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Initial Findings of a Medicare Annual Wellness Visit Program

Hesper B. Nowatzki
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Walden University

College of Health Sciences

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Hesper Nowatzki

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Walden University
2017

Abstract

Initial Findings of a Medicare Annual Wellness Visit Program

by

Hesper B. Nowatzki, FNP-BC

MSN, Walden University, 2014

BSN, Excelsior College, 2012

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

August 2017

Abstract

Despite the emphasis of benefits on preventive health, many older adults are not receiving the recommended age specific, evidence based screenings and vaccinations. The Medicare Annual Wellness Visit (AWV) is designed to address modifiable risk factors with aging adults and close gaps in care not captured in routine office visits. Although a free Medicare benefit to patients, and a reimbursable service to health care providers, participation in the AWV is low nationwide. The purpose of the project is to introduce an AWV program to a rural health clinic in Northwest Illinois that has a population consisting of over 25% of people 65 years and older. The rural health clinic failed to capture a single AWV in the previous year, despite having 1300 active Medicare patients in the clinic. The clinical question asked whether the implementation of an AWV program by nurse practitioners can yield improved compliance with recommended health screenings and vaccinations and diagnosed previously unrecognized clinical conditions. The Iowa model, health belief model and Donebedian's structure-process-outcome model were utilized for the introduction and implementation of the practice change. Evidence was derived from chart review of 50 patients and administration of the SF-36 survey before and following the AWV. Findings and conclusions suggest that the AWV generated improved compliance of preventive services and improved patient quality of life. Addressing preventive health strategies for aging adults is relevant to nursing practice because of the complex and chronic health challenges of this age group. These efforts can reduce the burden of suffering from chronic illness, prevent exacerbation and decline, improve quality of life, and reduce federal and individual health care expenditures to minimize the cost of advanced disease treatment.

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Section 1: Nature of the Project

The number of older adults is continuing to rise, as life expectancies have increased in the United States. The number of individuals over 65 years of age is expected to reach over 98 million in the next 50 years (U.S. Department of Health and Human Services, 2010). With the changes associated with increased life expectancy, the expectation of health and wellness in late adult life requires adaptation in services to address the needs and unique challenges of this population. Older adults are more likely to experience the high prevalence and complications associated with chronic health problems. Evidence based interventions are required to address these problems in ways that patients and primary care providers can mutually plan and facilitate preventive and maintenance services. Successfully managing chronic conditions, while preventing exacerbation and future decline, has the potential to impact both longevity and quality of life for older adults.

The health status of the older adult has changed dramatically over the past decades. The leading causes of death have shifted within the last century from infectious diseases and acute illnesses to chronic and degenerative diseases (Centers for Disease Control and Prevention [CDC], 2013). Hypertension, a common health condition, is prevalent among aging adults. With nearly 67 million Americans with elevated blood pressure, over 50% of these individuals do not have their blood pressures under control (CDC, 2013). Depression occurs commonly with older adults, yet is often not screened for in the clinical setting (Ivanova, Bienfait-Beuzon, Birnbaum, Connolly et al, 2011). Chronic pain is an issue among aging adults, yet remains under reported, under recognized, and under treated (Tracy & Morrison, 2013). Older adults may receive long

term prescriptions for multiple medications, utilize more than one pharmacy, and visit several specialists, which can contribute to complications associated with poly-pharmacy and adverse drug effects (Greenleaf-Brown, 2016). Common conditions among older adults such as vision and hearing impairments, frequent falls, bladder or bowel incontinence, cognitive decline, impaired nutritional status and dependency for their activities of daily living can compound disability, but are often unaddressed in health visits (Cigolle, Langa, Kabeto, Tian & Blaum, 2007).

The Medicare Annual Wellness Visit (AWV) Program provides an opportunity for patients 65 years and older to identify and manage chronic health conditions to optimize their health. Implementing a nurse practitioner led AWV program may lead to increased compliance with recommended evidence based health screenings, vaccinations and detect previously unrecognized conditions. The purpose of this doctoral project was to introduce a nurse practitioner led AWV program for Medicare eligible patients in a rural health clinic setting to identify risks and increase compliance with recommended practice guidelines for aging adults.

Problem Statement

Despite the emphasis of benefits on preventive health, many older adults are not receiving the recommended age specific screenings and vaccinations. The CDC (2011) stated that between 60-65% of men and women age 65 and older are deficient in receiving the recommended preventive services for their age group, and less than 25% of adults aged 50-64 years are considered current with recommended guidelines. The health problem is described as the lack of consistent chronic care and preventive health

management for older adult patients related to the under-utilization of preventive services being offered in the primary care setting.

It is estimated that nearly 50% of patients who are 65 years or older have at least one chronic condition, while almost 80% have two or more chronic diseases (CDC, 2011). Typical health check exams are focused more on the treatment of chronic conditions, rather than providing comprehensive assessments that encompass overall health status, functioning and well-being of the aging patient, missing opportunities for age appropriate preventive services and interventions. Although older adult patients regularly attend scheduled office appointments and health check exams, recommended practice guidelines for preventive screening and vaccinations are not being met within the context of these office visits (Viera, 2016).

Jo Daviess County, Illinois, has a large population of older adults, with over 25% of adults aged 65 or older (US Census Bureau, 2010). Within the rural health clinic located within the largest town in Jo Daviess County, there are over 1300 active Medicare eligible patients. In the previous 2016 fiscal year, the facility failed to capture any Medicare AWWs, which are specifically designed to assess health risk for aging patients and provide an individualized plan for patients. Currently there is the lack of a comprehensive care management and preventive health program which focuses on chronic health conditions to reduce exacerbations, acute care, and emergency department visits with patient centered goals and interventions. This is a gap in care that can be addressed by advanced nurse practitioners practicing to the scope of their education and licensure.

Purpose Statement

The purpose of the project was to introduce a Center of Medicare and Medicaid (CMS) AWW program to improve patient outcomes for beneficiaries who are 65 years of age or older living with chronic health conditions (CMS, 2015). By evaluating the outcomes of the program, new standards of care were adopted within the clinic setting. This objective was fulfilled by identifying and addressing modifiable risk factors for patients, developing provider, nursing and staff tools to assist in recognizing gaps in care, and by educating and motivating patients to participate in their plan of care.

This program provides opportunities to promote patient safety, improve health outcomes, and enhance quality of care. This program can assist in reducing health care expenditures for patients, reduce the burden of suffering related to chronic disease, and maintain clinic compliance with the age appropriate evidence based practice guidelines. Health care providers can assist their aging patients by educating and offering Medicare services to eligible patients, identifying individualized risk factors, and develop preventive action plans of care. These actions have the potential to enhance organizational quality by improving patient health outcomes for the target population, increase patient satisfaction, generate higher utilization of preventive screening services and tests, and improve facility Medicare ratings, while increasing revenue for the clinic through Medicare reimbursement.

Clinical Question

Will the implementation of the Medicare Annual Wellness Visit Program by a nurse practitioner yield improved compliance with recommended health screenings and vaccinations and diagnose previously undiagnosed clinical conditions?

Nature of the Project

The purpose of this project was to implement the AWW program by the clinic nurse practitioners for eligible patients and evaluate the outcomes. The clinical setting is situated in a rural health clinic within a rural critical access hospital in northwest Illinois. The rural health clinic located within the hospital includes four primary care physicians, one internal medicine physician and two nurse practitioners. Developing and implementing this program was intended to improve overall health status of Medicare eligible patients and improve their quality of life with an emphasis on prevention and health promotion. This was accomplished by including elements that are lacking from the traditional office visit including: (a) assessments of health history, (b) health and socio-economic risk, (c) activities of daily living, (d) quality of life, (e) nutrition, (f) pain, (g) health literacy, (h) screenings for safety and depression, (i) mini-cognitive exam, (j) medication review with reconciliation, (k) verification of current vaccination status, and (l) completion of age appropriate screenings. Patient centered care plans were developed by the health care provider to specifically address individualized interventions for self-management and patient education.

Patients of the clinic over 65 received notification from the practice leadership that this service was being offered and encouraging them to call to schedule a visit. Utilizing generic measures captured quality of life and the value attributed to overall health and functioning of participating patients (Kane & Radosevich, 2011). The 36 item

short form survey (SF-36), was completed prior to participation in an Initial Preventive Patient Exam (IPPE) or AWW. The SF-36 survey captured seven generic domains of health in areas of physical, social and cognitive functioning, psychological and overall well-being, pain and vitality (Kane & Radosevich, 2011).

This doctoral project evaluated the formative health outcome measures of 50 patients. Health data collected from clinical data of IPPE and AWW was compiled in a de-identified database. Performance indicators of quality were measured against organizational standard performance on The Healthcare Effectiveness Data and Information Set, and according to CMS Quality Improvement Systems for Managed Care.

Significance

This project was the first of its kind to be introduced in Jo Daviess County, Illinois and was in alignment with statewide initiatives to introduce AWW programs through the state of Illinois as directed by the Illinois Critical Access Hospital Network (ICAHN). Because chronic health conditions can increase morbidity and mortality for older adults and impact their quality of life, educating the importance of preventive health strategies that emphasize primary, secondary, and tertiary measures to reduce adverse outcomes can be instrumental in making positive health and lifestyle changes to adopt new health behaviors. The development of an AWW program can serve not only the aging population, but can be used as a model for all patients who suffer from one or more chronic diseases in order to improve their health status. Adopting the AWW program possesses the potential to improve quality of life for aging adults. Effective health promotion and disease prevention practices can reduce unnecessary health care

utilization, decrease incidence of preventable disease, reduce mortality and morbidity associated with chronic disease, and increase value to U.S. health spending (Thorpe & Ogden 2010).

The stakeholders consist of the members of the organization and community who are impacted by the organizational change (Chitty & Black, 2011). This included clinic physicians and nurse practitioners, reception and nursing staff, hospital administration, hospital board of directors, accounting and medical records staff, information technology and clinical informatics team, outsource patient billing department, ICAHN, CMS, and patients within the target population.

This program contributes to doctoral nursing practice by embodying the core principles and competencies of evidence based practice. The AWV program is aligned with the essentials of doctoral nursing practice education through the science of health care delivery, organizational and system leadership, and population health practices by addressing care needs, promoting patient safety, and quality health care (AACN, 2006).

Summary

In order to improve functional health status and quality of life among older adults, age appropriate evidence based screenings and guidelines should be offered through patient centered assessment that identifies current health and also determines risk and overall function to prevent future decline. By adapting strategies to recommend age appropriate preventive services consistently for older adults, health care professionals can assist their patients by potentially reducing the suffering of chronic illness through preventive measures made available for Medicare eligible patients. The goal of the program was to address the discrepancies in current health practice to close any deficits

that may exist in preventive services. The basis of the project was to offer guidance aimed at preventive care, health promotion and self-management to reduce health disparities through appropriate and individualized interventions.

Section 2: Background and Context

There is a lack of comprehensive, individualized care that identifies modifiable risk factors and promotes preventive practices in the primary care setting. The Medicare AWW provides an opportunity for patients 65 years and older to identify and manage chronic health conditions to optimize their health. Implementing a nurse practitioner led AWW program may lead to increased compliance with recommended evidence based health screenings and vaccinations and detect previously unrecognized conditions. The purpose of this doctoral project was to introduce a nurse practitioner led AWW program for Medicare eligible patients in a rural health clinic setting to identify risks and increase compliance with recommended practice guidelines for aging adults. In this section, I offer an introduction to the theories and models applicable to the program, explain the relevance to nursing practice, and examine pertinent literature to demonstrate the magnitude of the practice problem.

Literature Review

Sources of evidence include resources and materials from CMS, ICAHN, CDC, Illinois Department of Public Health (IDPH) and the U.S. Preventive Service Task Force (USPSTF). I used the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane Database of Systematic Reviews, Index Medicus (MEDLINE), Ovid Nursing Journals, Proquest Health and Science Direct as appropriate search engines to access scholarly documents. The terms I searched included: *Medicare IPPE*, *AWW*,

chronic care management, prevention for older adult, recommendations for aging adults, vaccines and screenings for 65 and older, and health promotion for older adult. I completed this exhaustive and comprehensive review that consisted of literature from the past decade to review current evidence based practice recommendations for the target population. This literature review includes peer reviewed articles, journals and public health databases.

Concepts, Models and Theories

I utilized several models to provide framework for the adoption for the AWW program as they each represent the fundamental approaches for project implementation. The Iowa model was the first model implemented in the development of the doctoral project for its applicability to embrace organizational collaboration of evidence based practice (EBP). This model has been used to implement EBP principles in a variety of health care settings to enhance quality and institute organizational change (Brown, 2014). My rationale for selecting this model is related to its detailed protocols for introducing EBP through topic selection, formation of teams, retrieving and grading evidence, and developing EBP standards for implementation and evaluation (Doody & Doody, 2011). In order to introduce organizational and practice change within the clinical setting, the IOWA model provided the methods for distinguishing the value and quality associated with EBP standards and guidelines for patient care. This model served as a guide for clinician stakeholders who were impacted by practice and process change.

The health belief model (HBM) was utilized for promoting the adoption of preventive health practices. This model detailed the susceptibility, benefits, barriers, action cues, and self-efficacy that encourage people to follow recommendations (Hodges & Videto,

2011). This model has been used widely in health care programs to understand the cognitive processes in managing illnesses and identifying risk factors that may influence health behaviors (Yue, Li, Weilin & Bin, 2015). My rationale for the HBM model is related to its applicability in the promotion of preventive service guidelines and EBP recommendations for older adults.

The final model is Donabedian's structure-process-outcome model. This model has been used in research and policy reform because it offers insight regarding underlying factors that can impact quality care for patients (Liu, Singer, Sun & Camargo, 2011). Donabedian's model has been utilized as a health care and quality model and illustrates that changes in care delivery structure lead to improvements both clinical processes and patient outcomes (Moore, Lavoie, Bourgeois, & Lapointe, 2015). My rationale for selecting this model was for providing structure for program evaluation to address organizational practice change and patient health changes. Through guidance of Donabedian's model, I determined the structure was the clinic environment and nurse practitioner providers, the process was the AWW program protocols and the outcomes are the initial findings of the AWW.

Relevance to Nursing Practice

The aging population poses unique challenges to the field of nursing, including the increase of the number of adults who are now 65 years and older, and the often complex and chronic health challenges of this age group. Maintaining the health and functional independence for aging adults is a priority, requiring collaborative efforts from public and private sectors (Sin, Fu, Tsang et al, 2015). With the passage of the Affordable Care Act, revised guidelines for screening and preventive services by the USPSTF and

CDC, and improvements in Medicare coverage, national efforts are aimed at improving age appropriate services for older adults (Nicholas & Hall, 2011). These efforts offer older adults comprehensive and cost-effective preventive measures and increase reimbursement for health care providers to reduce federal and individual health care expenditures to minimize the cost of advanced disease treatment (Nicholas & Hall, 2011).

Despite the evidence and recommendations, there is significant variability in the utilization of preventive services among Medicare eligible patients, with both under or over screening for specific diseases (CDC, 2011). Adults over 75 years of age with functional impairments receive less than half of the current recommended preventive services, with variance among adherence to practice guidelines among primary care practices (Wenger, Solomon, Roth et al, 2003). Adherence among primary practice providers can be contributed to disagreements with the USPSTF recommendations. This stems from the beliefs that some cancer and disease screenings are appropriate even though not recommended, or that the USPSTF recommendations are time-consuming or intrusive (Zyzanski, Stange, Kelly et al, 1994).

This doctoral project contributes to the field of nursing through its emphasis on evidence based practice, and education of both patients and providers to incorporate recommended practice guidelines and preventive health measures for older adults. It further promotes the Institute of Medicine objective of advanced nurse practitioners practicing to the top of their education and licensure.

Local Background and Context

ICAHN provided state wide initiatives to improve the utilization of Medicare AWV and for development of chronic care management programs. This is in effort to

promote preventive health benefits to improve the health status of residents residing in Illinois. My review of the literature supports the postulation that a problem exists regarding inadequate preventive health recommendations for older adults within routine office visits and a lack of comprehensive chronic care management. Si et al. (2014) evaluated surrogate and final outcomes and determined that office health visits fail to reduce mortality in adults. Krogsbøll et al. (2012) reported physical examinations do not reduce morbidity or mortality related to cardiovascular disease or cancer in a systematic review with meta-analysis of 16 randomized trials. These findings suggest that routine office visits are not positively impacting mortality rates.

The existing literature through my review suggests that preventive services are recommended inconsistently. Age appropriate preventive health measures for older women were varied, with over screening of some conditions, or under screening of others. Schonberg et al. (2008) reported 49% of women age 80 or more with below average health received mammogram screening, while only 19% of women with above average health between the ages of 65-79 received screening. Although no longer recommended, pap smear screening were commonly reported among older women, with only 34% reported receiving counseling on exercise and physical activity, and 40-43% reported not receiving pneumococcal or influenza vaccinations (Schonberg et al, 2008). Age appropriateness and health status considerations are inconsistent and deviate from the current evidence based practice guidelines established for older adults.

Conditions such as cognitive, vision and hearing impairments, frequent falls, and incontinence can occur commonly in older adults. Impaired nutritional status and increased dependency for activities of daily living, such as feeding, dressing, bathing,

grooming and mobility can contribute to disability, but are often not addressed in the confines of the routine office visit (Cigolle et al., 2007). These conditions can contribute to the functional status and overall health of aging adults and should be addressed in their health care and planning (Cigolle et al., 2007). This demonstrates the significance of comprehensive assessments and identifying health risk factors for older patients to prevent exacerbation of disease, functional decline, but also quality of life enhancement.

Role of the DNP Student

My role in the doctoral project was the development, implementation and evaluation of the AWW and to initiate development of a chronic care management program. My previous leadership role within the practicum organization and my background in clinical and quality management served as a guide through program adoption. My current role as family nurse practitioner working exclusively with Medicare eligible patients provided experience working with the target population, addressing gaps in care and educating patients regarding age appropriate practice guidelines and recommendations. The motivation behind this project was to improve health status and quality of life for the aging population of Jo Daviess County so that community members can enjoy longer, happier lives. No apparent biases were evident in working with this population or the organization.

Role of the Project Team

The project team consisted of multi-disciplinary professionals from the organization and ICAHN. The clinical preceptor was responsible for provider and staff education regarding system changes and protocols. The clinic manager served as the liaison between ICAHN and the rural clinic staff to communicate state-wide initiatives

and report progress. In addition, the clinic manager and clinical preceptor participated in organized patient education events. The information technology (IT) director provided oversight in electronic health information and system changes. The medical record department assisted with coding requirements and the acquirement of pertinent patient information. Evidence I collected regarding the doctoral project was reviewed by the clinic manager and clinical preceptor. Cumulative evidence from the medical records was de-identified for the data analysis of formative outcomes.

Summary

Following current guideline recommendations can optimize the health and functional status of aging adults and address the deficit in preventive health screening and services among patients 65 years and older,. In an effort to close this gap in practice, I focused on implementing an AWW program designed to identify and modify risk, provide comprehensive assessments, and developed targeted care plans to manage chronic disease. These strategies were designed to improve health function and quality of life of older adults while empowering them as active participants in their plan of care.

Section 3: Collection and Analysis of Evidence

Although patients over the age of 65 attend regular health care office visits, many of the complications associated with advanced age are not adequately addressed in the structure of those visits. Many adults over the age of 65 are not current with age appropriate preventive health screenings and services (CDC, 2011). The purpose of the doctoral project was to introduce an AWW program for Medicare eligible patients to improve their health outcomes and increase compliance with preventive

recommendations. I will explain the sources of evidence, methods of analysis and synthesis of data in order to measure the effectiveness of the program.

Practice-focused Question

In the rural health clinic, situated in a rural critical access hospital, the facility failed to provide a single AWW in the previous 2016 fiscal year despite having 1300 eligible patients. This deficit in care creates a missed opportunity for important health risk assessments for a complex patient population. The population of the county in which the clinic serves consists of over 25% of people aged 65 years or older (US Census Bureau, 2010). With many adults in this population determined not to be current with age appropriate preventive health services and suffering from one or more chronic conditions, this doctoral project addressed the gaps in care recommended by the USPSTF to optimize the health of aging adults. The purpose aligned with the practice focused question of whether a nurse practitioner lead AWW program can identify health risks for patients and improves compliance with recommended preventive services and screenings within the data collection period of October 2016 through June 2017.

Sources of Evidence

Evidence I collected for the AWW was based on clinical reports from Cerner software identifying patients by age group. Each provider reviewed patient reports to determine which patients would be eligible for the chronic care management services based on presence of chronic illness, while clinic reception staff determined patients who were eligible for an AWW. Health data I collected from clinical data from the AWW were compiled in a de-identified database. Participation in the AWW was voluntary. Patients who participated in the AWW program received a chart audit to determine

presence or absence of recommended screenings and vaccinations according to USPSTF guidelines. Patient data was retrieved through administrative reports derived from the medical records, accounting, and clinic departments. Collection of this evidence was an attempt to address gaps in practice based on current recommendations for older adults. I compared performance indicators of quality measures against organizational standard performance on The Healthcare Effectiveness Data and Information Set and according to CMS QISMC indicator system for managed care.

Archival and Operational Data. I collected archival data from the JoDaviess County Health Needs Assessment to determine identified needs, deficits and barriers to health present in the community. My rationale for retrieving this data was based on creating targeting program educational material and organizing community resources. Data retrieved from the Needs Assessment provided county specific demographics, incidence and prevalence of chronic disease, mortality rates and access to care. Collection of operational data included clinic productivity reports, billing claims for IPPE and AWV and enrollment into the chronic care management (CCM) program. Access to patient records and clinic reports was only accessed after signing facility permission regarding HIPAA compliance and safeguarding patient health information.

Generation of Evidence for Doctoral Project. This doctoral project evaluated the formative health outcome measures of 50 patients. The number of participants related to the anticipated visit completion rate in an 8 month period. I evaluated generic measures to determine value and quality of life associated with overall health and functioning of the patient participants. The SF-36 survey was administered and

completed by participants before and after their AWW. These measures captured generic domains of health for physical, social and cognitive functioning, psychological and well-being and pain and vitality (Kane & Radosevich, 2011). I audited charts following completion of an AWW to determine presence of previously undiagnosed illness, such as depression, tobacco and alcohol dependency, dementia, incontinence, and gait disturbances. Rates of immunizations for influenza, Pneumovax, Prevnar 13, Tdap and herpes zoster were recorded and number of patients referred for follow-up appointments and additional testing, including mammogram, colonoscopy, DEXA screening and low dose chest CT over the look back period. Data collection beyond the scope of this project included the number of patients recommended and enrolled into the CCM program and additional clinic revenue generated.

Patient participation in the wellness visits and survey was voluntary. Participation in the chronic care management program was optional and patients could withdraw from the program at any time and were provided consent and information regarding enrollment and termination of services. I followed organizational ethics and privacy protection in relation to the project and the access of patient information. Strategies for recruitment and developing relationships with participants included monthly Medicare “Lunch and Learn” events held by public invitation and presented by doctoral team members. The clinic completed a Data Use Agreement that specified the approved use of de-identified patient data for the project. Because this project is an expansion of evidenced-based services to Medicare eligible patient populations, the project was not subject to the organization’s IRB review. The practice physicians continued to provide their usual

oversight of nurse practitioner practice. Walden University IRB provided ultimate approval of the project.

Analysis and Synthesis

Cerner Software was the operational system which the doctoral project team accessed for recording, tracking, organizing and analyzing evidence. I additionally accessed CMS quality measure reports, and Rounding Well software developed for CCM documentation requirements. Data collected from patients in pre and post SF-36 surveys was evaluated in terms of measures in each of the quality domains. Raw scores were translated from 0-100 to measure quality of life and translated to determine a mean average for each domain. I designed spread sheets created in Microsoft Excel to assist with calculation and organization of collected data.

Summary

The overall objective of this study focused on the management of patients who are 65 years and older with chronic disease and to emphasize the completion of preventive health strategies based on evidence based guidelines. By increasing effort in assessing health risk and education regarding health promotion strategies, patients can generate increased quality of life and satisfaction in their health care services. With eligible patients participating in the Medicare AWW program in a rural health clinic, quality indicators and ratings can improve while enhancing clinic revenue.

Section 4: Findings and Recommendations

A rural health clinic situated in a designated critical access hospital with a large Medicare eligible patient population had not previously conducted Medicare AWW on a routine basis. The clinic failed to capture a single AWW or “Welcome to Medicare”

(IPPE) visit in the previous 2016 fiscal year. The AWW is intended to provide an individualized preventive health plan and identifiable risk factors to promote patient health. The practice focused question asked whether the implementation of the Medicare AWW program by nurse practitioners can yield improved compliance with recommended health screenings and vaccinations and diagnose previously undiagnosed clinical conditions. The purpose of the doctoral project was to introduce an AWW program to the rural health clinic to enhance the health of their Medicare eligible patient population.

I collected sources of evidence from 50 patient charts that had completed an AWW and compiled an audit of pre-existing active diagnoses. I reviewed charts preceding and following the AWW to determine completion of recommended screenings and vaccinations per USPSTF guidelines. I collected new orders for medications and referrals generated from the AWW. I reviewed active diagnoses captured on the AWW and compared against known diagnoses to determine the presence of newly found conditions. Data were distributed into a spreadsheet to distinguish (a) age, (b) gender, (c) number of active diagnoses, (d) presence of new diagnoses, (e) new medication orders, (f) colon cancer screening, (g) mammogram, (h) DEXA screening, (i) abdominal ultrasound for abdominal aortic aneurysm screening, (j) low dose chest CT, (k) cardiovascular screening, (l) diabetic screening, (m) diabetic training/education, (n) glaucoma screening, (o) hepatitis c screening and (p) influenza, (q) pneumococcal, (r) Prevnar 13, (s) Zostavax and (t) Tdap vaccinations. I identified orders that met compliance with USPSTF recommendations along with orders that were inappropriately recommended against USPSTF guidelines, and missed opportunities for recommended

evidence based screenings. I individually collected the number of office visits for each patient in the year preceding their AWW.

I distributed SF-36 surveys prior to completion of the AWW and 2 weeks following the AWW. The SF-36 survey was used to determine patient quality of life in several generic domains including physical functioning, role limitations due to health and emotion, energy and fatigue, emotional well-being, social functioning, pain, general health and expected changes in health (Ware & Sherbourne, 1992). The SF-36 survey was scored by weighted sums per question in each domain. The scales were translated into a 0-100 scale indicating the lower score equals more disability while the higher scores equal less disability (Ware & Sherbourne, 1992). Scores of zero indicate maximum disability, while scores of 100 represent no disability.

Findings and Implications

The AWW program started in October 2016, and once 50 patients had participated in the visits, their data was reviewed. The AWW generated eight new diagnoses not previously identified that resulted in three new medication orders. New orders for additional preventive screenings included 11 colorectal screening orders, 10 mammograms, 16 DEXA screenings, four abdominal ultrasounds for abdominal aortic aneurysm, six diabetic screenings, seven diabetic education referrals, five cardiovascular screenings, three glaucoma screenings and one hepatitis C screening. Two Influenza, six Pneumovax, eight Zostavax, three Prevnar 13 and three Tdap vaccinations were ordered by the health care provider as a result of the AWW. The patients receiving the AWW were primarily women (73%), with the average age of 73, with an average of 10 chronic diagnoses. The patients had an average of five clinic visits in the year preceding their

AWV. These findings suggest that the AWV is effective in capturing missing evidence based practice recommendations per USPSTF guidelines to support preventive health of older adults.

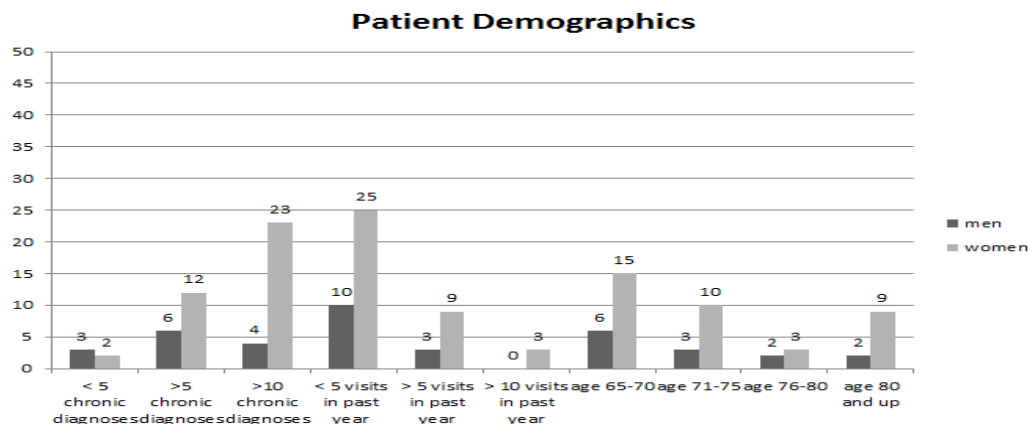


Figure 1. Patient participation in AWV, men and women, number of chronic diagnoses, number of clinic visits in year preceding AWV and patient age.

Unanticipated findings resulted from missed opportunities for appropriate screenings, including 22 missed recommendations for hepatitis C screening, five low dose chest CT screenings, and one abdominal aortic aneurysm screening. Chart audit reviewed that some recommendations and orders generated from the AWV were inconsistent with USPSTF guidelines. These orders lacked clinical criteria (family history, health/social history, negative review of systems) or were not age appropriate, including one colorectal screening, three mammograms and seven recommendations for abdominal aortic aneurysm. This finding suggests that additional training and education for providers regarding the health guidance for aging adults by the USPSTF is needed.

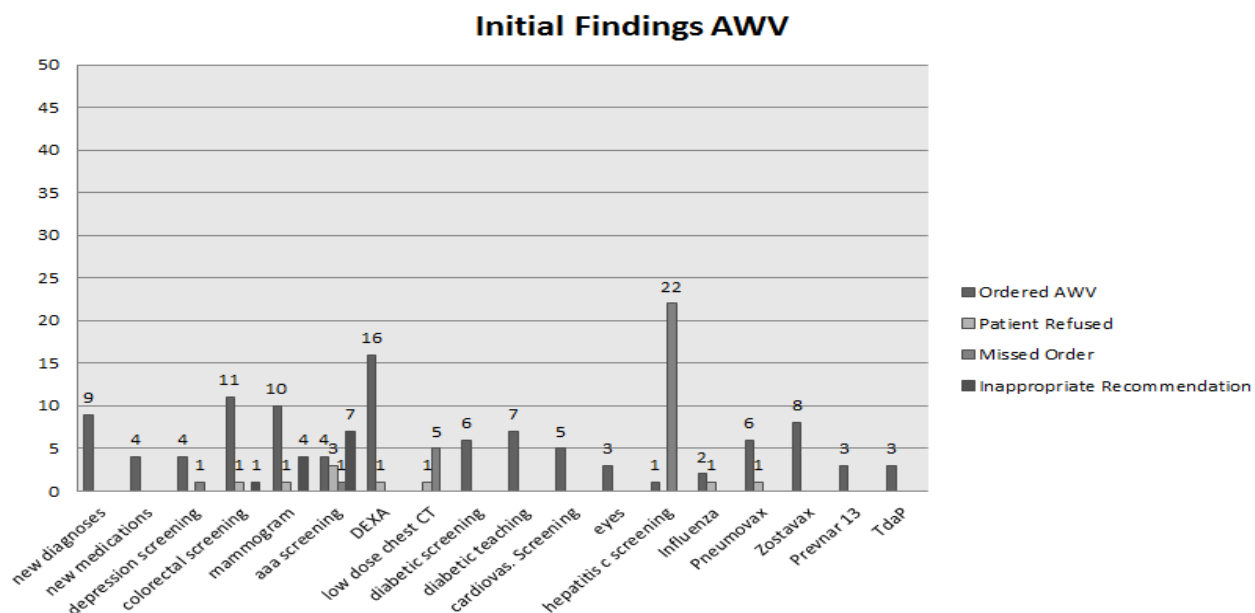


Figure 2. Screenings and vaccinations from AWW including those ordered as a result of AWW, recommendations that were refused by patient, missed orders and inappropriate recommendations that are not compliant with USPSTF guidelines.

In measuring quality of life indicators, the SF-36 survey generated a 20% return in the pre-visit surveys and 24% return in the post-visit survey. The pre-visit surveys indicated that patients perceived greater disability in all domains. The post-visit surveys showed improvements in all domains from the pre-visit survey, energy/fatigue 10% to 64%, physical functioning 20% to 73%, pain 28% to 72%, general health 25% to 73%, physical role limit functions 0% (maximum disability) to 67%, emotional role limit functions 17% to 70%, social role functioning 57% to 89%, emotional well-being 58% to 84%, and perception of health change, 38% to 61%. These findings suggest dramatic improvements in all quality of life areas, including the perception of their health changing for the better.

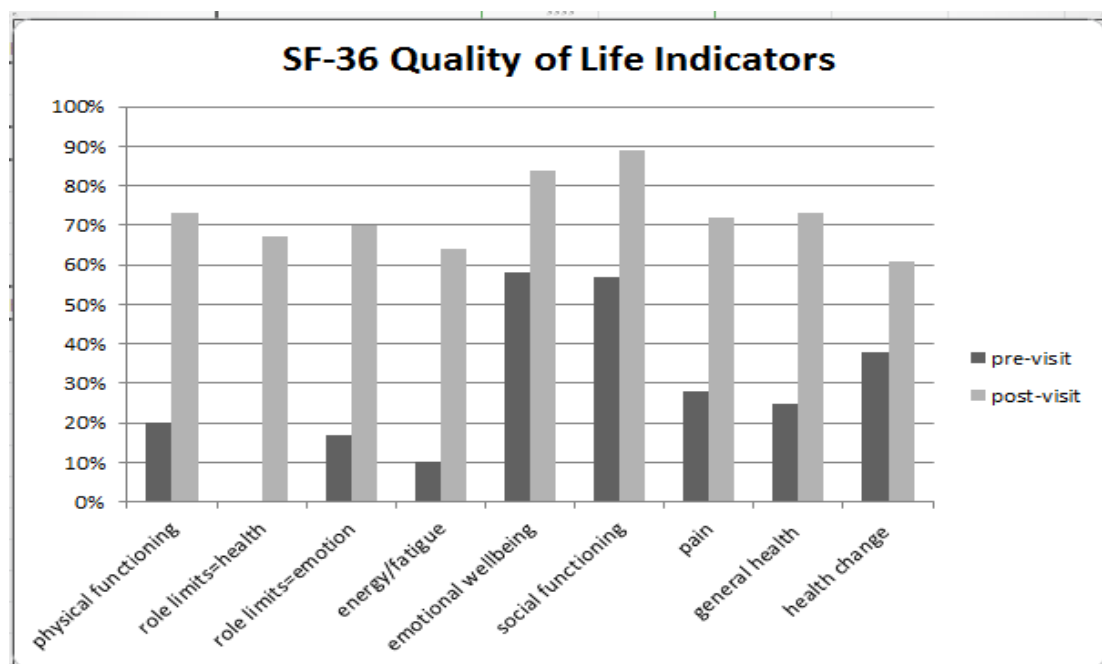


Figure 3. Percentages of quality of life domains pre and post visit. Zero represents maximum disability, 100 represents no disability.

Conclusions

With the significant aging population in Jo Daviess County and Medicare eligible patients within the rural health clinic, patient and provider participation in the AWW program generated increased preventive screenings and vaccinations as a result of the visit. With the same patients visiting the clinic on average five times a year, the AWW has the ability to close gaps in care not previously addressed in other office visits. The AWW has the opportunity to create increased clinic revenue with Medicare reimbursement and increased relative value units (RVU). Maintaining the health functioning of aging adults has the potential for positive social change by identifying risk, creating individualizing interventions to prevent illness, providing enhanced safety and improve their quality of life.

Recommendations

Recommendations for implementing an AWW program include collaborative insight across multiple disciplines. Forming a team of clinic staff including nurse practitioners, clinic manager, nursing, scheduling, medical records and IT staff assisted in policy and work flow development. Regular meetings scheduled weekly or every two weeks allowed the AWW team to problem-solve arising difficulties. Monthly medical staff meetings with the clinic physicians regularly addressed Medicare AWW and work flow.

Staff education across the clinic is essential to demonstrate the difference between the AWW and other routine office visits. Scripts and frequently asked question guides provided the scheduling staff with the ability to answer patient questions and clarify appropriate appointment booking. Patient education through newsletters, emails, mailings and scheduled events allowed for patients to understand the benefit of the AWW and the preventive services available under Medicare in collaboration with recommended practice guidelines set by the USPSTF.

The AWW was a two-part visit to enhance the efficiency of the AWW, meet all the visit and documentation requirements, and facilitate time management,. The nurse or medical assistant would acquire necessary patient information and perform ADL, fall risk, mini-cognitive, and depression screening. This pre-visit allows for the nurse practitioner or physician to focus on the remaining components of the AWW that require their knowledge and skill (Cuenca, Lozoya-Flores & Hogrefe, 2012).

Contribution of the Doctoral Project Team

The doctoral project team consisted of a registered nurse clinic manager, a nurse practitioner clinical preceptor, a nurse practitioner provider, and three participating physician providers. The clinic manager was responsible for generating reports from the Cerner software on patient data. The nurse practitioner clinical preceptor, clinic manager and I shared responsibility for clinic training for the AWV for reception, providers and nursing staff. The clinic manager, and clinical preceptor and I provided distribution of patient educational material and public patient in-service education regarding evidence based practice recommendations for older adults and the preventive benefits covered under Medicare part B. Both nurse practitioners and the physician providers performed AWV with their patients.

The data collected from the SF-36 surveys and chart audits were shared with the clinic manager and clinic preceptor. They reviewed the recommendations and provided the final reports to administration. The clinic manager had initially set a goal of completing 50 AWV in the 2017 fiscal year, but continuation of the program and an increased visit number for the 2018 fiscal year has been determined. Data from the AWV program will be used by the clinic manager to implement another Medicare reimbursable chronic care management (CCM) program for this patient population.

Strengths and Limitations of the Project

Strengths of the project relate to the evidence indicating the closure of gaps in care captured from the AWV to increase compliance with preventive health recommendations from the USPSTF. The USPSTF develops practice guidelines for clinical application and policy use for preventive care based on evidence derived from comprehensive systemic reviews of the best supportive evidence (Owens, Whitlock,

Henderson et al., 2016). Although many patients were compliant with several of the recommendations, the project identified the completion of tests and vaccines not previously administered, despite the frequency of the patient office visits. This finding is consistent with the estimated figures that less than 50% of older adults are current with all recommended preventive health services for their age group (Kim, Strecher & Ryff, 2014).

The limitations of the project include the small sample size of patients and the time frame of the look back period. Another limitation was the small return of SF-36 surveys from the patients to determine their quality of life factors. The SF-36 survey used in populations over 65 years of age have shown low response rates (Andresen, Gravitt, Aydelotte & Podgorski, 1999).

Provider support in the clinic was suboptimal, with limited participation due to lack of early adopters. This is consistent with minimal to modest utilization of the AWW nationally reported as less than 17% (Ganguli, Souza, McWilliams & Mehrotra, 2017). The CMS reports AWW utilization at only 8.8% (CMS, 2013). One clinic physician agreed to perform AWW on their own patients, one provider refused to participate, while the remaining three agreed to have nurse practitioners perform AWW on their patients. Clinic physicians expressed little perceived benefit of AWW, despite the opportunity to specifically address evidence based practice guidelines and preventive health strategies. This stemmed from the provider's belief that they already take care of their patients in the best manner and did not need further guidance. This is consistent with findings that suggest that clinicians in practice rarely access, appraise or use evidence derived from formal research, but rather practice with collectively reinforced, internalized tactic

guidelines formed from brief reading, peer interaction, and personal experience (Gabbay & Le May, 2004).

Increased provider participation may have led to more AWW completed. Future recommendations would include larger sample size, time and duration of study, increased incentives for provider participation to complete AWW for their patients, and enhanced survey methods to encourage patient participation. Patient participation may be increased by further education regarding quality of life improvements through preventive health services. Quality and purpose in life have been associated with better health and improved health behaviors (Kim et al, 2014). Adjusting electronic medical records chartings to add prompts or health maintenance documentation to the provider chart may improve orders in these areas.

Section 5: Dissemination Plan

My plans for disseminating the AWW program included sharing results with the rural critical access hospital where the rural health clinic is located. The findings of the program along with detailed work flows and educational material for staff and patients was provided to ICAHN. ICAHN provides additional information for AWW programs that are shared with facilities across the state. Resources generated from the AWW program including risk assessments, staff work flows, patient and staff education and individual care plans for chronic conditions were made accessible through the ICAHN website. Additional venues suitable for dissemination for the broader nursing profession include the Geriatric Nursing Journal, the Journal of Gerontological Nursing, the International Journal of Older People Nursing and the Journal of Rural Health.

Analysis of Self

My initial insights for the AWW program were generated from previous leadership and executive management experience acquired throughout my nursing career. In my profession as a nurse practitioner working exclusively with Medicare eligible patients, the value of risk assessments, patient education and preventive health services has been the primary focus of my current nursing role. Managing chronic illness to prevent exacerbations, preventing illness from occurring in the first place, and encouraging screening for early detection and treatment is a present principle that I adopt in current practice. Long term goals involve the development of a chronic care management program to follow patients each month to reduce hospitalizations and complications, and increase patients' quality of life.

The completion of the doctoral project was possible through the guidance and mentorship of my clinical preceptor and clinic manager. Through effective multi-disciplinary collaboration, we were able to redesign EMR templates to serve our documentation needs and make the AWW easier for nursing staff and providers. By participating in initiatives through ICAHN, the clinic presented on several state-wide seminars and shared our contributions with other facilities working on capturing AWW in their clinics.

The primary challenges arose from inconsistent participation from a number of clinic providers. The perception of little benefit, disruption to workflow, scheduling conflicts, minimal patient interest and lack of time to devote to the documentation requirements were the concerns expressed by the clinic physicians. This relates directly to findings that indicate that although EBP promotes high value health care, increased quality and improved outcomes, it is inconsistently used in practice (Melnik, Gallagher-

Ford, Long & Fineout-Overholt, 2014). The clinic providers shared behaviors and concerns documented by other clinicians that EBP is time consuming, and the lack of resources and cultural support generates resistance from colleagues and physicians (Melnyk et al., 2014). To address these challenges we increased our education efforts, created incentives for increased RVUs and focused our attention to patient education to generate interest and participation. This is consistent with findings that suggest that the utilization of the Medicare AWW can improve inter-professional education in the primary care environment (Irons, Evans, Bogschutz et al., 2016).

Summary

Although older adults visit health clinics regularly, a majority of Medicare eligible patients 65 years and older are not current with evidence based practice recommendations for screenings and vaccinations. The Medicare AWW provides an opportunity to identify modifiable risk and close gaps in care to increase compliance with current practice guidelines. By establishing an AWW in a rural health clinic, the facility saw an increase in orders for preventive screenings and vaccinations for older adults. Patient perspectives regarding quality of life and limitations in function, pain reduction and overall well-being showed significant improvement following the visit. In addition to increasing clinic revenue, the AWW demonstrates its effectiveness in improving health outcomes and quality of life for older adults.

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Summary of screening, prevention, and counseling recommendations for adults age ≥65 years

Priority problem	Brief recommendation
Historical information and counseling	
Exercise	Moderate-to-vigorous aerobic activity three to five times per week Weight training or resistance exercises to maintain strength Flexibility activities to maintain range of motion Balance training to improve stability and prevent falls
Alcohol use	CAGE questionnaire Counseling to stop drinking
Tobacco use	Ongoing regular counseling to stop smoking Consideration of pharmacotherapy
Medication use	Regular review of medication list for: Completeness, accuracy, adherence, and affordability Drug-drug, drug-disease interactions Careful attention to use of specific drug types/classes including warfarin, digoxin, antidiabetic, analgesic, antihypertensive, psychotropic, and anticholinergic drugs
Urinary incontinence (UI)	Inquire about presence and severity biannually Presence of UI should trigger medication review, GU exam, appropriate blood and urine tests
Driving	Consideration of driving problems in those with problems with vision, mobility, or cognition For demented patients, recommend stop driving or refer for detailed driving assessment
Social support	Regular screening for financial and social support
Elder mistreatment	Routine direct questioning about problems with abuse or neglect
Advance directives	Discussion and documentation of preferences with living will and designation of healthcare power-of-attorney
Physical examination and testing	
Blood pressure	Measure annually If treatment initiated, monitor orthostatic blood pressure, renal function, and electrolytes
Weight	Weight loss of 10% or more per year triggers assessment of undernutrition, possible medical or medication-related causes, dental status, food security, food-related functional status, appetite and intake, swallow ability, and previous dietary restrictions
Hearing and vision	Annual screening for hearing loss with patient inquiry and exam (Whisper test or handheld audiometry) Vision assessment as part of the routine workup for older adults with cognitive decline, functional impairment, or falls
Cognition	Targeted screening in patients with memory complaints or new functional impairment with MMSE, Mini-Cog, Clock Drawing Test, Memory Impairment Screen, SLUMS, or MoCA
Mood	Screen all older adults for depression with two questions: During the last month: 1) Have you been bothered by feeling down, depressed, or hopeless? 2) Have you often been bothered by having little interest or pleasure in doing things?
Gait and balance	Get Up and Go Test
Lipids	Screen and treat older adults with CAD risk exceeding 10% over 10 years
Bone density	Screening densitometry for osteoporosis for women at age 65
Abdominal aortic aneurysm (AAA)	One-time screening ultrasound in men aged 65 to 75 with any history of smoking or family history of AAA requiring repair
Diabetes	Screen adults (to age 70) with BMI ≥25 kg/m ² , hypertension or hyperlipidemia
Cancer screening	
Cancer screening	Key considerations in older adults: Life expectancy: Will this patient live long enough to benefit? Potential harms: Procedural complications, anxiety, cost, and overdiagnosis Individual patient preference
Breast cancer	Shared decision-making; if woman opts to be screened, biennial mammography if life expectancy is at least 10 years
Colorectal cancer	Annual FOBT versus Screening colonoscopy every 10 years versus Flexible sigmoidoscopy every five years as long as life expectancy is at least five years
Cervical cancer	May safely discontinue Pap smears at or after age 65 after three consecutive normals within a 10-year period May discontinue after hysterectomy for benign indication
Lung cancer	Annual low-dose chest CT scan for high-risk individuals to age 80 years; discontinue if person has not smoked for 15 years or if life expectancy is limited
Immunization	
Tetanus-diphtheria vaccine	Booster every 10 years in patients who have received primary series (alternative: booster once after age 50); Tdap once
Influenza vaccine	Annual vaccination
Pneumococcal vaccine (PCV13 and PPSV23)	Give PCV13 followed by PPSV23 6 to 12 months later, once after age 65 Revaccinate PPSV23 once after age 65 if an initial vaccination was given before age 65 and five years have elapsed since the first dose
Herpes zoster vaccine	One-time vaccination after age 50
Other	
Aspirin	Consider daily aspirin in patients with five-year CAD risk of 3% or greater Weigh risks of gastrointestinal bleeding
Calcium and Vitamin D	1200 mg of elemental calcium (diet and/or supplement) and at least 800 international units of Vitamin D

CAGE: Cut down, Annoyed, Guilty, Eye-opener; GU: genitourinary; MMSE: Mini Mental State Examination; SLUMS: St. Louis University Mental Status Test; MoCA: Montreal Cognitive Assessment; BMI: body mass index; FOBT: fecal occult blood test; CT: computed tomography; CAD: coronary artery disease.