Takes a detailed look at the Chronic Care Model, with an emphasis on patient and family-centered care.
- Learners apply theoretical knowledge through real-world, scenario-based questions (here and in other modules).

GW Nursing

Module 3: Empowering Patients for Self-Management of Chronic Conditions

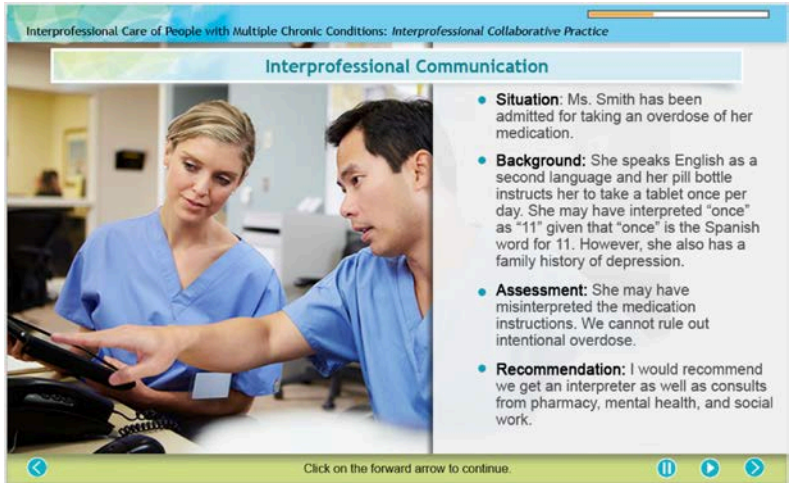


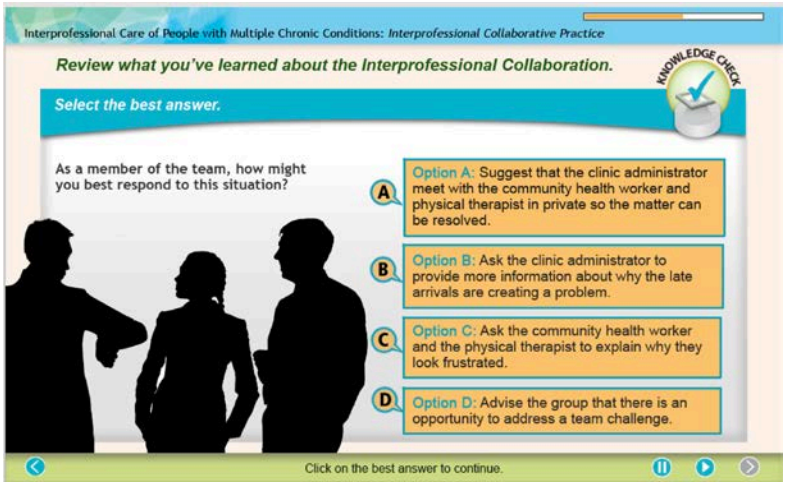


- Explores methods to enhance patient engagement and self-management skills, including strategies to build self-efficacy, use of patient activation measurement tools, and strategies to facilitate behavior change.

GW Nursing

Module 4: Interprofessional Collaborative Practice

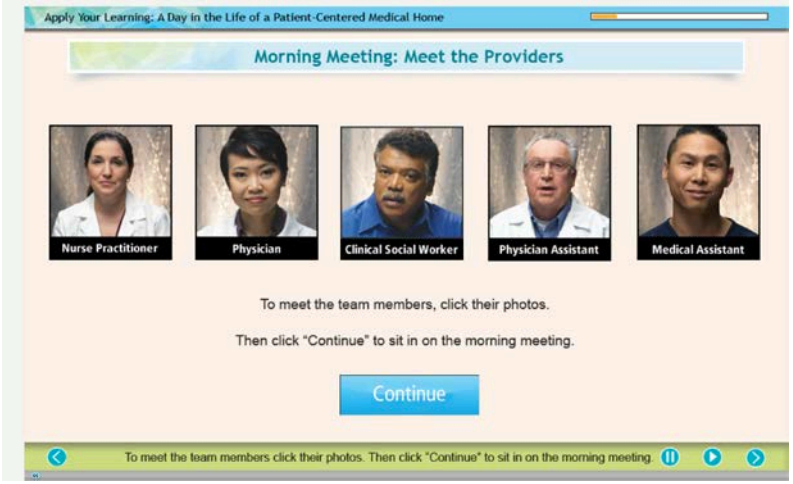


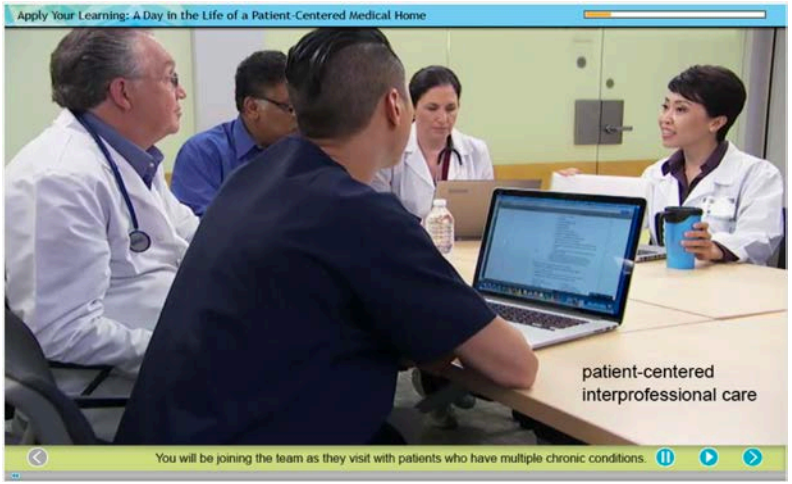


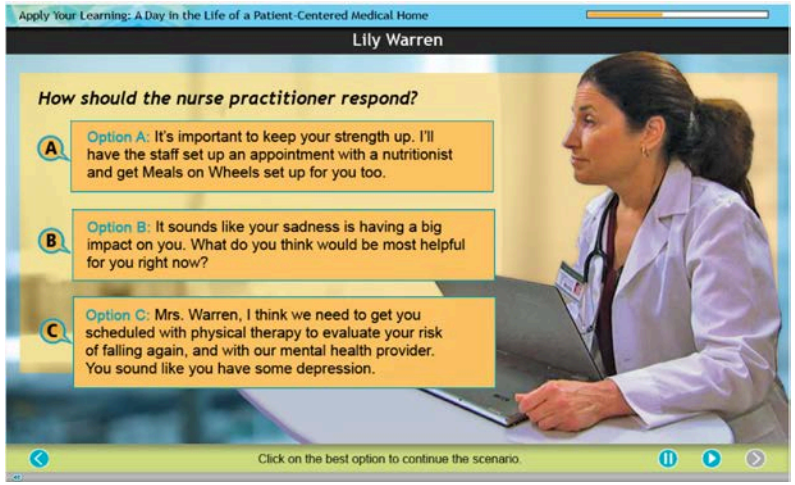
- Explores communication, teamwork and other aspects of interprofessional practice based on Interprofessional Education Collaborative (IPEC) competencies.
- Students learn the value of interprofessional practice for patients with complex chronic medical problems and in the health care system overall.

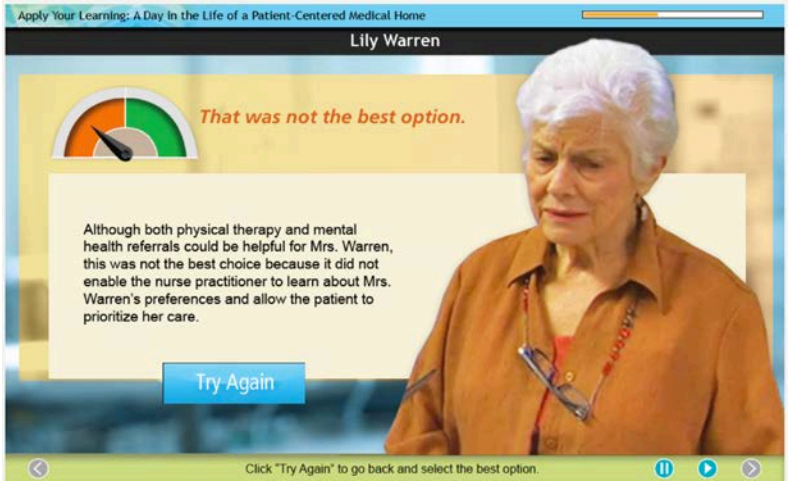
GW Nursing

Apply Your Learning: A Day in the Life of a Patient-Centered Medical Home





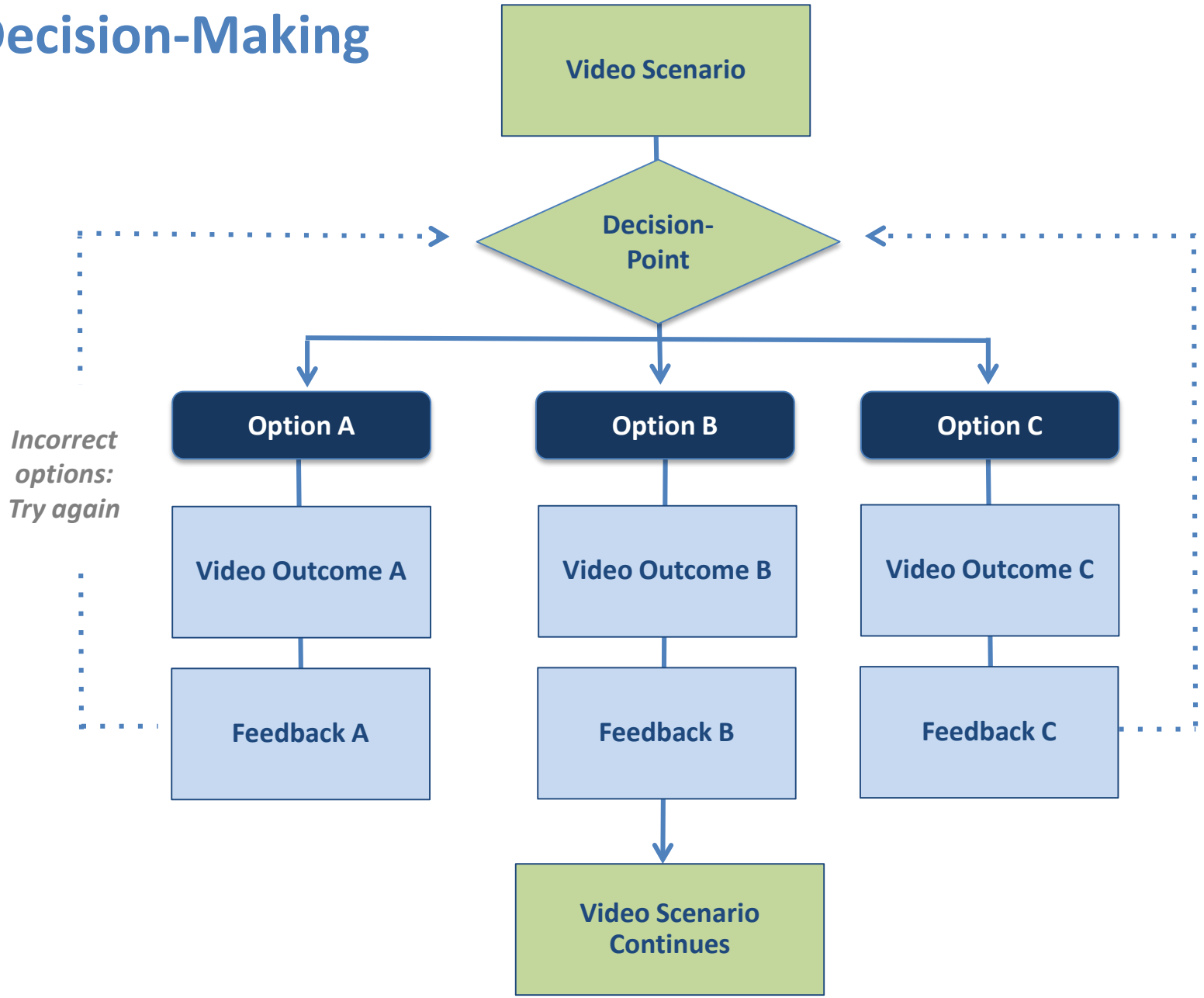




- Video vignettes feature professional actors to create realistic simulated clinical situations
- Learners practice decision making & receive immediate feedback with conditional video outcomes

GW Nursing

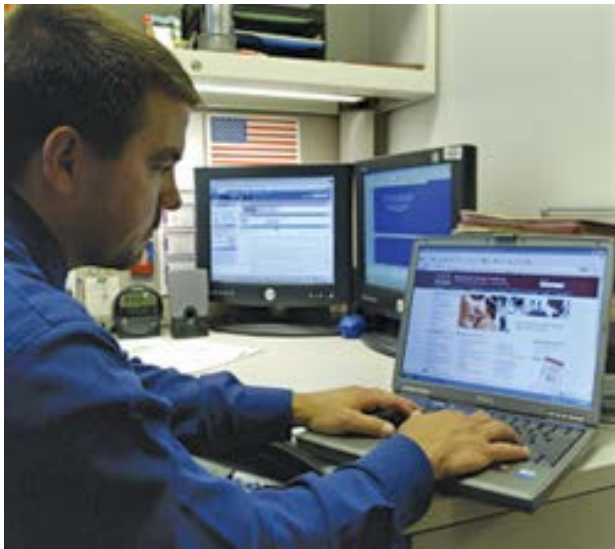
Scenario-based Decision-Making



GW Nursing

Study Aims

- To evaluate nurse practitioner students' satisfaction with the IPCMCC e-Learning module
- To evaluate the IPCMCC e-Learning module on nurse practitioner students' perceived learning



GW Nursing

Methods

- **Setting:** The George Washington University School of Nursing
- **Sample:** 328 primary care NP students enrolled in Advanced Health Assessment (Spring 2016 and 2017)
- **Data Collection:**
  - Short-term outcomes: Pre and post test evaluation of perceived learning, satisfaction and useability.
    - Evaluation completed before and after completing the modules
    - Perceived learning measured on a 5 point Likert-type scale (1 = poor to 5= excellent)
    - Satisfaction/Useability measured on a 5 point Likert-type scale (1= strongly disagree to 5 = strongly agree)
  - Long-term outcomes: Baseline and end of program assessment with the *Readiness for Interprofessional Learning Scale*.

GW Nursing

Findings: Table 1 - Demographic Data

Variables	Mean (SD) or freq (%)
Age in years	32.71 (7.31); range: 22-66
Gender	
• Male	33 (10.1%)
• Female	295 (89.9%)
Years as a RN	6.40 (5.16); range: 1-37
• 1 - 5 years	193 (58.8%)
• >5 years	135 (41.2%)
What area of nursing are you working in currently or just prior to entering the NP program	
• Critical Care	100 (30.5%)
• Medical/surgical	57 (17.4%)
• Outpatient/ambulatory care	22 (6.7%)
• Oncology	21 (6.4%)
• OB/GYN	16 (4.9%)
• Pediatric (include neonatal)	12 (3.7%)
• Public Health	7 (2.1%)
• Nursing homes	5 (1.5%)
• Home Health	3 (.9%)
• Other	85 (25.9%)
Have you had prior experiences working/learning together with other health professional students before entering your current nursing program?	
• Yes	267 (81.4%)
• No	61 (18.6%)

GW Nursing

Findings: Self-Assessed Knowledge

Table 2: Nurse Practitioner students' perceived knowledge about interprofessional care of patients with chronic medical problems

	Pretest Mean (SD)	Posttest Mean (SD)	Paired t; p-value
Applying the Chronic Care Model to clinical practice	2.82 (1.03)	4.02 (0.67)	15.99; p<0.001
Coaching for patient self-management of multiple chronic conditions	3.21 (0.90)	4.02 (0.70)	11.04; p<0.001
Interprofessional collaboration skills	3.83 (0.73)	4.07 (0.70)	3.86; p<0.001

GW Nursing

Findings: Self-Assessed Knowledge

Table 3: Nurse Practitioner students with good or excellent perceived learning

	Pre	Post
Applying the Chronic Care Model to clinical practice	25%	83.3%
Coaching for patient self-management of multiple chronic conditions	39.6%	83.8%
Interprofessional collaboration skills	72.6%	85.5%

GW Nursing

Findings: Satisfaction/Useability of the IPCMCC e-Learning modules

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I think I will be able to directly apply what I learned in these modules to my future clinical practice.	1 (0.4%)	3 (1.3%)	17 (7.5%)	144(63.2%)	63(27.6%)
The information I learned in these modules will improve my competence in caring for people with multiple chronic illnesses.	1 (0.4%)	5 (2.2%)	17 (7.5%)	141 (61.8%)	64(28.1%)
The information I learned in these modules will improve my competence in interprofessional practice.	1 (0.4%)	4 (1.8%)	16 (7.0%)	141 (61.8%)	66(28.9%)
The information I learned in these modules will improve my competence in caring for people with multiple chronic illnesses.	1 (0.4%)	4 (1.8%)	16 (7.0%)	145 (63.6%)	62(27.2%)

GW Nursing

Findings: Satisfaction on IPCMCC e-learning modules

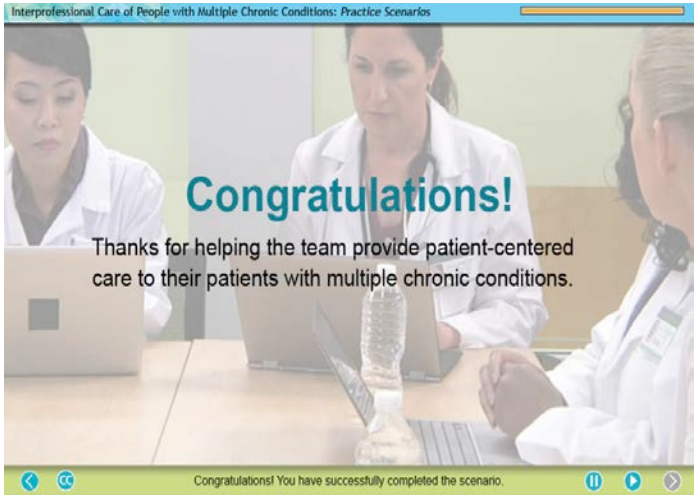
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
These modules were sound, credible and unbiased.	0	1 (0.4%)	14 (6.1%)	143 (62.7%)	70(30.7 %)
The content was presented in a way that helped me learn.	3 (1.3%)	5 (2.2%)	24 (10.5%)	129 (56.6%)	67(29.4 %)
I expect to refer to one or more of the learning modules again.	4 (1.8%)	32 (14.0%)	47 (20.6%)	108 (47.4%)	37(16.2 %)
The modules were just the right length.	5 (2.2%)	32 (14.0%)	55 (24.1%)	104 (45.6%)	32(14.0 %)

GW Nursing

Findings: Qualitative Responses

Video scenarios were the best–liked aspect of the course.

- *I liked the last learning module the best. It was nice to see video examples of health care providers coaching patients, and it was also helpful to 'sit in' on their interdisciplinary team meetings. I will take some of the communication strategies used in this video to use when coaching patients and participating in interdisciplinary team meetings.*
- *The knowledge checks at the end to ensure the learner was taking away the critical points of the module*

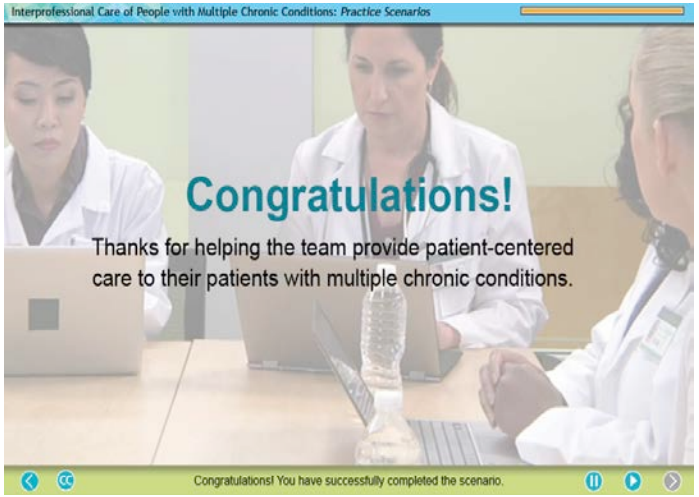


GW Nursing

Findings: Qualitative Responses

Video scenarios were the best–liked aspect of the course.

- *I liked the session where we got to "sit in" on actual patient encounters and decide conversation techniques. This was very helpful to see in person on actual scenarios.*
- *I think I learned a lot from watching the scenarios in the last module. I was able to see how each healthcare provider played an important role in the care of a patient, and how one healthcare provider is never alone in the plan of care. I think this is very beneficial for all of us, as many of us are heading into primary care. It is important to use the resources from our individual practices and work together as a team.*

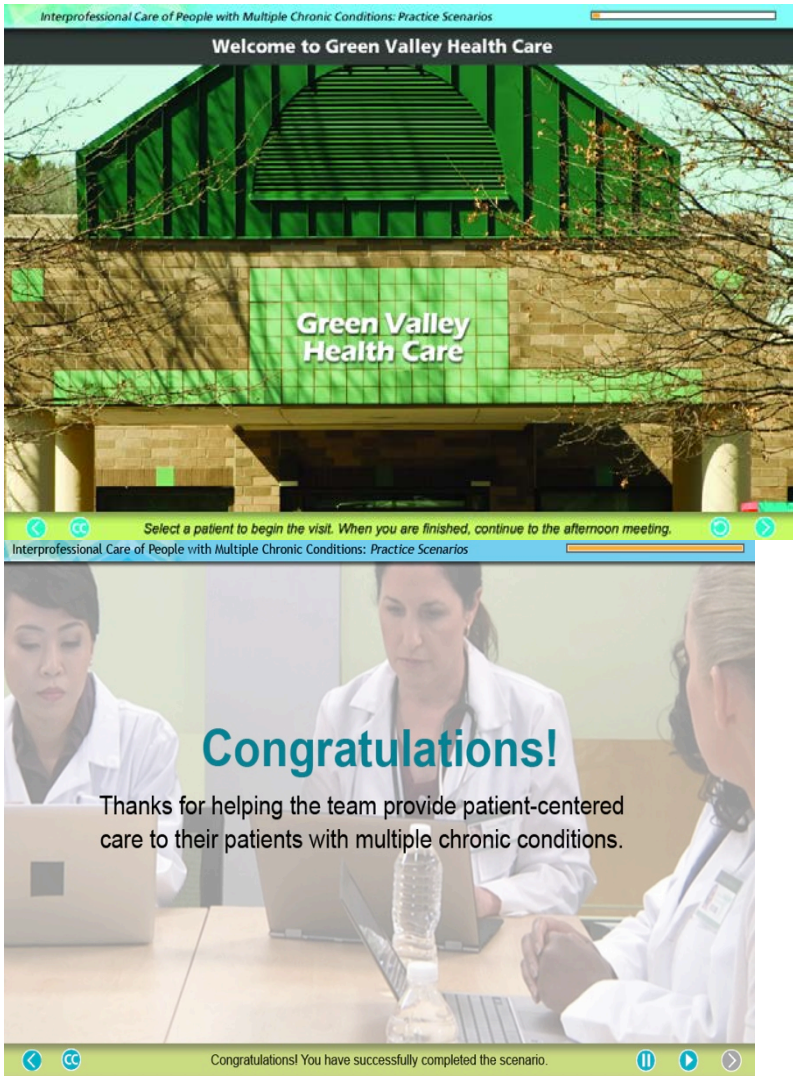


GW Nursing

Findings: Qualitative Responses

What needs improvement?

- The length and technical issues were a problem for some
  - *Super annoying with having to sit through conversations, versus being able to read… In short, it needs a lot of work to accomodate (sic) the fast-paced pattern of learning that this generation is geared toward.*



Conclusions

- Faculty can prepare NP students to care for patients with multiple chronic conditions in interprofessional settings by using this open-access, self-directed e-Learning course.
- Students found the e-Learning modules engaging and interactive, which helped their learning.
- The course may increase the ability of NP graduates to care for patients with chronic illnesses within interprofessional practice settings.

GW Nursing

Questions?