Implementing Project ECHO Complex Care Management:
Using Technology to Support Primary Care Nurses

Authors: **Mary Blankson**, APRN, DNP, FNP-C; **Sarahi Almonte**, BSN-RN, MS; **Katie Lainas**, BS

Problem Statement:

Patients continue to increase in complexity, requiring significant support, education, coaching, coordination, and care management to achieve an improved health status and ultimately self-management. Primary care nurses are key players in caring for patients, but they need ongoing support to:

- Expand their role to include complex care management
- Enhance their content knowledge
- Enhance their leadership identity within the overall care team
- Improve collaboration among both internal and external health care team members

Abstract:

Project ECHO® is a telehealth model of knowledge transfer that connects expert faculty teams with primary care providers. The primary goal of Project ECHO is to improve health care outcomes through case-based learning. It aims to do so by equipping participants with the knowledge and skills needed to care for unique patient populations. While there are several established Project ECHOs specifically addressing the knowledge needs of primary care providers, Project ECHO Complex Care Management (CCM) is one of the first specifically targeting primary care nurses. It is uniquely designed to build nurse leadership and to directly support nurses as they engage in complex care management. A faculty team of multidisciplinary specialists advise the nurses on next steps to manage their patients with complex medical, psychosocial, and behavioral issues.

As part of a larger complex care management initiative at the Community Health Center, Inc. (CHC), Project ECHO Complex Care Management (CCM) was uniquely designed to build nurse leadership skills and experience. The CHC is one agency with 14 different integrated patient-centered primary care sites across the state of Connecticut. These sites provided care for uninsured and underinsured patients. The CHC translated this provider-centric design using the Knowledge To Action framework to a model centered on nurses. Through twice monthly didactics and case presentations, nurses from all over CHC's statewide network connect via videoconference to receive expert advice from a variety of specialists on how to care for their most complex patients. The faculty team is made up of a nurse practitioner and Chief Nursing Officer, a medical provider, behavioral health provider, pharmacist, registered dietician, certified diabetes educator, care management specialist and home-care nurse. The first thirty minutes of a session are focused on didactic education, and the latter 1.5 hours on case presentations by nurses. There is a standard presentation form that was designed to support nurses in organizing the case information as well as the questions they are requesting the faculty to address. Through videoconferencing and case-based learning, the faculty lends real-time support and supports nurses as they address the needs of their complex patients. Nurses are empowered to practice to the top of their license and provide patients with high quality, low cost care. Through case presentations nurses learn valuable care management skills and gain the confidence to develop their roles as leaders on health care teams.

Project ECHO CCM develops nurses as leaders and care managers in the primary care setting. It is an effective tool in training both new and experienced nurses as they transition into primary care roles that include a significant amount of care management. Project ECHO CCM is an important platform for improving nurses' knowledge and self-efficacy and connects every nurse throughout the CHC on a regular basis. It provides them with the chance to learn from one another, creating a knowledge network, and a stronger team dynamic. This technology has the potential to connect nurses without regard to geography, linking teams together to learn from each other, and to share best practices.

Operational data from Project ECHO CCM further demonstrates the impact through case analysis, and also general metrics of the % of nurses who have presented, as well as the number of continuing nurse education credits granted. As of June 2017, 79 cases have been presented, representing 64 discrete patients with 62% of nurses at CHC having had presented at least one case, and 1 nurse having presented ten cases. This number will continue to rise and more and more nurses are likely to full engage in this intervention in the coming year. Topics covered during the didactic portion of Project ECHO CCM have included chronic pain, substance abuse, diabetes, asthma, COPD, self-management goal setting, motivational interviewing and even medical nutrition therapy to name a few. This poster will be updated with the most current operational data to better describe the overall impact and global implications for Project ECHO CCM.

Project ECHO Origins:

"The mission of Project ECHO is to develop the capacity to safely and effectively treat chronic, common, and complex diseases in rural and underserved areas and to monitor outcomes."

—Dr. Sanjeev Arora, University of New Mexico

The Project ECHO Model:

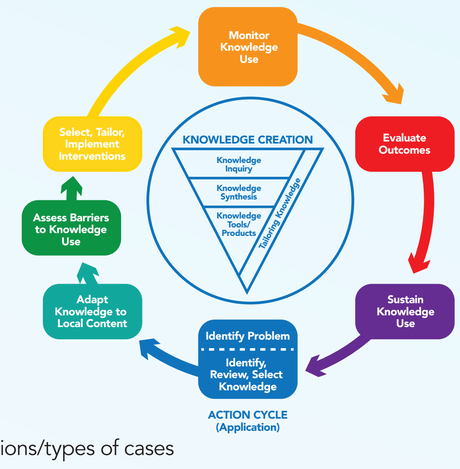
Benefits:

- Increased knowledge and confidence to manage complex chronic conditions in primary care
- Increased patient access to evidence-based treatments
- Increased provider satisfaction and retention
- Reduction in unnecessary imaging and other laboratory services
- Reduction in overuse/misuse of specialty, surgical, and procedural services
- Reduction in inappropriate medication usage

Action Cycle:

Knowledge-to-Action Framework

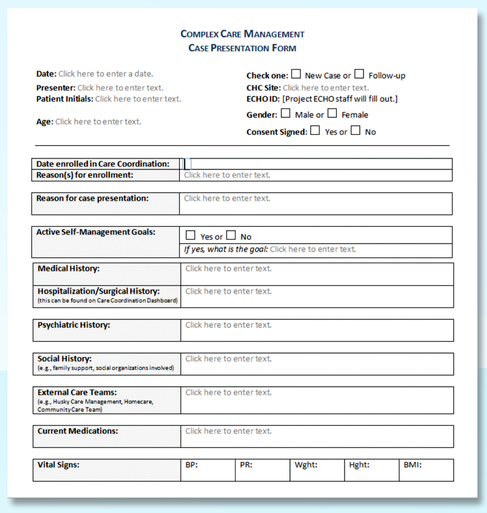
1. **Identify the problem: Nurses need support**
2. **Review and select the knowledge: Project ECHO Model**
3. **Adapt to the local context:**
   a. Provider participants: Nurse participants
   b. Integrate into current CHC Project ECHO programming
4. **Assess barriers:**
   a. Academic training
   b. Lack of job experience
   c. Time
   d. Resources
   e. Geography
5. **Select, tailor, implement:**
   a. Project ECHO CCM: First session on September 24, 2015
6. **Monitor use:**
   a. # of patients enrolled in CCM
   b. # of cases presented
   c. # of nurses presenting
   d. Qualitative evaluation of nurse questions/types of cases
7. **Evaluate outcomes:**
   a. Impact on patient experience/patient outcomes
   b. Impact on nurse/provider and retention/nurse leadership
8. **Sustain knowledge use:**
   a. Faculty development
   b. Quantify visits added or budget neutrality
   c. Savings from retention (both provider and nursing)
   d. Spread model



Project ECHO Complex Care Management:

- **First session: 09/24/15**
- **Duration: 2 hours**
- **Each session: 1 didactic, 2 cases**
- **12 sites**
- **Approximately 35 nurses**
- **Faculty:**
  — Chief Nursing Officer; Medical Provider; Pharmacist; Behavioral Health Provider; Homecare Nurse; CCM Specialist; Certified Diabetes Educator; Registered Dietitian; Access to Care Coordinator

Case Presentation Form



COMPLEX CARE MANAGEMENT
CASE PRESENTATION FORM

Date: Click here to enter a date.
Presenter: Click here to enter text.
Patient Initials: Click here to enter text.
Age: Click here to enter text.
Check one: ☐ New Case or ☐ Follow-up
CHC Site: Click here to enter text.
ECHO ID: [Project ECHO staff will fill out.]
Gender: ☐ Male or ☐ Female
Consent Signed: ☐ Yes or ☐ No

Date enrolled in Care Coordination:	
Reason(s) for enrollment:	Click here to enter text.
Reason for case presentation:	Click here to enter text.
Active Self-Management Goals:	☐ Yes or ☐ No *If yes, what is the goal:* Click here to enter text.
Medical History:	Click here to enter text.
Hospitalization/Surgical History: (this can be found on Care Coordination Dashboard)	Click here to enter text.
Psychiatric History:	Click here to enter text.
Social History: (e.g., family support, social organizations involved)	Click here to enter text.
External Care Teams: (e.g., Husky Care Management, Homecare, CommunityCare Team)	Click here to enter text.
Current Medications:	Click here to enter text.

Vital Signs:	BP:	PR:	Wght:	Hght:	BMI:

Common Challenges: Complex Care Management

- Overcoming cultural barriers
- Dealing with patient's families
- Connecting patients with community resources
- Medication adherence
- Non-compliance with care
- High ER utilization
- Managing transition to new PCP
- High utilization of primary care

Common Challenges: Chronic Disease Management

- Hypertension management
- Obesity management
- Diabetes management
- INR/Coumadin management
- Chronic disease comorbidities
- Co-management of chronic disease and behavioral health
- Behavioral health management and support
- Substance abuse

Project ECHO CCM Satisfaction Scores

Question: How meaningful was today's Project ECHO CCM session to your work?

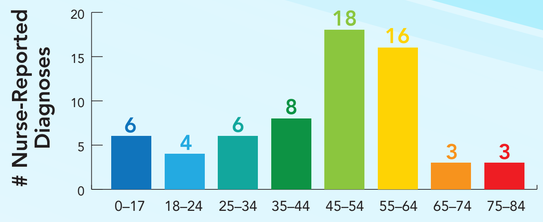
Project ECHO Didactic	Satisfaction Score
HIV PrEP and PEP	3.94
Providing Affirmative and Inclusive Care to the LGBT Community at CHC, Inc.	4.06
Asthma Management	3.80
Self Management Goal Setting and Documentation	4.29
Wound Care	4.06
Respiratory Devices: Workshop for Educating Patients	4.27
COPD—Part 1	3.93
COPD—Part 2	4.04
Asthma Management—Part 2	4.06
COPD: Best Practice at Middlesex Hospital	4.25
Heart Failure Basics and the Role of Cardiac Rehab	4.00
Obesity and Weight Management	4.74
PCMH+	4.07
Hepatitis C	3.85
Circle of Care	4.44
Nurse Triage	4.44
HIV 1	4.38

1 = Not at all; 2 = Slightly; 3 = Moderately; 4 = Very; 5 = Extremely

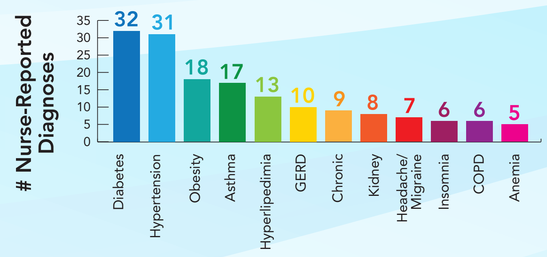
Project ECHO CCM at a Glance (Data from 09/24/15 to 06/08/17)

Sessions	**38**
Cases Presented	**79**
Unique Patients Presented	**64**
Total Nurse Presenters	**28**
Percent of Nurses Who Have Presented	**62% (21/34)**

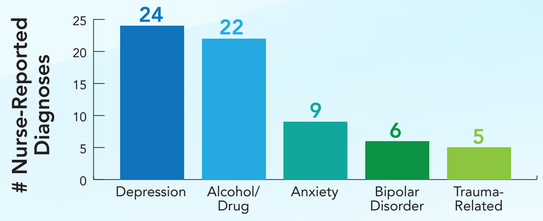
Project ECHO CCM Patient Demographics: Age Group



Project ECHO CCM Common Medical Diagnoses



Project ECHO CCM Common Behavioral Health Diagnoses



Project ECHO CCM Didactic Topics

Care Transitions and Complex Care Management
Homecare Overview
Health Information Technology for Complex Care Management
Complex Pain Care in a Community Health Center
Substance Abuse and Introduction to Effective Treatments
Motivational Interviewing
The Nursing Guide to Medical Nutrition Therapy and Nutrition Counseling in Primary Care
Diabetes Disease Management
Health Care at Home 101
Exploring Diabetes Medications
Personality Disorders
Intensive Care Management Provider Collaboration
Medication Reconciliation
HIV Post-Exposure and Pre-Exposure Prophylaxis
Providing Affirmative and Inclusive Care to the LGBT Community at the CHC
Asthma Management and Medications
The Keys to Quality Wound Management
Self-Management Goal Setting and Documentation
Care Coordination: COPD
Heart Failure Basics and the Role of Cardiac Rehab
Obesity and Weight Management: Treatment Guide for Nurses
Hepatitis C
Nurse Triage
HIV
Psychotropic Medications
Mental Health Triage: Anxiety and Suicidal Tendencies
Buprenorphine
Asthma and In-Check Dial Devices
Hospice and Respite Care

References:

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Scott, J. D., Unruh, K. T., Catlin, M. C., Merrill, J. O., Tauben, D. J., Rosenblatt, R., & Spacha, D. H. (2012). Project ECHO: A model for complex, chronic care in the Pacific Northwest region of the United States. *Journal of Telemedicine and Telecare*, 18(8), 481-484.

For more information, please contact **Mary Blankson**, APRN, DNP, FNP-C, Chief Nursing Officer, at **Mary@chc1.com**

Community Health Center, Inc. 675 Main Street, Middletown, CT 06457 | Visit: www.chc1.com | Follow: Facebook/CHCInc; Twitter(@CHCConnecticut)