

January 6, 2017

Focused Nurse Education Project Proposal

1. Purpose and Summary:

Nursing homes hospitalize residents when physicians and nursing staff determine that residents require acute-level care. Such transfers to hospitals provide residents with access to needed acute-care services. However, as reported in a [November 2013 Department of Health and Human Services OIG study](#), "...hospitalizations are costly to Medicare, and research indicates that transfers between settings increase the risk of residents' experiencing harm and other negative care outcomes." Whether a readmission or a preventable admission, the ramifications to federal, state, and private resources are significant.

According to the OIG study referenced above, 15 of the most frequent CCS (Clinical Classification Software) diagnosis categories accounted for just over 60 percent (60.9) of all resident hospitalizations¹. These 15 categories are:

- Septicemia
- Pneumonia
- Congestive heart failure (CHF), non-hypertensive
- Urinary tract infections (UTI)
- Aspiration pneumonitis, food/vomitus
- Acute renal failure
- Complication of device, implant, or graft
- Respiratory failure, insufficiency, or arrest
- Gastrointestinal hemorrhage
- Complications of surgical procedures or medical care
- Chronic obstructive pulmonary disease (COPD) and bronchiectasis
- Delirium, dementia, and amnestic and other cognitive disorders
- Acute cerebrovascular disease
- Fluid and electrolyte disorders
- Fracture of neck of femur (hip)

Given the complexity of the health care needs of older adults, ensuring direct care staff such as registered nurses (RNs), licensed practical nurses (LPNs) and state tested nurse aides (STNAs) are up to date on the most recent assessment and treatment protocols is imperative to reaching the triple aim outlined by CMS. The triple aim is a framework developed by the Institute for Health Improvement (IHI), <http://www.ihl.org/engage/initiatives/tripleaim/pages/default.aspx>, that describes an approach to optimizing health system performance. The three dimensions of the triple aim include improving the individual experience of care, improving the health of populations, and reducing the per capita cost of care for populations.

1. Source: OIG analysis of data on FY 2011 hospitalizations of nursing home residents

The purpose of this proposed project is to provide a focused curriculum to RNs, LPNs, and STNAs in long term care facilities that will increase their ability to communicate accurately, effectively, and confidently the conditions of the long term residents in their facilities, thereby improving these residents' healthcare and reducing unnecessary hospitalizations and emergency room visits.

Focused Curriculum and Teaching Strategies

The seven key topics of instruction in the focused curriculum will be:

- CHF
- Pressure Injuries
- Pneumonia
- COPD
- Diabetes
- Stroke
- UTIs

For each of these conditions or procedures, geriatric-specific training will provide teachings on the basic physiology, pathophysiology, signs and symptoms of concern, and evaluation techniques to discern patient condition. Instruction on inter-professional communication strategies will be a focal point of the teachings to improve communication between nurses and clinicians, with the goal of improving patient care and minimizing unnecessary patient transfers or other interventions.

Further, the use of telehealth technology as a teaching tool in this proposal will provide the ability to incorporate practice in describing and documenting exam findings as demonstrated through standardized images and/or real time streaming images on practice patients as supervised by a clinician. This provides an opportunity for participating nurses (RNs and LPNs) to describe to a provider how they would document a finding and get feedback on the accuracy of their description.

Early curriculum planning envisions the incorporation of the widely-used SBAR (Situation-Background-Assessment-Recommendation) communication strategy as a primary teaching tool. Developed by Michael Leonard, MD, Physician Leader for Patient Safety, along with colleagues Doug Bonacum and Suzanne Graham at Kaiser Permanente of Colorado (Evergreen, Colorado, USA), <https://share.kaiserpermanente.org/article/colorado-overview/>, the SBAR technique, <http://www.ihl.org/resources/pages/tools/sbartechinqueforcommunicationasituationalbriefingmodel.aspx>, provides a framework for communication between members of the health care team about a patient's condition. SBAR is an easy-to-remember, concrete mechanism useful for framing any conversation, especially critical ones, requiring a clinician's immediate attention and action.

Training will be delivered via on-line modules with videos demonstrating desired skills interspersed throughout the teaching. The videos were recorded at CareSpace at The Optimized Care Network (OCN) (one of the project partners listed on page 7 of this proposal) and at various LTC facilities. Modules will be available for completion 24/7 by nursing staff, as well as used for on-site teaching by DONs and others. Each module will contain a pre-test and post-test to measure training effectiveness for individual project participants, as well as provide information for future improvement.

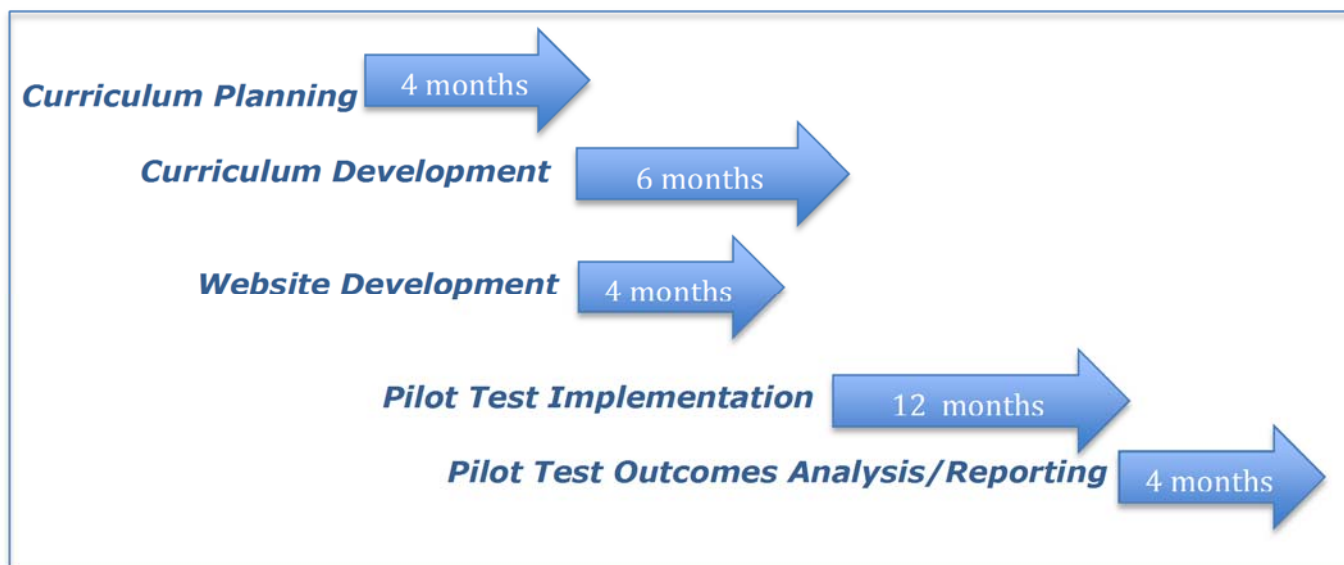
Three nursing homes will be participating in this project:

- Bethany Village (Dayton, Ohio)
- Green Hills Retirement Community (West Liberty, Ohio)
- Kendal at Oberlin (Oberlin, Ohio)

This project will include a certificate of completion, which will be awarded by LeadingAge Ohio to successful RN, LPN, and STNA project participants.

Project Timeline: 26 months

- **Anticipated Start Date: March 1, 2017**
- **Anticipated End Date: April 30, 2019**



2. Expected Outcomes:

Implementation of this project is expected to reduce hospital readmission rates and preventable emergency room visits for the following seven conditions that correspond to the seven key topics of instruction used in the focused curriculum of the project:

- CHF
- Pressure Injuries
- Pneumonia
- COPD
- Diabetes
- Stroke
- UTIs

3. Results Measurement:

This project proposes to measure, track, and reduce:

1. **Hospital readmission rates** for each participating facility, with the goal of a combined overall 20% reduction in hospital readmission rates for the seven conditions listed above in *Section 2. Expected Outcomes* that correspond to the seven key topics of the focused curriculum.
2. **Preventable emergency room visits** for each participating facility, with the goal of a combined overall 10% fewer emergency room visits for the seven conditions listed above in *Section 2. Expected Outcomes* that correspond to the seven key topics of the focused curriculum.

For both measures, rates will be determined by diagnosis for the seven conditions prior to implementation of the curriculum. Post implementation rates then will be recorded and monitored, and also will be determined by diagnosis of the seven conditions. Diagnoses will be identified using individuals' medical records in both the nursing facility and the hospital.

4. Benefits to NH Residents:

Reducing readmission and potentially preventable admission rates are the desired outcomes for any aging Ohioan. The benefits are particularly striking for frail elderly, many of whom suffer ill effects simply from the transition from a nursing home to an acute care setting.

5. Non-Supplanting:

This project will in no way supplant existing responsibilities of nursing homes to meet existing Medicare and Medicaid requirements or other statutory and regulatory requirements.

6. Consumer and Other Stakeholder Involvement:

After successful implementation of this project and conclusion of the CMP grant period, LeadingAge Ohio will provide the curriculum through distance education modules that will be accessible for training 24/7 and available for use by all nursing homes in Ohio.

Anticipated Phase 2: Discussions currently are taking place with colleges of nursing at universities throughout Ohio for the incorporation of simulation training related to each of the seven focused curriculum topics listed on page 2 of this proposal that would allow hands-on learning experiences for nursing staff at nursing homes throughout Ohio. These specially designed simulated training sessions would allow nurses and LPNs who have received enhanced communication training through the on-line modules to further refine their physical assessment skills through convenient on-site simulation sessions. Funding for this Phase 2 project would be requested in a future CMP grant proposal.

7. Funding:

Budget

Task	Staffing	Grant Request
Curriculum Planning		
LeadingAge Ohio Nurse Educators	2 staff/20 hours/\$50.00/hour	\$2,000
OCN Program Staff Support	1 staff/20 hours/\$60.00/hour	\$1,200
OSU College of Nursing Faculty	8 hours/module X \$75.00/hour	\$4,200
OCN Nurse Practitioner Educator	4 hours/module X \$65.00/hour	\$1,820
Curriculum Development		
LeadingAge Ohio Nurse Educators	2 staff/20 hours/ \$50.00/hour	\$2,000
LeadingAge Ohio Member Review	2 staff/20 hours/\$75.00/hr.	\$3,000
OCN Program Staff Support	1 staff/40 hours/\$60.00/hour	\$2,400
OSU College of Nursing Faculty	16 hours per module @ \$75.00 X 7 modules	\$8,400
OCN Nurse Practitioner Educator		
Peer Review	8 hours per module @ \$65.00 X 7 modules	\$3,640
Video Recording--Skills Training Vignettes		
Recording & Editing (SilverScreen Video Productions)	7 vignettes @ 3 minutes each	\$5,600
Scenario Development & Enactment (OSU Nurse Practitioner)	4 vignettes@ 10 hours X \$75/hour	\$3,000
Scenario Development & Enactment (OCN Nurse Practitioner)	3 vignettes @ 10 hours X \$65/hour	\$1,950
Website Development		
Graphic design, registration, functionality, reporting and data base creation, URL (OGG)		\$2,000

Website hosting, mgmt, license fee (OGG)		\$4,500
Formatting, incorporation of curriculum, pre-tests, post-tests, video incorporation (OCN Program Staff)	10 hours/module X \$60 X 7 modules	\$4,200
Program Pilot Test Implementation		
LeadingAge Ohio Nurse Educators	2 staff/20 hours/\$50.00/hour	\$2,000
OCN Program Staff Support	1 staff/80 hours/\$60.00/hour	\$4,800
OSU Faculty Curriculum Revisions	4 hours/module @ \$75/hour X 7 modules	\$2,100
OCN NP Educator Peer Review	2 hours/module @ \$65/hour X 7 modules	\$910
Pilot Test Outcomes Analysis		
OSU Grad Student assistance with module pre- and post-tests, evaluations	5 hours/module@\$25/hour X 7 modules	\$875
OSU Grad Student development of staff behavior evaluation instrument	30 hours @ \$25/hour	\$750
OSU Faculty Oversight	10 hours @ \$75/hour	\$750
OSU Grad Student Analysis of pre- and post-test outcomes	10 hours @ \$25/hour X 7 modules	\$1,750
OSU Grad Student Analysis of staff behavior evaluations	60 hours @ \$25/hour	\$1,500
OSU Grad Student Analysis of CMS Nursing Home Compare data pre and post staff training	60 hours @ \$25/hour	\$1,500
OSU Faculty Oversight	20 hours @ \$75/hour	\$1,500
LeadingAge Ohio Nurse Educators	2 staff/20 hours/\$50.00/hour	\$2,000
OCN Program Development Staff	1 staff/20 hours/\$60.00/hour	\$1,200
Continuing Education Credit Application		
LeadingAge Ohio Nurse Educators	2 staff/20 hours/\$50.00/hour	\$2,000
Total Budget Request		\$73,545

8. Involved Organizations:

- **LeadingAge Ohio**, http://www.leadingageohio.org/aws/LAO/pt/sp/home_page, is the lead agency for this proposal. LeadingAge Ohio leadership will include:
 - Anne Shelley, MBA, BSN, RN, Director of Professional Development and Regulatory Relations. Anne specializes in home health and hospice and has been a nurse educator for over 20 years. She is responsible for the educational events offered by LeadingAge Ohio as well as regulatory and technical assistance for LeadingAge Ohio members. Anne received her MBA from Tiffin University and her BSN from Bowling Green State University.
 - Beth Griebel, MSN, RN, Professional Development Specialist. As a professional development specialist and primary nurse planner, Beth functions as the expert in CE criteria in planning educational activities. She assesses professional practice gaps, identifies needs that can be addressed through education, and works with the planning committee to ensure education is based on best available evidence. Beth collects data throughout the educational process to evaluate and monitor quality outcome measures for enhancing nursing professional development and patient care.
- **The Optimized Care Network (OCN)**, <http://www.optimizedcare.net/>, a leading provider of digital healthcare that merges high tech with high touch, will assist with project development. Two members of the leadership team will help guide project development both from a clinical content perspective and a curriculum development perspective.
 - Erin McCaffrey Crespo, MSN, FNP-BC, AAHIVS, Lead Clinician. Erin is licensed as a Family Nurse Practitioner with additional certification as an HIV Specialist through the American Academy of HIV Medicine. She earned a BSN and an MSN from Georgetown University. Erin has experience providing healthcare to patients across the lifespan in a variety of settings. She has special interest in and extensive experience providing care to vulnerable populations.
 - Linda Mauger, Community Health and Aging Executive. As Director of the Ohio State University Office of Geriatrics and Gerontology (now called the Office of Geriatrics and Interprofessional Aging Studies), Linda utilized technology to deliver numerous distance education programs in aging, as well as creating innovative training and outreach programs to respond to today's complex healthcare and social service needs. At OCN, Linda focuses on the integration of telemedicine across the long-term care network, once again leading efforts to change the paradigm of care and enhance quality of life for older adults.

- **The Ohio State University Office of Geriatrics and Interprofessional Aging Studies (OGG)**, <https://ogg.osu.edu/>, will provide technology support in the development of the project's website and on-line modules to provide 24/7 access to participating nurses and nurse aides.
- **The Ohio State University College of Nursing**, <https://nursing.osu.edu/>, will lead curriculum development, building upon their vast experience in offering nurse education via distance education platforms.
 - Monique Ganucheau, MS, CNP, is an Adult Nurse Practitioner working in primary care for over 7 years. At this time, Monique is practicing at OSU Total Health and Wellness, a nurse-led inter-professional primary care practice located at OSU University Hospital East. She splits her time between Total Health and Wellness in the clinic setting and visiting patients in their homes. Previously, Monique worked in privately owned internal medicine clinics in Central Ohio. She also has experience caring for patients in Hospice and in extended care facilities. Monique's professional interests include identifying and breaking down barriers to quality healthcare. She is an active member of the Ohio Association of Advanced Practice Nurses.
- **SilverScreen Video Productions**, <http://silverscreenvp.com>, will provide video recording and editing for the module vignettes. Founded in 2002, SilverScreen Video Productions has done productions, transfers and duplication for a variety of corporate and retail clients, including previous work for LeadingAge Ohio.

9. Contacts:

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APPENDIX A
FOCUSED NURSE EDUCATION PROJECT PROPOSAL

NAME Sample Pre/Post Test DATE _____

Congestive Heart Failure Test

1. What is the leading cause of heart failure?
 - a. hypertension
 - b. obesity
 - c. congenital heart malfunction
 - d. high cholesterol
2. Of the following what is a sign of left sided heart failure?
 - a. edema
 - b. jugular vein distention (JVD)
 - c. non-productive cough and crackles
 - d. ascites
3. What is a positive response to therapy for patients suffering from heart failure?
 - a. edema
 - b. diuresis
 - c. cough
 - d. restlessness
4. Upon entrance into a patient's room, what is an observable physical sign that would initiate a nurse to do a further assessment for possible CHF exacerbation?
 - a. Inability of patient to catch their breath
 - b. Foley bag with 150 ml of urine
 - c. Diaphoresis
 - d. Drooling
5. The presence of crackles indicates left sided heart failure? (T or F)
6. Crackles are best heard in what area?
 - a. all over lung fields
 - b. 6th intercostal space
 - c. 4th intercostal space midclavicular line
 - d. dependent lobes, right and left lung bases
7. What part of the stethoscope is best used to listen to lung sounds?
 - a. diaphragm
 - b. cup
 - c. bell
 - d. concave side

APPENDIX A
FOCUSED NURSE EDUCATION PROJECT PROPOSAL

NAME _____

DATE _____

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8. When putting on a stethoscope the ear tips should be pointed:
- a. upward the sky
 - b. downward toward the feet
 - c. forward towards nose
 - d. backward towards ears
9. Blood tinged, frothy sputum found in left sided heart failure is called:
- a. hematuria
 - b. hematoma
 - c. hemoptysis
 - d. occult blood
10. A high-pitched, continuous musical sound like a squeak heard continuously during inspiration or expiration; usually louder on expiration is:
- a. wheezing
 - b. crackles
 - c. rhonchi
 - d. stridor