Case Management of Primary Care Patients

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Eastern Kentucky University

College of Health Sciences
School of Nursing

Doctor of Nursing Practice Program
DNP Project Final Report

Case Management of Primary Care Patients
DNP Student: Bernadette Webster
Date: April 28, 2021
The DNP Project Final Report is submitted in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice (DNP) at Eastern Kentucky University (EKU).

**Student Acknowledgement**

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Signature: Date:

**Review & Approval of DNP Project Final Report**

The DNP Project Final Report has been reviewed and approved by the DNP Project Team, which includes the DNP Project Chair and the DNP Project Team Member(s). The DNP Project meets the satisfactory requirements for the DNP Project Final Report outlined in the EKU DNP Project Guidelines. The EKU DNP Project Guidelines are based on best practices outlined by the American Association of Colleges of Nursing (AACN) and external evidence-based sources. The DNP Committee develops, maintains, and monitors these standards on behalf of the Department of Baccalaureate and Graduate Nursing at Eastern Kentucky University.

“We assert that we have reviewed and approved this DNP Final Project Report.”

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Case Management of Primary Care Patients

Bernadette A. Webster
School of Nursing, Eastern Kentucky University
DNP Project Final Report
April 28, 2021
Abstract

Case management (CM) offered in primary care is a collaboration, guided by the registered nurse, working to coordinate all aspects of care for the patient and the family. The purpose of this quality improvement/assurance project was to provide nurses in primary care with the education and methods of CM to assist in more effectively managing care for a patient after testing positive for COVID-19. An intervention was delivered to registered nurses (RN) in the primary care setting designed to improve knowledge and skill with case management for patients with high care needs or recently diagnosed with COVID-19. A templated note was created to assist with application of the skill in practice. Findings indicate when given a templated note to utilize the registered nurses were able to document a comprehensive case management note. To promote compliance in case management further templated notes should be created for the RNs to utilize.

*Keywords: case management, registered nurse, emergency department, hospitalizations*
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Case Management of Primary Care Patients

Background and Significance

Older adults present the healthcare system with many challenges. Not only is the number of older adults growing but the complexity of their care is also expanding (Scholz Mellum et al., 2018). This complexity leads to an increased use of healthcare options and requires multiple resources, providers and treatments (Hickman et al., 2013). The number of people over the age of 65 in 2017 was 6.12 billion or 8.3% of all people and is projected to reach 15.46 billion by 2050 (Hsu et al., 2019). Hudon et al. (2019) identifies frequent healthcare users as approximately 10% of the population but they consume 70% of all healthcare expenditures.

The National Academy of Medicine’s report edited by Long et al. (2017) identifies that high need individuals make greater use of the emergency department (ED), have more hospitalizations, more doctor visits and more paid home health days. Liberman et al., (2020) estimate of those aged 75 years and older 58% will visit the ED in a one-year period and use the ED services more than any other age group. Those 65 years old and older account for 15-20% of all ED visits and 36% of hospitalizations (Liberman et al., 2020). In a study conducted by Simpson et al. (2018) the mean cost of health care for a 9 month period was $10,139 and of the cohort they studied 14.4% had at least one visit to the ED and 11.4% had at least one hospital admission. Enhanced primary care has been identified as a successful means to reduce healthcare utilization and costs. One method of enhanced primary care is case management.

Case Management (CM) involves a collaborative approach where a case manager, usually a registered nurse (RN), evaluates, plans, implements and coordinates services based on the patient’s needs (Hudon et al., 2019). A case manager works with the patient to coordinate and integrate care when the patient has difficulty accomplishing this on their own
Case management entails high-intensity involvement with patients and the case manager can be seen as caring for the whole person and not just clinical diagnosis (Hickman et al., 2013). The goal of CM is to deliver better care coordination by providing individually tailored care plans and contacts (Stokes et al., 2015). The CM intervention should focus on each individual’s specific needs and not focus on the disease or conditions present as each person is unique and has very different situations (Sandberg et al., 2015).

The Veteran’s Health Administration (VHA) has developed a tool, the care assessment need (CAN) score. It is utilized to assist primary care providers to identify patients at higher risk for death or hospitalizations over a 90 day or one year period (Alban et al., 2017). This predictive analytical tool is generated from the electronic health record (EHR) and is calculated to assist in care coordination and patient management (Ruiz et al., 2018). The CAN score is stated as a percentile ranging from 0, lowest risk, to 99, highest risk (Lovelace et al., 2016). Consistent and correct use of the CAN score promotes that CM is provided to patients at risk for potential poor outcomes (Alban et al., 2017).

The CM can use the CAN score to guide interventions with select patients. The CM intervention can have multiple benefits such as reducing ED visits, hospitalizations, and improved quality of life and patient satisfaction (Hudon et al., 2019). Case management assists patients and their families assess problems, communicate with providers and navigate the health care system (Long et al., 2017). Lovelace et al. (2016) found a decrease in cost of $3,823,673 from the use of CM. The purpose of this project is to provide nurses in primary care with the knowledge and methods for CM in order to assist in more effective management of care for the outpatient population.
Proposed Evidence Based Intervention

The aim of this project was to provide nurses in primary care with the education, knowledge, and skills to manage more difficult patients and those recently diagnosed with severe acute respiratory syndrome coronavirus 2 (SARA-CoV-2 or COVID-19) effectively through case management. The outcome was to increase the knowledge and skills of the RN on the processes of CM and assist the RN in the implementation of CM with the use of a templated note. The RN staff were educated on the purpose and importance of CM and the principles as it applies to patients within primary care and to those recently diagnosed with COVID-19.

Literature Review

A systematic literature search was performed focusing on case management, registered nurse, older adults, and primary care. Additional searches also included the emergency department and hospitalizations. Databases utilized to search for relevant information included Cumulative Index of Nursing and Allied Health Literature (CINAHL), PubMed and Cochrane Collaboration. A total number of five studies were included in the final analysis of evidence to support this project.

Standards

In 1995 the Case Management Society of America (CMSA) first developed the standards related to the practice of case management (Fraser et al., 2018). These standards were updated most recently in 2016 to reflect changes in the healthcare industry. Changes include the navigation of transitions of care, promoting collaborative care coordination through the application of evidence-based guidelines in practice and ensuring quality, safe, and cost-effective outcomes (Case Management Society of America, 2016). Through the Standards of Practice for Case Management (2016) it is identified how the RN case manager works toward optimal wellness, function and autonomy for the patient and the family. This is
done through “advocacy, assessment, planning, communication, health education, resource management, care coordination, collaboration, and service facilitation” (Case Management Society of America, 2016, p. 13).

**Relevant Studies**

Five studies were identified that examined the role of CM in caring for patients. Three articles identified CM as decreasing ED visits and hospitalizations (Bodenmann et al., 2017; Lovelace et al., 2016; Sandberg et al., 2015). Three articles identified CM as an intervention to increase patient satisfaction (Lovelace et al., 2016; Scholz Mellum et al., 2018; Stokes et al., 2015). One article determined CM decreased the number of primary care provider (PCP) visits (Sandberg et al., 2015).

Stokes et al. (2015) performed a systematic review and meta-analysis to determine the effectiveness of CM for at risk patients in primary care. Beginning with 15,327 records, after screening and eligibility were completed, a total of 36 studies (n=36) composed of 50 articles were chosen to be included in the meta-analysis. The majority of the studies (n=28, 78%) were randomized controlled trials. The population included adult patients over 18 years old with multiple conditions. Three main health system goals were utilized as outcome categories: health, cost and satisfaction. The effects of each outcome was divided into short-term and long-term. Related to the intervention of CM and the outcome of health there was found a statistically significant effect in the short term for self-assessed health status (0.07, 95% CI 0.00 to 0.14, p = 0.094) but this was not found in the long term (-0.01, 95% CI -0.08 to 0.05, p = 0.327). There were no statistically significant effects found related to the outcome of cost in either the short or long term. The CM intervention showed a statistically significant beneficial effect in patient satisfaction in both the short term (0.26, 95% CI 0.16 to 0.36, p = 0.465) and increasing in the long term (0.35, 95% CI 0.04 to 0.66, p <0.001). These
findings suggest that while there is minimal health effects over the long term, patient satisfaction in case management is significantly increased.

Utilizing a randomized controlled trial Sandberg et al. (2015) studied the effect of CM on the healthcare utilization of frail older people. The study was carried out in a municipality in Sweden and was a collaborative of municipal care, a nearby university hospital, social services and primary care. A power calculation was made and determined a sample size of 140 participants was needed. The inclusion criteria were at least 65 years or older, live in an ordinary home, be dependent in at least two activities of daily living (ADL) and in the last twelve months have been admitted to the hospital at least twice or had at least four visits in primary care or outpatient. A continuous recruitment process was carried out for 43 months to obtain the correct number of participants. Overall a total of 153 participants were allocated randomly to the intervention (n = 80) or the control group (n = 73).

In the short term, 0 – 6 months, there was found to be no significant difference in the groups when it came to hospital stays, ED visits or ED visits leading to a hospital stay. There was noted in 6-12 months the mean number of visits to the ED that did not lead to hospitalization was significantly lower (0.08 vs. 0.37, p = 0.041) in the intervention group. There were also significant differences in the proportion of visits that did not lead to hospitalization between the groups. The intervention group had a total of 23 visits to the ED with only 4 or 17.4% leading to hospitalization. The control group had 49 visits to the ED with 23 or 46.7% resulting in admission to the hospital. Physician visits in outpatient care were also significantly different for mean numbers where the intervention group had less visits noted (4.09 vs. 5.29, p = 0.047). There is a significant benefit noted to having a case manager after 6-12 months as a form of support to be able to solve issues in the patient's own home without healthcare utilization.
Scholz Mellum et al. (2018) conducted a mixed methods study to gain a deeper understanding of older adults’ experience with a Care Coordination Program (CCP). The CCP was part of a large corporate medical and primary care practice in Central Ohio and designed for Medicare Advantage patients. The sample included participants 65 years and older with two or more chronic illnesses and were enrolled by a provider in the CCP within the previous six months of the study. A recruitment packet was sent to a total of 1437 potential participants, a total of 201 (n = 201) usable responses were received with a response rate of 14%. A total of 65 of these consented to a phone interview but after the exclusions a total of 30 (n = 30) participated. Of the 201 participants 171 (n = 171) took part in the quantitative portion of the study only and 30 (n = 30) in both the quantitative and the qualitative portions. For the quantitative strand of the study The Patient Assessment of Chronic Illness Care Plus (PACIC+) was administered. This 26 item instrument measures the patients’ assessment of their chronic illness care as delivered by a team of providers. On a Likert scale of 1 (almost never) to 5 (almost always) respondents rate how often the aspect of chronic illness care happens. The overall PACIC+ score was noted to be 3.15 (n = 201, SD = 0.922). An independent sample $t$ test was performed comparing those completing just the quantitative strand and those completing both strands with no significant difference noted between the two groups. The highest rated question on the PACIC+ was “Satisfied that my care was well organized” (n = 196, M = 4.04, SD = .99). The qualitative strand data indicated primarily the participants had a positive experience with care coordination. Overall the findings from this study show older adults are satisfied with the CCP model of care.

Bodenmann et al. (2017) conducted a randomized controlled study to determine whether a CM intervention when compared to standard ED care reduces ED usage. To participate in the study, the patient needed to be at least 18 years old and a frequent ED user. The study was conducted at Lausanne University Hospital, Switzerland. After determining a
A sample size of 85 was needed in both groups, to anticipate a dropout rate of about 30%, it was decided to enroll 250 frequent ED users in the study, 125 for each group. Frequent users were identified via the patient tracking system and contacted by the research team. After receiving permission from the participant a member of the research team contacted their primary care physician, if there was one, and informed them about the study and gathered information. Computer generated randomization was concealed from the patient. Participants were told they may receive CM. All 125 intervention group participants received CM at baseline, 106 (84.8%) at 1 month, 98 (78.4%) at 3 months and 93 (74.4%) at 5 months; 108 (86.4%) from the intervention group contacted the CM team between the study visits. Twenty (10 in each group) died during the study. In the 12 month follow-up period participants from the control group visited the ED an average of 3.35 ± 0.32 visits. The intervention group made 2.71±0.23 ED visits, corresponding to 19% fewer ED visits (ratio = 0.81, 95% CI = 0.63 to 1.02). While this result is not statistically significant in the bivariate model (b = -0.217, p = 0.080) a decrease of 19% is clinically relevant. In the United States this would reduce the ED visits by 5.1 to 6.8 million visits annually, resulting in significant cost savings.

Lovelace et al. (2016) conducted a retrospective record review at a 399 bed Veterans Affairs (VA) facility in Richmond, Virginia over the course of two years. Veterans with more than two hospital admissions in the past 90 days or were at risk for readmission based on a CAN score of greater than 95 were included in the study. The sample consisted of Veterans who accepted the transitional care program (TCP), 200 (n = 200) Veterans the first year and 141 (n = 141) Veterans the second year. A retrospective review of medical records of the Veterans who accepted the TCP services was conducted for 90 days prior to the intervention and 90 days after the intervention. In comparing the ED visits pre and post intervention a 61% decrease was noted, 456 pre intervention and 113 post intervention a difference of 277 ED visits. Results were similar for hospitalizations with 575 noted pre intervention and 192
post intervention, a difference of 383 hospital admissions or a decrease of 67%. This decrease in healthcare utilization also translates into a decrease in healthcare spending.

**Synthesis of Literature**

The effectiveness and impact of CM on healthcare usage was the central theme of all the studies reviewed. Multiple studies found the use of the ED and hospitalizations decreased to varying degrees with CM interventions. Also, while cost or usage of healthcare was unaffected, it was found CM increased the patient satisfaction of the care they were receiving.

The decrease of healthcare utilization was addressed in three studies (Bodenmann et al., 2017, Lovelace et al., 2016, Sandberg et al., 2015). Each did point to the decreased use of healthcare, specifically the ED and hospitalizations, with each study having a varying level of evidence. Sandberg et al. (2015) also noted a decrease in the use of the primary provider offering additional decreased use of resources.

Increased patient satisfaction was also evidenced in three studies (Lovelace et al., 2016, Scholz Mellum et al., 2018, Stokes et al., 2015). While patient satisfaction does not necessarily translate into decreased costs it does show patients were receiving care that had value to them. CM improved the communication with the patient giving them a single point of contact.

Throughout the studies the method of CM was not consistently defined. One study (Scholz Mellum et al., 2018) expressed CM as a care coordination program and another (Lovelace et al., 2016) used the terminology transitional care program. The remaining three studies (Bodenmann et al., 2017, Sandberg et al., 2015, Stokes et al., 2015) utilized the phrase case management. Each of the five studies did describe the steps of the intervention and this was consistent regardless of the term identified.
Guiding Theory

Rogers’ Diffusion of Innovation Theory was utilized as a framework to guide change and to create a culture of innovation in organizations (Rogers, 2003). With this theory, innovation is a process or idea that is perceived as new or is unfamiliar to the participants. Diffusion is the process by which the innovation is communicated through networks to members of a social system over time (Zhang et al., 2015).

To be adopted an innovation must pass through five stages: knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003). Knowledge is when the group first becomes aware of the innovation and begins to understand the function. Persuasion is where the attitudes related to the innovation are formed. Decision is the acceptance or rejection of the innovation and implementation is the stage the innovation is put to use (Rogers, 2003).

In addition to the stages of innovation Rogers (2003) categorizes the members of the social system into five groups based on their attitudes toward and innovation: innovators, early adopters, earlier majority, later majority and laggards. Innovators see and understand the innovation and are essential to bring the innovation to the organization. Early adopters are more informed about the innovation and are more likely to be the role models of the unit. By adopting the innovation the early adopters encourage others to do the same (Zhang et al., 2015).

The early majority and late majority will follow the lead of the innovators and early adopters and will begin to utilize the innovation. The laggards, the last group, are the most resistant to change and most likely be non-adopters related to their lack of knowledge and awareness of the innovation (Zhang et al., 2015). The number of adopters usually follows an S-shaped curve. As the information related to the innovation begins to spread and more knowledge is gained the innovation becomes more widely accepted and used. The rate of
adoption speeds up until the members of the system adopt the innovation creating the S-shaped curve (Rogers, 2003).

The Rogers Diffusion of Innovation framework was applicable to instituting case management in primary care. The use of the CAN score to implement case management in the organization/agency/outpatient setting is a new approach for most nurses caring for patients. Implementing the case management intervention in primary care required the stages of spreading the knowledge and persuading the staff of the benefits of CM. With the decision and implementation of the CM intervention the staff saw the confirmation of the positive results of decreased healthcare utilization by the patients to include decreased use of the ED and decreased hospitalizations. In addition, an increase in patient satisfaction was noted.

Organizational Description

Setting

This project was implemented in an urban, federal healthcare system affiliated with numerous academic programs. The VA Western New York Healthcare System (VAWNYHS) is located in the Northeastern portion of the United States. It is a member of the Veterans Integrated Service Network (VISN) 2. VISN 2 incorporates all of New York state and portions of New Jersey and Pennsylvania. The VAWNYHS main campus is found near the New York State and Canadian border and includes a rural campus 43 miles east. The healthcare system includes eight community-based outpatient clinics located across the western portion of New York State and one long term care facility at the rural campus.

The VAWNYHS main campus includes an acute care hospital with 142 beds. In addition it supports two primary care clinics comprising 19 providers completing approximately 450,000 visits per year. The VAWNYHS rural campus consists of a 120 bed long term care facility, two outpatient post-traumatic stress disorder residential programs and a primary care clinic. The primary care clinic consists of five providers completing
The mission of the Veterans Healthcare Administration is to fulfill the promise made by President Lincoln “To care for him who shall have borne the battle, and for his widow, and his orphan” (Department of Veterans Affairs, n.d.). In January 2020, VISN 2 implemented a steering committee entitled VISN2 Care/Case Management Steering Committee and created a charter (see Appendix A). The goal of the steering committee encompasses providing oversight and establishment of standards of practice for care coordination and case management for RNs working in Primary Care, Home Based Primary Care (HBPC) and Care in the Community (CITC). The main goal of the committee is to keep Veterans healthy, out of the hospital and with the highest quality of life. Through better care coordination and case management the number of hospital stays and hospital readmissions should reduce and the Veteran’s experience be improved.

The strategic plan or strategic objective as defined by the steering committee is Veteran centered care. The focus of all care provided will be personalized, proactive and patient driven. Cultural, programmatic and environmental or infrastructure needs are to be in alignment with Veteran centric care.

**Stakeholders**

**Organizational stakeholders**

The key nursing stakeholders for this project were the registered nurses, the licensed practical nurses, the Associate Chief Nurse of Service (Chief Nurse of Primary Care) and the Associate Director of Patient Care and Nursing Service (Nurse Executive). The patients and the families were also key stakeholders in the project. Additional key stakeholders include
the Executive Director, physicians, nurse practitioners, and other members of the healthcare team to include social workers, pharmacists, dieticians, and medical support assistants.

**Intervention group**

The intervention group for the case management education included registered nurses currently working in the primary care clinics at the VAWNYHS and the CBOCs.

**Impact population**

The impact population for this project was the Veterans and families serviced by the facilities.

**Organization SWOT Analysis**

One of the most frequently utilized strategic planning tools is the SWOT analysis (Nazarko et al., 2017). Nazarko et al. (2017) discuss the SWOT analysis identifies the positive and negative of the internal forces, strengths and weaknesses, and the external forces, opportunities and threats. The completed SWOT analysis relates to providing the nurses in primary care with the education and methods of CM to assist in more effectively managing care for the outpatient is seen in Table 1.
Table 1

**SWOT Analysis**

<table>
<thead>
<tr>
<th>Strengths:</th>
<th>Weaknesses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Support for initiative from VISN</td>
<td>1. Mandate from VISN</td>
</tr>
<tr>
<td>2. Support for initiative from facility Administration</td>
<td>2. Mandate from Administration</td>
</tr>
<tr>
<td>3. Appropriate platform for socially distant education is available</td>
<td>3. Lack of time to attend the education by the RNs</td>
</tr>
<tr>
<td>4. Primary Care Methodology: RN already part of care team</td>
<td>4. Increased time needed to perform CM in already busy schedules</td>
</tr>
<tr>
<td>5. Ability to identify patients in need from CAN score</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities:</th>
<th>Threats:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Increased patient/family satisfaction</td>
<td>1. COVID-19 resurgence: staff moved to support inpatient hospital units</td>
</tr>
<tr>
<td>2. Increased RN satisfaction</td>
<td>2. Increase time with CM decreases time available for other patients</td>
</tr>
<tr>
<td>3. Increased communication with patients</td>
<td>3. Resources identified through CM not available to the patients</td>
</tr>
<tr>
<td>4. Improved care transitions</td>
<td>4. Decreased staff satisfaction with increased time to perform CM causing turn-over</td>
</tr>
<tr>
<td>5. Increased use of available resources</td>
<td></td>
</tr>
</tbody>
</table>

**Aim and Objectives**

The aim of this project was to develop education in the strategies of case management for the target audience of the RNs assigned to primary care. With this education the RNs will be better prepared to implement the strategies of case management to the selected patients within primary care and those recently diagnosed with COVID-19, concentrating on those with a higher CAN score. The objective was to increase the knowledge of the RN on the utilization of CM and assist the RN in the implementation of CM with the use of a templated note. Evaluation consisted of review of the documentation related to the encounters in the electronic medical record for utilization of CM as evidenced by inclusion of the data points in the note template. The outcome encompasses the RNs utilizing the templated note correctly.
Methodology

Design

The quality improvement / quality assurance project design was based on the action plan formulated by the VAWNYHS (Appendix B). Education was provided to the RNs in Primary Care (PC) on case management. Within the primary care clinics the RNs function as care managers, not case managers. This project supported the nurses to identify one to three patients on their panel concentrating on those with a higher need or those recently diagnosed with COVID-19 who would most benefit from case management.

A templated note had been created to outline the areas to be addressed with the patient and could be copy and pasted into the nurses notes in the EHR. This was provided to the RNs for use (Appendix C). Also provided to the RNs was the templated note with suggestions for the response for each topic (Appendix D). A chart review for the inclusion of the identified topics in the documentation by the RNs was completed four weeks after the provision of the education.

Implementation Framework

The implementation model for the project was the Plan-Do-Study-Act (PDSA) model. Leis & Shojania, 2017 state PDSA are the building blocks of improvement and making rapid cycle changes. According to Donnelly & Kirk, 2015 the first step, Plan, asks a number of key questions: “what is the problem, what are you trying to achieve, how do you know it is a problem”. The second step, Do, is where the change or intervention is carried out. The third step, Study, asks the questions, “did the intervention work as planned and what lesson was learned”. The last step, Act, is important to consider what modifications are required, “was the outcome the solution desired? Will the solution realized remain effective”? Changes to the process will then be implemented and the PDSA cycle restarted. According to Durham et
al. (2019) continued cycles are used to accelerate improvement by learning from the previous cycle.

**Description of Evidenced Based Intervention and Activities**

Utilizing CM as an intervention has been studied and verified as a method to reduce the utilization of healthcare resources. Provision of CM through the primary care provider has been shown to decrease ED usage and hospitalizations and increase patient satisfaction with the care they are receiving. As part of the primary care team RNs are well suited to perform the CM processes for patients.

Through registered nurse case management (RN CM) the care coordination of patients will lead to better outcomes. Lab results and medical records will be available when needed to all providers. Patients and families will be better informed related to upcoming appointments and needed specialty care. RN CM will lead to less duplication of services and decrease the cost of care (Long et al., 2017). Patients will be able to stay in their home longer and have increased satisfaction with their care. Being independent and living at home are important patient goals and as life expectancy increases the number of older persons living at home will also increase (Lovelace et al., 2016). Bodenmann et al. (2017) discussed patients being sent home after an ED visit as an indication they did not have RN CM. Their health status was not being monitored as well and they were going to the ED for issues that CM would have solved in the home.

The use of CM has benefits for the patients it serves. Through the use of an RN case manager coordinated, collaborative care specifically planned for a patient is delivered offering results of decreased healthcare usage. In addition the patient and family may experience increased satisfaction of a single person coordinating their care. As healthcare becomes more complex and patients live longer case management will become an important part of care.
Utilizing the skills obtained through the education the RN provided CM to one to three patients on their panel with a higher need, including those identified as recently diagnosed with COVID-19, who would most benefit from case management. The patient and family engaged in shared decision making with the PCP and the RN regarding their care (Long et al., 2017). The RN was the intermediary between the PCP and the patient as needs arose. This allows the patient the ability to have needs met without having to interface with the PCP. The RN assists in placing consults for other areas of care, for example dermatology, if the patient requests it. This would not replace the face to face visits with the PCP but would augment them freeing the PCP to see other patients.

The RN communicated with the patient and/or family at the agreed interval and medium. The RN queried the patient on various topics based on the patient’s condition and needs. The patient was given the opportunity to discuss any concerns with the RN who in turn assisted in resolving the concerns through various methods available. Through this regular interaction issues and concerns were resolved prior to the need for higher intensity interventions including an ED visit or hospitalization.

**Setting**

This project was implemented in the primary care clinics and CBOCs of an urban, federal healthcare system located in the Northeastern portion of the United States.

**Recruitment**

**Subjects**

The RN staff in primary care were provided education on CM. This education was an extension of the orientation provided for nurses who are currently practicing in primary care.

**Inclusion criteria**

Only RNs currently working in primary care at the VAWNYHS or the CBOCs were included. This included 19 RNs.
**Exclusion criteria**

RNs not presently working in primary care at the VAWNYHS or the CBOCs were excluded.

**Recruitment Strategies**

Emails were sent to the RNs within primary care describing the dates and times of the educational offering. A cover letter explaining the project was distributed with the email (Appendix F). The RNs were asked to voluntarily complete an anonymous demographics online survey (Appendix G). The educational offering was mandatory but the submission of demographics was not. At the end of the education the RNSs were asked to voluntarily complete an online program evaluation (Appendix H).

**IRB, Ethics and Consent**

The VAWNYHS was the Institutional Review Board (IRB) of record (Appendix E). The Eastern Kentucky University (EKU) IRB was informed when approved. Participation in the case management education offering was required for the RNs as part of their employment with VAWNYHS. Submission of the Anonymous Demographic Survey offered no more than minimal risk.

**Data Collection**

A chart review utilizing the Veterans Health Administration’s (VHA) EHR was completed by the principal investigator (PI) for completion of the note template documentation by the RNs. Each RN participating added the PI as the additional signer in the EHR. The VA EHR additional signer feature allows the author of a note to identify additional persons to read and sign the note. Once added as an additional signer the person added receives an alert to indicate there is a note to sign. All patient identifiers were removed. The data collection was aggregated data and as such was not attributed to any patient and/or RN.
Instruments

Anonymous Demographic Survey

The demographics of the RNs completing the intervention was collected utilizing an anonymous demographic survey through an online survey (Appendix G). This survey included age, gender, years of service at the VAWNYHS, years working in primary care and terminal nursing degree obtained.

Chart Review Instrument

Information was collected from the EHR. The charting for the identified patients was reviewed and scored by the PI based on the inclusion of the points identified in the CM templated note. This was collected in aggregate form and not patient specific to insure confidentiality (Appendix I).

Data Analysis

Data analysis was completed utilizing Statistical Package for the Social Sciences (SPSS) version 27. Data analysis includes the demographics of the RNs completing the survey to include age, length of employment at the facility and educational degree obtained. The analysis of the chart documentation within the template was completed by the PI. Analysis was completed as included or not included and reported as percentages. It was also noted if there were additional remarks.

Timeline, Resources and Budget

The IRB submission paperwork was submitted and approved by the VAWNYHS Associate Chief of Staff for Research & Development in October 2020 (Appendix E). Once approved, work began on completing the templated note for documentation of the CM intervention in the EHR. The power point presentation for the RNs on the process and implementation of CM was developed during the months of September 2020 to February 2021. The education was presented to the participating RNs in the week of February 21,
2021. The CM utilization commenced the same week. Data collection began after the completion of 4 weeks. Data analysis was completed in April of 2021. (Appendix J)

There were minimal resources used to complete this project. Costs consisted primarily of the paper to print any materials. The education of the RN staff took place within a normal work day. The VAWNYHS requires the education of the nurse care managers in the strategies of CM. For this reason the actual time involved in the CM did not require any additional cost. All RNs have computer access and the proper software for virtual training also incurring no further costs. There was no specialized equipment required.

Results

Anonymous Demographic Survey

The online, anonymous demographic survey was completed on a voluntary basis by eight of the nineteen RNs participating in the educational offering, making the response rate was 42% (Table 2).

| **Table 2**
| **Demographic Survey** |
|-------------------------|-------------------|-----------------|
| **Variable**            | **Number**        | **Percentage**  |
| Age in years            |                   |                 |
| 18-29                   | 1                 | 12.5            |
| 30-39                   | 1                 | 12.5            |
| 40-49                   | 1                 | 12.5            |
| 50-59                   | 4                 | 50.0            |
| 60+                     | 1                 | 12.5            |
| Gender                  |                   |                 |
| Female                  | 7                 | 87.5            |
| Male                    | 1                 | 12.5            |
| Number of Years at VAWNYHS |                  |                 |
| 0-5                     | 4.0               | 50.0            |
| 6-10                    | 3.0               | 37.5            |
| 11-29                   | 0.0               | 0.0             |
| 30+                     | 1.0               | 12.5            |
| Number years in PACT    |                   |                 |
| 0-3                     | 3.0               | 37.5            |
| 4-6                     | 3.0               | 37.5            |
| 7-9                     | 2.0               | 25.0            |
| Education Level         |                   |                 |
| Associates              | 1.0               | 12.5            |
| Bachelors               | 6.0               | 75.0            |
| Master                  | 1.0               | 12.5            |
Seven of the eight RNs completing the survey were female. Additionally 5 of 8 were noted to be over the age of 50. From the U.S. Department of Health and Human Services et al., 2019 survey neither of these results is surprising.

**Program Evaluation**

In addition an anonymous, online program evaluation was also given to the RNs participating to voluntarily complete at the end of the program (Appendix H). This was only completed by one RN with the responses all being strongly agree.

**Chart Review Instrument**

There were a total of 24 charts were audited. All were appropriately selected by the RN Care Manager based on COVID-19 results or CAN score. Twelve of the charts audited were of COVID-19 positive patients. The RNs are notified in the EHR of all positive COVID-19 patients on their panels.

The CAN score, listed as a percentile ranking from 0-99, lowest risk to highest risk, is available from the VA data warehouse. The RNs were instructed if they did not have a COVID-19 positive patient to utilize the templated note on a higher CAN score patient. The CAN scores ranged from 15-99 with a mean score of 71.8.

The CAN score was noted in 21 of the 24 patients. Three of the patients were traveling and are not part of a primary care team in the VAWNYHS making their CAN score inaccessible from the data warehouse. These patients were contacted by the Traveling Veteran Coordinator (TVC) and documented in the EHR. While traveling the patients are able to seek care at their destination through the TVC. The Traveling Veteran Coordinator works with the home facility of the Veteran to assure continuity of care (“Traveling Veteran Coordinator - Traveling for the Winter?,” 2019). The CAN scores of the 21 patients ranged from 15 to 99 (Table 5).
Of the 24 charts reviewed in the patient population there were 19 male patients and 5 female patients. As this project was conducted at a Veterans Affairs facility males were the primary patients included, 79% compared to 21% females. The ages of the 24 patients ranged from 28 years to 88 years old with a mean of 63.8 years.

The charts were reviewed by the PI for completion of the CM chart entries. The case management chart entry variables were identified in each note as included or not included. The results of the chart review are presented in Table 3. When the documentation was reviewed all variables were addressed in each chart note. Some entries incorporated more information than others and some were simple yes/no answers or not applicable. None of the variables were left blank or unanswered and as such were identified as included.

At times the RN would add additional information pertinent to the patient in the CM note or at the end of the CM note. These additional notes helped to provide valuable information regarding the patient. Information included in the additional notes included referrals to social work for assistance related to employment issues, financial questions and housing problems. Discussion with the patient related to past issues with depression and need for referral to behavioral health was also included. Three of the patients were traveling veterans and this was reflected in the notes. One patient refused to participate and answer the questions of the RN.
Table 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Included</th>
<th>Not Included</th>
<th>Percentage Compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct note in chart</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Contact information correct</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Social supports</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Living arrangements</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Living situation adequate</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Employment status</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Employment status affected by illness</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Income/financial status</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Mental Health diagnosis</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Mental status</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Open consults noted</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Upcoming appointments</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Correct Cosigner added</td>
<td>24</td>
<td>0</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Discussion**

This project was the first exposure for most of the RN participants to case management. A templated note was created to increase the compliance with the
documentation. The evidence reflected in this project when given the template to guide documentation the RNs completed an entry into all the variables in the chart.

There were two notes completed by the women’s health RN on lower CAN score patients; however, both were recently confirmed as pregnant. Utilizing the CM note provided the RN with additional information on these two patients including one who had issues with depression in the past. The RN was able to discuss this with the patient and document the conversation in the record.

One RN did not utilize copy and paste of the templated into the note into the patient EHR. Because of this, the CM note included all the required information, but the order was not consistent with the template. This made it more difficult to interpret the information and could lead to an incomplete note.

Limitations include at the time of the education and chart review the local COVID-19 numbers had been on a decrease in the area of the VAWNHYHS. Registered Nurses who did not have a COVID-19 positive patient still completed the CM note on a high CAN score patient with another diagnosis. In addition, staffing in the primary care clinics was decreased related to staff being utilized for the COVID-19 vaccination efforts of the VAWNYHS. For this reason the note template utilized was a condensed version of a full CM note to increase the compliance by the RNs.

**Implications**

**Clinical Practice**

As the RNs in the primary care clinics are care managers and not case managers they have had little exposure to the benefits of CM. For most this is the first introduction to CM. The VISN and facility continues with the expectation all RNs in primary care will perform CM on a small number of patients within their panel. Continued education and participation
in CM will be required. Additional note templates will be developed to support the RN in furthering the journey of CM.

**Policy**

The completion of case management for patients at the VAWNYHS is being driven by the VISN 2 Care/Case Management Steering Committee. The organization will need to continue to support the RNs as they move forward to this goal. As the RNs become more proficient in providing CM to patients, support from leadership will be required.

**Quality and Safety**

As the life expectancy of this population continues to increase so does their desire to remain in the home as long as possible (Lovelace et al., 2016). Case management offers the patient a link to health care services through the RN to provide the support for staying in the home. Regular interventions with the CM will offer quality care to the patient. Safety will be enhanced through prompt interventions by the RN when issues are identified in the home. A prompt referral to physical therapy by the RN if the patient is unsteady in the home could lead to the prevention of a fall as well as potential fracture and hospitalization.

**Education**

Additional education on the case management process will be required for the RNs. This project was limited in the CM intervention offered. Education on writing a CM care plan will need to be offered. Case Management should be a regularly scheduled contact with the patient at an agreed upon interval. Findings from this project demonstrated that providing the RNs an outline of possible answers to the case management questions assisted them in using the CM note template more effectively. Education on the use of the CM template, CAN score and expected answers should be repeated as new versions are released by the VA, and as new case management RN roles are assigned in the facilities.
Feasibility and Sustainability

The feasibility of this intervention in terms of being able to accomplish is high. The VAWNYHS is mandating this training for the RNs and the utilization of CM. The RNs currently are each assigned a panel of patients and maintain primary responsibility for managing those patients. Performing CM with those recently diagnosed with COVID-19 and at highest risk can potentially decrease workload through the prevention of adverse events which lead to ED visits and hospitalizations. Discussed by Long et al. (2017) a key attribute of a successful program is targeting those that would most likely benefit from it.

The benefit of the intervention of CM will lead to its sustainability. Sandberg et al. (2015) highlights the aim should be to improve a patient’s situation, working to have the complex needs met and overcoming fragmented care. The increased teamwork, care coordination, and relationships with the patient, PCP and RN created through CM will lead to maintaining the intervention. The shift in workload to prevention rather than post admission follow-up will create a more positive interaction with the patients.

Future Scholarship

Information from this project will be shared with the nursing leaders of the VAWNYHS and with the participating RNs. Ongoing education in CM will be conducted using the fundamental components from this project. Additional note templates created will be communicated to the RNs along with the training required to complete them properly.

Conclusion

Registered nurses in Primary Care are well positioned to coordinate care for the patients. This project demonstrated when given a template to follow the RNs were able to complete an accurate CM note for the patients. The objective to increase the knowledge of the RN on the utilization of CM and assist the RN in the implementation of CM with the use of a templated note was met.
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https://doi.org/10.2217/cer-2018-0029

https://doi.org/10.1371/journal.pone.0132340


Appendix A

VISN 2 Care/Case Management Steering Committee

January 2020

Committee Name: VISN 2 Care/Case Management Steering Committee

Chair: Western New York Chief Of Staff

Co-Chair: Bath Associate Director Patient Nursing Service

Membership:

Voting Members:
- RN Representative from Albany
- RN Representative from Bath
- RN Representative from Bronx
- RN Representative from Canandaigua
- RN Representative from Hudson Valley
- RN Representative from New Jersey
- RN Representative from New York Harbor
- RN Representative from Northport
- RN Representative from Syracuse
- RN Representative from Western New York

Adhoc:
- VISN 2 Associate Directors for Patient Nursing Services
- Associate Chief of Staff Primary Care from each VISN site
- Primary Care Lead Physician
- Community Care Leads
- Home Based Primary Care Leads

Recorder: Bath ADPNS AA

Purpose: The VISN 2 Care and Case Management Committee provides oversight and establishes standards of practice for Care Coordination/Case Management for RN’s working in Patient Aligned Care Teams, Home Based Primary Care and Care in the Community. With the provision of Choice, Veterans can receive health care closer to home and in the wider private sector health care community. However, they must also navigate in and out of a complex VA healthcare system to receive this care. Keeping Veterans healthy and out of the hospital with the highest quality of life is paramount to this committee. Better care coordination and case management should reduce the number hospital stays and hospital readmission rates; improve Veteran experience, continuity of care, and improve Ambulatory Care Sensitive Conditions with successful implementation.
VISN Strategic Alignment:

- **Strategic Objective:** Veteran Centered Care (Ensure the focus of all care provided is personalized, pro-active and patient driven. Ensure cultural, programmatic and environmental/infrastructure needs are aligned with Veteran centric care.)

Blueprint for Excellence Strategic Alignment:

- **Strategy:** Deliver high quality, Veteran-centered care that compares favorably to the best of private sector in measured outcomes, value, access and patient experience.
- **Strategy:** Leverage information technologies, analytics, and models of health care delivery to optimize individual well-being and population health outcomes.
- **Strategy:** Grow an organizational culture, rooted in VA’s core values and mission, that prioritizes the Veteran first, engaging and inspiring employees to their highest possible level of performance and conduct.
- **Strategy:** Foster an environment of continuous learning, responsible risk-taking, and personal accountability.
- **Strategy:** Advance a model of health care that is personalized, proactive, and patient-driven, and engages and inspires Veterans to their highest possible level of health and well-being.
- **Strategy:** Support innovation in health services through academic affiliations, information exchange, intergovernmental, public-private, and community-based initiatives.
- **Strategy:** Operate and communicate with integrity, transparency and accountability to earn and maintain the trust of Veterans, stewards of the system (Congress, Veteran Service Organizations) and the public.

Key Tasks:

a. Assesses needs, forecasts trends, set priorities, and establishes goals for Care Coordination and Case Management across VISN 2.

b. Reviews, evaluates, and continually improves Care Coordination/Case Management processes across the medical center.

c. Ensures compliance with applicable standards related to the delivery of Care Coordination/Case Management using the principles of Case Management Society of America training initiative.

d. Integrates activities with other key VISN Committees/Councils responsible for delivery of clinical care and/or services.

e. Continuing education of RN staff on care coordination/case management for implementation into nursing practice. Initially this will be on Patient Aligned Care Teams, Home Based Primary Care and Care in the Community, but will eventually spread to Specialty Care/Inpatient Care and even Urgent Care/Emergency Care.

f. Establishment of productivity guidelines for care and case management.

Area of Responsibility:

a. Case management is intended to maximize resource utilization and promote quality Veteran-centric care while producing cost effective outcomes.
b. Case management requires well-coordinated and collaborative interdisciplinary efforts, which are dependent upon effective communication and cooperation across internal and external VA care.

c. Case management requires frequent assessment, planning, advocacy, support, coordination of multiple services, and evaluation to meet the Veteran’s complex health care needs. Case management is geared towards Veterans with the highest level of need. These Veterans may be hospitalized, or have had recent, extended, or repeat hospitalizations, or recurrent episodes of crisis. Their identified problems interfere with life in a disabling manner and there are multiple service provision needs. Intensive-acute case management includes extensive contact with the Veteran, the Veteran’s family/caregiver, and the Veteran’s health care providers. The goal is to stabilize the Veteran and eventually transition to less intensive case management.

d. Assess Nursing Evidenced Based Practice/Nursing Research in regards to Care Coordination and Case Management. Specific areas assessed include the following:
   - Strategic Planning in regards to Care Coordination and Case Management
   - Proactive Health Care Planning for Veterans/families/caregivers
   - Integrate appropriate use of Community resources in the care of our Veterans.
   - Patient Safety
   - Veteran Health Education
   - Patient Satisfaction
   - Safe and effective Medication Reconciliation/regimens
   - Fall prevention
   - Nursing Initial and On-Going Education in regards to Care Coordination and Case Management for those nurses in PACT, HBPC, and CITC.

Relevant Boundaries: The VISN 2 CCM Censures actions taken improve efficacy, efficiency, and effectiveness of nursing care delivery processes in the most cost effective manner to continually improve quality of clinical services.

Ethical Responsibilities: This committee recognizes its responsibility to help foster an ethical environment and culture in VISN 2 Care Coordination and Case Management, to bring ethical awareness to its work, to discuss ethical issues openly and honestly, to collaborate with facility leadership as needed and to take action as necessary.

Long and Short Term Goals:

Short Term Goals:

- Develop Plans of Care using the Integrated Case Management Complexity Assessment Grid for top 2-3 on each panel.
- Provide Tutorials to better navigate and utilize tools such as:
  - CAAN Reports
  - PCMM Functions
  - Pre and Post Visit Summaries
• SAIL metrics
• 3M High Risk Reports
• More CVT / Telehealth training
• Increased use of Video on Demand in the Case Management of Complex Patients for top 3-5 per team.
• Providers need to engage RNs in Care Plan
• Review Complex Cases to maintain skill levels in Case Management

**Long Term Goals:**

• Enhance efficiency and competency of care coordination and population health management in PACT teams. If determined by participants and VISN leadership, develop Disease-specific roles for Case Managers.
• Demonstrate functional improvements in transitions of care between practice settings.
• Utilize standardized tools for eligibility criteria, screening, practices, transitions of care, oversight, training, IT infrastructure, data collection techniques and team collaboration.
• Increase the number of Telehealth referrals from PACT teams.
• Utilize each staff member to the fullest extent of their license/competencies and scopes.
• Maintain a system to ensure Patient-Centered Care using current evidence-based practice in Care Coordination, Case Management
• Support Facility, VISN, and VHA Goals and Objectives
• Improved management of NVCC and Choice consults
• Coordination with Travel Vet Coordinator

**Reporting Requirements:** Reports Quarterly to VISN Healthcare Delivery Council

**Meeting Frequency:** Monthly for a minimum of 10 months/year

Joan McInerney, MD, MBA

VISN 2 Network Director
VISN 2 Care/Case Management Steering Committee

Appendix A

VA Strategic Alignment:

- **Strategic Objective 1**: Organizational Culture; to foster a culture which emulates the values and behaviors which support the mission of serving Veterans. This includes emphasizing the core values of ICARE, promoting psychological safety to “Speak Up” or “Stop the Line”, and empower staff to share ideas for process improvement.

- **Strategic Objective 2**: Access / Advances in Clinical Care & Quality (Ensure the highest quality of care is accessible closest to a Veterans home and available in a timely manner.)

- **Strategic Objective 3**: Veteran Centered Care (Ensure the focus of all care provided is personalized, pro-active and patient driven. Ensure cultural, programmatic and environmental/infrastructure needs are aligned with Veteran centric care.)

- **Strategic Objective 4**: Financial & Environmental Stewardship (Ensure resources are allocated efficiently and planning incorporates assessment of Veterans’ future)

Blueprint for Excellence Strategic Alignment:

- **Strategy 1**: Operate a health care network that anticipates and meets the unique needs of enrolled Veterans, in general, and the service disabled and most vulnerable Veterans, in particular.

- **Strategy 2**: Deliver high quality, Veteran-centered care that compares favorably to the best of private sector in measured outcomes, value, access and patient experience.

- **Strategy 3**: Leverage information technologies, analytics, and models of health care delivery to optimize individual well-being and population health outcomes.

- **Strategy 4**: Grow an organizational culture, rooted in VA’s core values and mission, that prioritizes the Veteran first, engaging and inspiring employees to their highest possible level of performance and conduct.

- **Strategy 5**: Foster an environment of continuous learning, responsible risk-taking, and personal accountability.

- **Strategy 6**: Advance a model of health care that is personalized, proactive, and patient-driven, and engages and inspires Veterans to their highest possible level of health and well-being.

- **Strategy 7**: Lead the nation in research and treatment of military service-related conditions.

- **Strategy 8**: Support innovation in health services through academic affiliations, information exchange, intergovernmental, public-private, and community-based initiatives.

- **Strategy 9**: Operate and communicate with integrity, transparency and accountability to earn and maintain the trust of Veterans,
stewards of the system (Congress, Veteran Service Organizations) and the public.

- **Strategy 10:** Modernize management processes in human resources, procurement, payment, capital infrastructure, and information technology to operate with benchmark agility and efficiency.
Appendix B

Action Plan

High Risk ACSC/High CAN Score Case Management - WNY PC PACT RN Action Plan

High Care Assessment Need (CAN) Score Case Management

a. With PC Provider, identify three patients on panel with CAN 99 for Case Management (by 10/2020)
   a. RN to be integrated during scheduled Provider F2F appt
   b. RN to complete pro-active follow-up phone calls/VVC visits at appropriate intervals
b. Use CAN score report during scheduled teamlet meeting to review future scheduled care and identify care and case management issues with particular focus on CAN 99 pts
c. Purpose of follow-up contact/calls:
   o Assess patient & develop and document Care Plan
   o Educate about chronic disease and self-management
     o Document education in PHE/VHE General Education Note
     o Provide appropriate educational handouts – locally developed or from VA Library Resources
   o Offer Home Telehealth/CCHT using appropriate disease management modules
   o Engage in LSTI conversation and document Goals of Care Conversations

Action Plan Revised January 2021

How to identify patients:

- Start with CAN score of 99 and work down
- Choose 1-3 patients who could benefit from case management after their diagnosis with COVID-19
- Utilize the COVID-19 Tracker report- V2 to see which patients from your panel have tested positive/were admitted
Appendix C

Case Management Additions to Templated Note

Contact Information Correct:
Social Supports available:
Living Arrangements:
Is living situation adequate?:
Employment status:
Employment status affected by illness?:
Income/Financial Status:
Mental Health Diagnosis:
Mental Status:
Open Consults:
Upcoming Appointments:
Appendix D

Case Management Additions to Templated Note Including Prompts for RNs

Is contact information correct? (Yes/No/Comments)

Social Supports available: (None, Unknown, Spouse/Partner, Parent, Adult Children, Family, Friends, Religious, Pets, Other)

Living arrangements: (House, Apartment, Assisted Living, Shelter, Other)

Is living situation adequate? (Yes/No/Comments)

Employment status: (Employed, Unemployed, Retired, Disabled, Homemaker)

Employment status affected by illness? (Yes/No/NA/Comments)

Income/Financial Status: Income from: (None, Salary/wages, Public assistance, SSI/SSDI, VA Pension, SC Compensation, Unemployment benefits, Retirement benefits, Other)

Mental Health diagnosis: (from problem list)

Mental Status: (Behavior, speech, thought content, orientation, mood affect, isolation)

Open consults noted: (If yes review and document. If need to contact consultant make comment)

Upcoming appointments: (Review upcoming appointments. If any need to be changed make sure patient is aware as well as the area where the appointment is scheduled)

Correct Cosigner added: PACT Team or as needed
### Appendix E

**IRB Approval**

---

**VA Western New York Healthcare System**

**QA/QI Project Submission Worksheet**

<table>
<thead>
<tr>
<th>Title:</th>
<th>Case Management of Primary Care Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Bernadette Webster</td>
</tr>
<tr>
<td>Date:</td>
<td>October 13, 2020</td>
</tr>
</tbody>
</table>

**Complete the Worksheet for Determination of QA/QI versus Research**

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the Operations Activity designed (and/or implemented) for internal VA purposes in support of the VA mission(s)?</td>
<td>Yes — Please explain below and answer next question</td>
</tr>
<tr>
<td>Please Explain: The purpose of this QA/QI project is to provide nurses in primary care with the education and methods of case management to assist in more effectively managing care for the outpatient. Education will be provided to the registered nurses on methods for implementing case management in the primary care setting.</td>
<td></td>
</tr>
<tr>
<td>Are the activity’s findings designed to be used by and within VA (or by entities responsible for overseeing VA)?</td>
<td>Yes — Please explain below and answer next question</td>
</tr>
<tr>
<td>Please Explain: It is designed to be utilized by the Registered Nurses within the primary care clinics</td>
<td></td>
</tr>
<tr>
<td>Is the activity designed for the purpose of contributing to generalizable knowledge (i.e., expanding the knowledge base of a scientific discipline or scholarly field of study)?</td>
<td>No — Please explain below and answer next question</td>
</tr>
<tr>
<td>Please Explain: The activity will provide education to the registered nurses to assist in more effectively managing care for the outpatient</td>
<td></td>
</tr>
<tr>
<td>Is the activity funded or supported as research?</td>
<td>No — Please explain below and answer next question</td>
</tr>
<tr>
<td>Please Explain: The activity is in support of the VISN 2 Care/Case Management Steering Committee to put the VISN in compliance with VHA Directive 1110.04(1) Integrated Case Management Standards of Practice.</td>
<td></td>
</tr>
<tr>
<td>Is the activity a clinical investigation as defined under Food and Drug Administration (FDA) regulations (e.g., studies of FDA-regulated drugs, devices, and biologics)?</td>
<td>No — Please explain below and answer next question</td>
</tr>
<tr>
<td>Please Explain: This activity does not include any clinical investigation</td>
<td></td>
</tr>
<tr>
<td>Does the activity include double-blind interventions?</td>
<td>No — Please explain below and answer next question</td>
</tr>
<tr>
<td>Please Explain: The activity includes education for all Registered Nurses in Primary Care</td>
<td></td>
</tr>
<tr>
<td>Does the activity include placebo controls?</td>
<td>No — Please explain below and answer next question</td>
</tr>
<tr>
<td>Please Explain: All the primary care Registered Nurses will be participating in the education and providing this intervention to patients within their panels</td>
<td></td>
</tr>
<tr>
<td>Does the activity involve randomizing patients to a clinical intervention that may or may not benefit them?</td>
<td></td>
</tr>
<tr>
<td><strong>No</strong> – Please explain below and answer next question</td>
<td><strong>Yes</strong> →</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Please Explain: This project will support nurses to work in collaboration with the PC Provider and identify three patients on their panel with a CAN score of 99 for case management. The nurses will utilize a templated note for documentation of the intervention. A chart review for the inclusion of the identified topics in the documentation by the RNs will be completed four weeks after the provision of the education.</td>
<td></td>
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<tr>
<td><strong>Has the activity been supplemented or modified before, during, or after implementation in order to produce information to expand the knowledge base of a scientific discipline or scholarly field of study or otherwise contribute to generalizable knowledge?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>No</strong> – Please explain below and answer next question</td>
<td><strong>Yes</strong> →</td>
</tr>
<tr>
<td>Please Explain: The project is a QI intervention developed in order to promote compliance with VHA Directive 1110.04(1) Integrated Case Management Standards of Practice.</td>
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<tr>
<td><strong>Has the purpose of the activity changed so that it is now designed or intended to expand the knowledge base of a scientific discipline or scholarly field of study or otherwise contribute to generalizable knowledge?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>No</strong> – Please explain below and submit the requested documents</td>
<td><strong>Yes</strong> →</td>
</tr>
<tr>
<td>Please Explain: This project will contribute to the work of the VISN 2 Care/Case Management Steering Committee to improve compliance with VHA Directive 1110.04(1) Integrated Case Management Standards of Practice.</td>
<td></td>
</tr>
</tbody>
</table>

The following documents are submitted with this completed checklist:

- [ ] Project Abstract
- [x] Full Project Proposal
- [x] Letter of Support from VA Supervisor/Care Line Manager

Bernadette A Webster 376338
Digitally signed by Bernadette A Webster 376338
Date: 2020.03.14 11:07:20 -04'00'

Signature

Date

RDC Chair Recommendation:

- [x] This Operations Activity is **NOT RESEARCH**. Research and Development Committee (RDC) and appropriate Subcommittee approval is not required.
- [ ] This Operations Activity may constitute as **RESEARCH**. Research and Development Committee (RDC) and appropriate Subcommittee approval is required.
- [ ] Modifications itemized below are required before a determination may be made whether this activity does or does not involve research.

Version 07/18/14
CASE MANAGEMENT

John A Sellick 288743
RDC Chair/Designee Signature

RDC Reviewer Conflict of Interest
Indicated by marking YES or NO if there are any financial conflicts of interest or arrangements of concern (describe below) that apply to the reviewer:

☑ Yes | ☑ No

Institutional Approval:
Based on the review of the proposal and the QAQI checklist, the activity is not research and Research and Development Committee approval is not required. Note, if the scope of the project changes, it may require evaluation for research status. The decision of non-research status was made in compliance with (or informed by) VHA Handbook 1058.05: VHA Operations Activities that may Constitute Research [10/28/11].

Documentation of non-research status is (i) required prior to peer-reviewed publication, and (ii) encouraged whenever non-research status may be questioned. This approval form serves as documentation of non-research status for this activity.

You should retain this documentation of non-research status as it may be required prior to peer-reviewed publication and in the event that the non-research status of this activity is questioned.

Ali A El-Solh 270612

Approving Official Signature

Page 3 of 3
Dear Registered Nurse (RN):

My name is Bernadette Webster. I am implementing an educational program at the Veterans Affairs Western New York Healthcare System (VAWNYHS) as a requirement for the completion of my Doctor of Nursing Practice (DNP) degree at Eastern Kentucky University. I will be guided in my work by Dr. Melanie Johnson. This project is titled Case Management of Primary Care Patients. The purpose of this project is to provide education to Registered Nurses in primary care on the implementation of case management into nursing practice to promote quality Veteran-centric care while producing cost effective outcomes.

You are being asked to participate because you are an RN at the VAWNYHS in a primary care clinic. Participation in the education of case management is required as a condition of your employment. Chart reviews will be completed for inclusion in the study and results reported only in aggregate form. You can voluntarily complete an anonymous short demographic survey for general informational purposes through an online survey.

There is no known benefit to your participation; however, participation may help identify areas requiring additional education regarding case management. This project will last 4 weeks.

If you have any questions please contact the primary investigator, Bernadette Webster at (716) 361-5275 or my project advisor Dr. Melanie Johnson at (859) 622-6335.

Bernadette Webster

Doctor of Nursing Practice Student

Eastern Kentucky University
Appendix G

Anonymous Demographic Survey

Age:

- 18-29  •  30-39  •  40-49  •  50-59  •  60 or older

Gender:

- Female  •  Male

Number of years at VAWNYHS

- 0-5  •  6-10  •  11-15  •  16-20  •  21-25  •  26-30  •  30+

Number of years in PACT

- 0-3  •  4-6  •  7-9  •  10-12  •  13+

Education Level of Nursing Degree:

☐ Associates  ☐ Bachelor’s  ☐ Masters  ☐ Doctorate
Case Management for the PACT RN

Date:

We value your opinion:

Please take a moment to complete this program evaluation.

Rate the degree to which you felt this program met the learning objectives:

<table>
<thead>
<tr>
<th>Learning Objective:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>1. This program explained the importance of case management for primary care patients</td>
<td></td>
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<tr>
<td>2. This program identified the need for case management for primary care patients</td>
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<tr>
<td>3. This program discussed how case management leads to less visits to the ED and hospitalizations</td>
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<tr>
<td>4. As a result of this program, I will implement use of case management with one to three patients</td>
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<tr>
<td>5. As a result of this program, I am able to use the documentation guide I was provided</td>
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<td>6. I will use the information I learned today in my daily practice</td>
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<td>7. Case management is an interesting topic and I would attend other programs related to this topic</td>
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</tbody>
</table>

What do you think we could have done to improve our program?

What subjects would you like to see presented in staff development programs in the future?

https://www.surveymonkey.com/r/L82KJS9
## COVID 19 CM Chart Review

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<tr>
<th>Included</th>
<th>Not included</th>
<th>Additional Comments</th>
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<tr>
<td>Correct note in chart</td>
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<td>Contact information Correct</td>
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<tr>
<td>Social support</td>
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<tr>
<td>Living Arrangements</td>
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<td>Living Situation adequate</td>
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<td>Employment Status</td>
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<td>Employment Status affected by illness</td>
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<td>Income/Financial status</td>
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<td>Mental health diagnosis</td>
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<td>Mental status</td>
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<td>Upcoming appointments</td>
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<td>Correct cosigner added</td>
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## Appendix J

### GANTT Chart

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<tbody>
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<td>Prepare Proposal for IRB submission</td>
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<td>Revision of templated EHR note</td>
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<td>Prepare educational presentation</td>
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<td>Present education to RNs</td>
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