# **Nursing Education Research Conference 2018 (NERC18)**

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

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The care of patients with multiple chronic conditions is becoming a significant factor in the delivery of health care in the U.S. (Orenstein, Nietert, Jenkins & Litvin, 2013). Because of their holistic approach, nurse practitioners (NPs) are uniquely qualified to care for the growing number of these patients, with the majority of NPs working in primary care (Van Vleet & Paradise, 2015). Chronic health conditions must be treated differently than acute or episodic problems, and the best outcomes are achieved through use of health care delivery frameworks that support chronically ill patients (Improving Chronic Illness Care, 2017). Patients with complex health problems benefit from the diverse skills and perspectives of an interprofessional healthcare team (Institute for Healthcare Improvement, 2014).

The Interprofessional Care of Individuals with Multiple Chronic Conditions (IPCMCC) eLearning course is designed to enhance the competency of NP students to support patients in the self-management of their chronic conditions within interprofessional healthcare teams. This highly interactive, open-access course integrates the competencies of the Interprofessional Education Collaborative (IPEC) Expert Panel (2011) with the Chronic Care Model (Wagner, et al, 2001). As we developed this eLearning course, we applied strategies to promote learner engagement and authentic practice. We selected key course topics such as patient engagement in self-care, Motivational Interviewing and other coaching techniques, behavior change facilitation, identification of community and family resources, promoting self-efficacy, and interprofessional teamwork. The content was selected based on studies that identified the characteristics of effective management of multiple chronic conditions (Bodenheimer, & Berry-Millett, 2009; Bodenheimer, T., & Abramowitz, S., 2010; Institute for Healthcare Improvement, 2015; Parehkh, Goodman, Gordon, & Koh, 2011). Throughout the course, real-world examples and scenarios provide the context for learning and contain interactive and reflective exercises. The course concludes with an immersive, video-based practice experience in which learners make decisions, receive feedback and experience consequences as they follow an interdisciplinary team through a day in the life of a patientcentered medical home.

Learners completed pre- and- post evaluation surveys to measure satisfaction and perceived learning with the eLearning course. Responses were rated on a 5-point Likert scale ranging from poor (1) to excellent (5). The pre-and post-test results were as follows: applying the Chronic Care Model to clinical practice, t = -11.67,  $df = 98 \, p < .0001$ , coaching patients for self-management, t = -9.46,  $df = 98 \, p < .0001$ , interprofessional collaboration skills, t = -2.40,  $df = 98 \, p < .0001$ , indicating a significant difference in perceived knowledge between the pre-and post-test. The majority of the learners were satisfied or very satisfied with the modules. Qualitative findings indicate high level of satisfaction with the video scenarios. Results of our evaluation indicate that students found the Interprofessional Care of People with Multiple Chronic Conditions eLearning course to be engaging, informative and applicable to real world practice.

The IPCMCC eLearning Course is freely available for use by educators, students and providers world-wide through an open-access learning management system. We will demonstrate portions of the course and its complementary Instructor Guide for the benefit of faculty who may wish to access and adopt the course within their own curricula.

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## **Keywords:**

Chronic conditions, Interprofessional practice and eLearning

#### References:

Bodenheimer, T. & Berry-Millett, R. (2009). Care management of the patient with complex health care needs. Retrieved from the Center for Excellence in Primary Care, University of California, San Francisco website: http://www.rwjf.org/content/dam/farm/reports/issue\_briefs/2009/rwjf49853/subassets/rwjf49853\_1

Bodenheimer, T., & Abramowitz, S. (2010). Helping patients help themselves: How to implement self-management support. Retrieved from the California HealthCare Foundation website: http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/PDF%20H/PDF%20HelpingPt sHelpThemselvesImplementSelfMgtSupport.pdf

Improving Chronic Illness Care. (2017). Evidence for Better Care: Chronic Care Model Literature. Retrieved January 2017

from: http://www.improvingchroniccare.org/index.php?p=Chronic\_Care\_Model\_Literature&s=64

Institute for Healthcare Improvement. (2014). Team-based care: Optimizing primary care for patients and providers. Retrieved January 2017

from: http://www.ihi.org/communities/blogs/\_layouts/15/ihi/community/blog/itemview.aspx?List=0f316db6-7f8a-430f-a63a-ed7602d1366a&ID=29

Institute for Healthcare Improvement. (2015). Partnering in self-management support: A toolkit for clinicians. Retrieved from the Institute for Healthcare Improvement website: http://www.ihi.org/resources/Pages/Tools/SelfManagementToolkitforPatientsFamilies.aspx

Interprofessional Education Collaborative Expert Panel. (2011). *Core competencies for interprofessional collaborative practice: Report of an expert panel.* Washington, D.C.: Interprofessional Education Collaborative. Retrieved from http://www.aacn.nche.edu/education-resources/ipecreport.pdf

Orenstein, S.M., Nietert, P.J., Jenkins, R.G. & Litvin, C.B. (2013). The prevalence of chronic diseases and multimorbidity in primary care practice: APPRNet Report. *Journal of the American Board of Family Medicine*, *26*, 518-524. doi:10.3122/jabfm.2013.05.130012

Parekh, A., Goodman, R. A., Gordon, C., Koh, H.K., and the HHS Interagency Workgroup on Multiple Chronic Conditions. (2011). Managing multiple chronic conditions: A strategic framework for improving health outcomes and quality of life. *Public Health Reports, 126,* 460–471. Retreived from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3115206/

Van Vleet, A., & Paradise, J. (2015). Tapping Nurse Practitioners to meet rising demand for primary care. Kaiser Family Foundation Issue Brief. Retrieved January 2017 from: <a href="http://kff.org/medicaid/issue-brief/tapping-nurse-practitioners-to-meet-rising-demand-for-primary-care/">http://kff.org/medicaid/issue-brief/tapping-nurse-practitioners-to-meet-rising-demand-for-primary-care/</a>

Wagner, E.H., Austin, B.T., Davis, C., Hindmarsh, M., Schaefer, J. & Bonomi, A. (2001). Improving chronic illness care: Translating evidence into action. *Health Affairs*, *20*, 64-78.

#### **Abstract Summary:**

See and learn about the Interprofessional Care of People with Multiple Chronic Conditions eLearning course, designed to enhance the competency of NP students to support patients in the self-management

of their chronic conditions within interprofessional healthcare teams Evaluation results support the educational value of this highly interactive, open-access course.

## **Content Outline:**

- 1. Need for innovative educational approaches to help students become competent with teambased interprofessional care of patients with multiple chronic conditions
- 2. Description of the development and demonstration of the *Interprofessional Care of People with Multiple Chronic Conditionse*Learning course
  - a. Rich multimedia presentations of the Chronic Care Model and Interprofessional Practice framework
  - b. Embedded, real-world examples and interactive practice activities
  - c. Immersive video-based decision-making following team members through a day in the life of a primary-care medical home
- 3. Evaluation findings
- 4. Accessing and adopting the open-access eLearning course
- 5. Conclusions

First Primary Presenting Author

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**Professional Experience:** Over 20 years experience in developing online courses, educational assessment, and program evaluation. Development and implementation of several eLearning courses. Faculty member for 20 years with extensive experience in the education of nurse practitioner and doctoral level students. Recipient of several teaching awards.

**Author Summary:** Dr. Pintz's research is focused on the use of educational technology and distance education in graduate nursing education, interprofessional education and patient engagement. She has received both the STTI Educational Technology and the Best Practices in Technology Awards. Dr. Pintz was selected for the National Library of Medicine Medical Bioinformatics Program. In addition, she is a fellow of the National Association of Nurse Practitioners and the National Academies of Practice.

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**Professional Experience:** Dr. Laurie Posey has over 24 years of experience designing and developing eLearning programs for academia, government and industry. She received her Doctorate of Education in Distance Education and Instructional Technology in 2007. She is currently an Associate Professor for the George Washington University. She is the Director of the Nursing Education Certificate program and has taught online for the past 7 years. She is the former Director of Instructional Design for the School of Nursing (2013-2016) and Health Sciences Programs (2004-2012).

**Author Summary:** Dr. Laurie Posey is an Associate Professor for the George Washington University School of Nursing. She is the Director of the school's Nursing Education Certificate program, and teaches

online in the areas of Instructional Design, Teaching with Technology, and Knowledge Management. Her research and scholarship focuses on instructional design, eLearning best practices, active learning strategies, collaborative learning, continuous quality improvement, online simulation, and telehealthenabled education.

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