Running head: MEDICARE AWVS

Change Project to Increase Medicare AWVS by Changing Current Workflow

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### ABSTRACT

This is a Doctor of Nursing Practice capstone project for a multi-specialty practice in Rockland, New York. One of the services provided in the multi-specialty practice is a Medicare Annual Wellness Visit (AWV). Currently the practice underutilizes the Medicare AWVs due to inconsistent AWVs workflow leading to prolonged office visits. The causes for underutilization of the AWVs were multifactorial, but the focus will be on the redesign of the current workflow. The term *providers* include physicians and nurse practitioners. A literature review was conducted to discuss the benefits of Medicare AWVs, expose barriers contributing to underutilization of AWVs, and review current effective work flow guidelines. Utilizing recent findings in the literatures, a flowchart was developed with the intention of improving the workflow at the multi-specialty practice for Medicare AWVs.

#### **ACKNOWLEDGEMENTS**

First off, I would like to thank God for giving me the strength and perseverance to complete my capstone project. I want to thank my husband Didier for taking over both mommy and daddy role to raise our son. Nathan thank you for being an amazing child. You motivate me to be the best mother and role model I can be. My mother Marie Yolla is heaven sent, always motivating and encouraging me throughout the process. I also would like to thank my family and friends who periodically checked on me and sent me words of encouragement. Special thanks to Dr. Deborah Shapiro for her assistance in facilitating the change project. Her expertise, knowledge, and encouragement have helped me with this intense project during the final year of my DNP program. I am grateful to have had her as a mentor. I would also like to thank Dr. Barbara Polowczyk, who provided invaluable perceptions and recommendations regarding the doctoral program and project requirements. A special thanks Dr. Weissman, who is the Director of the DNP Program, for her constant support and guidance. Last year my life flipped upside down, and I didn't think I could continue with the program. Dr. Weissman encouraged me to continue and provided me with support. When Covid-19 disrupted our personal and professional life, she remained active in our lives and offered help and assistance to continue with the program. Lastly, I would like to thank Dominican College for providing me the opportunity to complete my DNP degree. I am grateful Dominican College have provided me with the opportunity to continue to grow in my nursing career starting first with my BSN, then FNP, and now my DNP. What I have learned at Dominican College will always be utilized to provide the best evidence-based care to my patients.

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### INTRODUCTION

The focus of this DNP Capstone project is on a multi-specialty practice located in Rockland County, New York. The practice consists of board-certified physicians and nurse practitioners focused on internal medicine, pulmonary care, and sleep services. One of the services provided by health care providers is the Medicare AWVs (AWVs) for patients who are enrolled in the Medicare B plan. Utilization of Medicare AWVs vary widely across health care practices, in which half of the practices do not provide any Medicare AWVs and 23.1% of practices only provide Medicare AWVs to about quarter of their eligible beneficiaries (Ganguli, Souza, Mcwilliams, & Mehrotra, 2018). In 2019 of the 1,047 Medicare beneficiaries, 434 did not have a Medicare AWV in the past 12 months.

At the current practice in Rockland, providers should be able to perform seven Medicare AWVs in their eight-hour shift. But due to the time constraint, the providers only allow their staff to schedule three to four Medicare AWVs on any given office day. In reviewing the prior AWV charts, the visits are time consuming with each visit taking approximately 45 minutes to 75 minutes to complete. Other barriers contributing to the decreased utilization of AWVs which includes uncompleted forms, varied scope of practice of ancillary staff, and shortage in: rooms, equipment, and available resources. By creating a team-based workflow, providers will be allotted more time developing patient-centered plan of care within the 30-minute visit.

The current Medicare AWVS work flow, begins with scheduling the appointment, often the appointment is scheduled six to twelve months in advance. The patient is instructed to come 15 minutes early, on the day of the appointment to register and complete standard forms. A Medicare AWV packet with instructions on how to complete the form is mailed to the patient the

day the appointment is scheduled, to be completed before the appointment. On the day of the appointment, the patient checks in providing legal identification and their insurance card. Once checked in, the patient is seated in the waiting room. The medical assistants (MA) or licensed practical nurse (LPN) then brings the patient into an examination room, the patient is weighed, the Snellen chart and Whisper Test are performed, and the patient is asked to complete the screening forms for depression and substance use. Vital signs and fall risk intake are obtained and recorded. The MA or LPN also verifies the patient's current medication list. The review of the medication list often is overlooked or done incorrectly by the MA because their scope of practice differs from the LPN. Once all tasks are completed by the MA or LPN, the provider is given the patient's slip indicating the patient is ready to be evaluated by the provider. The provider greets the patient and completes the: medication reconciliation, health risk assessments, mini-mental status (MMS), review of system (ROS), physical examination, advanced care planning, educations, prescriptions, refills, referrals, obtain latest notes from other specialist, and vaccinations. The time period allotted for the visit is 30 minutes, but the visit often extend beyond the 30 minutes in order to complete the requirements of the visit.

# **Background**

The practice of preventative healthcare has proven to reduce rates of mortality, incidence of acute illnesses, healthcare costs, and also offers patients a sense of security about their own health (Rockliffe, Chorley, Marlow, & Forster, 2018). Health promotion, maintenance of health and well-being along with the prevention of death, disease, and disability are the primary goals of preventative health (American Board of Preventative Medicine, 2020). Through the practice of preventative care, many diseases can be detected early for better management along with prevention of worsening conditions (Office of Disease Prevention and Health Promotion, 2020).

Medicare AWVS allow providers and patients to collaborate on an effective plan of care to manage comorbid condition and prevent other health risk conditions. Research has displayed adults who recollected receiving guidance from their provider were more likely to change their eating habits, exercise, maintain a healthy weight, improve dietary intake, and better manage their own health (Musich, Wang, Hawkins, & Klemes, 2016).

### **National Guideline**

The Medicare AWVs is a yearly appointment with a patient's primary care provider to create or update a personalized prevention plan through shared decision making. According to the Centers for Medicare and Medicaid Services' guidelines, only patients who are enrolled in Medicare part B are eligible for Medicare AWVs at no cost. During a Medicare AWVs, providers address multiple aspects of patient care. This includes height, weight, blood pressure, and other routine measurements. Providers perform health risk assessment to assess health status, injury risks, behavioral risks, and urgent health care needs. Functional ability and level of safety such as hearing impairment, fall risk, and ability to perform activities of daily living are routinely reviewed. Surgical, medical and family history of the patients are updated. The provider also reviews and update lists of current specialist, durable medical equipment (DME) supplies, and medications. During the encounter the patients and the provider discuss end of life planning and advanced care directives. The patients are screened for cognitive impairment, depression, and substance abuse. Lastly, the health care provider provides health advice and referrals for health education and preventative counseling services aimed at reducing identified risk factors and promoting wellness. (Medicare Interactive, 2020).

### **Problem Statement**

Currently at this multi-specialty practice, there are many barriers which contribute to underutilization of Medicare AWVs. The practice consists of three LPNs and twelve MAs. The current starting rate at the practice for LPNs is \$24 dollars an hour and for MAs \$19 dollars an hour. Though it is more cost effective to hire MAs but, LPNs can do more tasks because of their acquired skill sets. Medical Assistants is not licensed and tasks performed by the MA must be performed with the supervising physician responsible of determining if the unlicensed person is capable of performing the required tasks. A MA scope of practice allows them to act as scribes and can enter chief complaint, medications, allergies, and family history into a chart or electronic medical record (EMR) and assist patients in filling out self-report questionnaires. There scope of practice does not include the knowledge of medication and their indications, unlike LPNs who can reconcile and administer medications. This is a disadvantage because many medical assistants are not familiar with medications, thus unable to accurately update the patient's medication list. The medication reconciliation then falls on the physician's task list, adding additional time to the already constrained appointment.

Another issue affecting the utilization of the Medicare AWVS is the size of the practice. The practice is large, consisting of four other offices in Rockland County. There are seven or more providers working at the two main offices and two to six providers working at the other two sites. The main office has 16 examination rooms. There are two office which have 8 examination rooms. And one office with 2 examination rooms. They are shared amongst internal medicine, pulmonology, and occasionally cardiology consults. This often leads to shortage in rooms, equipment, and available resources such as in office chest x-rays and pulmonary function tests. Lastly, patients failing to complete the Medicare paper work prior to their appointment is

one of the biggest sources of delay in the time allotted for AVS encounters. Patients often report they forget to complete the paper because they usually receive the packet six to twelve months in advance. Because Medicare AWVS are time consuming, delay from either the patient, ancillary staff, or provider causes a considerable delay to other scheduled appointments.

### **Purpose Statement**

The purpose of this evidence-based project, is to improve the workflow for Medicare AWVS in a multi-specialty practice in Rockland County, New York. Interviewing the providers provided a consensus, AWVs were very involved and the current workflow was inefficient (Appendix B). Twelve out of the 15 providers expressed they would accept change as long it didn't require more time for them to complete. The aim of this project is to increase Medicare AWVs from three to six visits per provider in a scheduled day. This will be successful by improving the current workflow, changing the Medicare AWVS process to a team-based workflow, and initiating reminder phone calls prior to the appointment. To measure the increase in AWVs utilization, the office manager will keep track how often the CPT code G0438 and G0439 is billed weekly compared to last year. The stakeholders are the providers, staff members, referring specialists, Medicare insurance, pharmacies, as well as patients with Medicare.

### **PICO Question**

Will improving the practice's workflow increase revenue and utilization of Medicare AWVS through team-based practice, by providing a reminder phone call and scheduling a previsit with an LPN or MA prior to meeting with the health care provider within the next three months?

### **Theoretical Framework**

The Consolidated Framework for Implementation Research (CFIR) is a conceptual framework developed to conduct systematic assessment of multilevel application contexts to detect elements which might affect intervention implementation and effectiveness (Keith, Crosson, O'Malley, Cromp, & Taylor, 2017). The 39 CFIR concepts reveal the evidence base of features most likely to influence implementation of interventions (Keith et al, 2017). CFIR assist in discovering data to apprise stakeholders on advances to the intervention and its implementation, when utilized in the early phases of implementation (Keith et al, 2017).

The CFIR is composed of five categories which will have an affect an intervention's implementation. The first step is "Intervention Characteristics", which demonstrates features of an intervention influencing implementation such as intervention source, evidence strength and quality, relative advantage, adaptability, complexity, design quality and packaging, and cost. The second step "Outer setting", demonstrates features of the external context or environment influencing implementation such as patient needs and resources, cosmopolitanism, peer pressure, external policy, and incentives. The third step "Inner setting", demonstrates features of the implementing organization influencing implementation such as structural characteristics, networks and communications, culture, implementation climate, and readiness for implementation. The fourth step, "Characteristics of individuals" can influence implementation such as knowledge and beliefs about the intervention, self-efficacy, individual stage of change, individual identification with organization, other personal attributes. The final step "Implementation process", demonstrate strategies or tactics influencing implementation such as planning, engaging, executing, reflecting, and evaluating. The CFIR is flexible so

researchers can adapt the framework to the specific intervention design, factors, and context being studied. (Keith et al, 2017).

### CRITICAL APRAISAL OF THE EVIDENCE

### **Literature Search**

The strategy used to gather information for this literature review was performed by executing an electronic search exploring several databases. The Electronic search for the research included Business Insight: Essentials, Complementary Index, Reginal Business News, Gale Academic Onefile: News, Ebscohost, Google Scholar, CINAHL, Academic One File, Cochrane Database of Systemic Reviews. Key search terms included *Medicare AWVS*, preventative care, Medicare AWVS AND worklflow, and Medicare AWVS team approach. The initial search for "Medicare AWVS" in the database produced 6,009 results for Business Insight: Essentials, 5,970 for Complementary Index, 2,826 results for Ebscohost, 1,822 results for Regional Business News, 1,312 CINAHL with full text, 968 results for Gale Academic OneFile, 919 results for MEDLINE with full text, and 823 results for Health Source: Nursing/Academic Edition. The search field was narrowed by tapering the search to "Medicare AWVS workflow" which identified 2,377 results. To further limit the results, filters in the database was used to search for academic journals published between the years 2015 to 2020 with articles that only provided full texts. The advanced search then produced 353 results. Of those results, all recognized articles retrieved were evaluated and manually examined to only approve pertinent articles pertaining to the study of interest. Inclusion criteria was as follows: published in the last five years, in English, Medicare B beneficiaries, in academic journals, and an article or review. Articles and reviews were excluded if they were not peerreviewed, were not in English, or did not have an available full text. After final filtering results,

removal of duplicates and exclusion of irrelevant studies, 21 articles were applicable for this project (Appendix A "table of evidence).

The level of evidence for each article ranged from level one to level four. Level one provides evidence from a systematic review or meta-analysis of all relevant randomized controlled trial (RCTs) or evidence-based clinical practice guidelines based on systematic reviews of three or more RCTs of good quality that have similar results. Level two provide evidence from at least one well-designed RCT. Level three provide evidence obtained from well-designed controlled trials without randomization. Evidence stemming from well-designed case-control or cohort studies are considered level four.

### **Literature Review**

This research was designed to collect data about Medicare AWVs. Three factors stood out cohesively in the articles reviewed:

- 1. The underutilization of Medicare AWVs.
- 2. The methods for improving the workflow of Medicare AWVs.
- 3. The benefits of performing Medicare AWVs.

### **Underutilization of Medicare AWVs**

The analysis of several articles identified lack of Medicare AWVs utilization amongst Medicare part B beneficiaries. The researchers' goal was to estimate Medicare AWVs utilization and evaluate the importance of demographics, socioeconomic factors, health status, and access to care in explaining differences in utilization (Tipirneni, Ganguli, Ayanian, & Langa. 2018). Lind et al, (2018) discussed, currently the Medicare AWVs is not reaching the majority of older Americans, especially lower-income or minority adults and those served by safety-net providers. The articles also mentioned, Medicare beneficiaries were more likely to receive a Medicare

AWVs if they were white, female, lived in an urban or higher-income area, or received a Medicare AWVs the year before. Tipirneni et al, (2018) mentioned baby boomers with low socioeconomic status experienced accelerated aging, increased amount of chronic conditions, and decline in general health, mental health, and functional status.

After the authors' previous publication, Lind et al (2019) main objective was to analyze if the utilization of AWVs continued to be inconsistent in the United States. It has been proven numerous times, AWVs can potentially increase the utilization of preventative care, improved health, and reduce ethno-racial disparities among Medicare recipients. The authors concluded ethno-racial disparities were persistent because of the lack of AWVs utilization in minorities compared to non-Hispanic white Medicare beneficiaries.

Simpson, Edwards, and Berlin (2018) explains a multifactorial collaboration between patient and provider enable disability prevention and maintenance of independence in older adults. Despite the benefits, the practice of AWVs continues to be underutilized. The authors interviewed providers and patients in a small study to gather the reason for underutilizations of AWVs. The authors stated health care providers listed some barriers to complete AWVs such as lack of: time to complete and document visit requirements, understanding of requirements, a system to integrate AWVs/HRAs into office workflow, and a specific form for the HRA. The physicians also expressed increased pressure because patients often want to discuss other issues not covered by the AWVs.

Cross-Barnet et al (2019) report Medicare beneficiaries continue to underutilize preventative services. The author's' objective was to gather information identifying barriers and facilitators to access and utilization of preventative services. Their qualitative research identified barriers expressed by providers and beneficiaries. "Providers indicated time and competing

priorities as factors for not offering patients a full range of preventative services, while beneficiaries reported barriers related to knowledge, perception, and trust" (Cross-Barnet et al, 2019).

Nagykaldi et al (2017) suggests there are several gaps in knowledge regarding the role and effective participation of patients in Medicare AWVs, the types of health risk assessments that may improve process and health outcomes, how Medicare AWVs should be structured, along with resources and education clinicians and practice staff might need to make Medicare AWVs effective. The authors used Conversation Analysis techniques to analyze 40 Medicare AWVs conducted in an academic family medicine residency practice. The authors concluded health risk assessments introduced without proper framing, education, and additional resources may not allow patients and clinicians to completely utilize Medicare AWVs for effective health planning and improvement.

Bluestein, Diduk-Smith, Jordan, Persaud, & Hughes (2017), mention a few reasons why Medicare AWVs are not practiced routinely in primary care from the patient's perspective. Several patients may have a negative attitude toward preventative care with statements like "I got the flu shot then got the flu". Another negative factor is, individuals believe that providing physicians incentives to discuss end-of-life care may limit life sustaining treatment for older adults and extremely sick patients. Most patients were unaware the benefits of Medicare AWVs along with confusion when copayments for services such as lab tests, immunizations, and chronic disease management are added to their "free" visit. Last but not least, patients do not understand how Medicare AWVs differ from an annual physical or regular office visit. The principle of an annual physical exam is to examine the body and identify physical problem with

the patient. AWVs focus on prevention by identifying risks and then mitigating those risks by referring the patient to appropriate resources. More patient education is needed.

Tse (2020) provided examples of why health care providers did not routinely perform Medicare AWVs. For one, physicians saw value in preventative discussions but felt obliged to provide both wellness and regular care at the Medicare AWVS which is extremely overwhelming. Another factor was confusion amongst the medical assistants over the scope of service resulting in operational challenges such as lack of the appropriate process, staffing, and technology necessary to provide all the required services. Health care providers also complained of complex documentation and billing requirements which caused a lot of time constraints.

# **Benefits of performing Medicare AWVs**

To successfully improve the practice of Medicare AWVs, it is imperative to establish the benefits of a Medicare AWVs. Briggs (2019) main objective was to understand how Medicare accountable care organizations (ACO) provided preventative care services to their attributed patients. The author used a mixed-methods study using survey data reporting Medicare ACO capabilities in patient care management. The study revealed offering Medicare AWVs and having a system-wide approach to closing preventative care gaps were key mechanisms used to address patients' preventative care needs.

Chung et al, (2015) evaluated whether alterations in preventative visit increased the reception of specific preventative care services such as discussing aspirin prophylaxis, screening and counseling for tobacco use, cancer screenings, and immunizations. The authors compared trends in preventative visits among patients who had Medicare fee-for-service and Medicare health maintenance organization (HMO) as well as non-Medicare patients age 65 to 75-years-old who were covered by private fee-for-service and private HMO plans. The article concluded

preventative issues could be addressed in the annual visit and more chronic issues could be addressed fully during a single evaluation-and-management visit, which reduced the number of non-preventative visits.

Fowler et al (2018) mention in their article, AWVs provided an opportunity to identify reversible and nonreversible cognitive impairment early. The authors further discussed reviewing medications may identify medications and supplements that may contribute to cognitive impairment and if modified could reduce reversible cognitive impairments. The authors concluded AWVs correlated with an increase in laboratory testing for reversible causes of cognitive impairment.

The United Nations Population Division projects 22% of the population in 2050 will be over the age of 80 (Simpson & Kovich, 2019). Simpson and Kovich (2019) suspects if the estimation is correct, the prevalence of non-communicable diseases, risk factors, and multiple co-morbid conditions will contribute to increased disability and frailty rates. The authors concluded utilization of AWVs improve the compliance of primary and secondary prevention such as vaccinations and screenings.

Camacho, Yao, and Anderson (2017) examined whether AWVs improved preventative care practice, on Medicare fee-for-service (FFS) beneficiaries after The Centers for Medicare and Medicaid Services adoption of ACA policies in 2011. Their study proved patients who did not receive AWVs were less likely to receive preventative services compared with recipients of AWVs. The authors concluded the results were consistent with the ideology in which wellness visits improve screening rates leading to reduction in cancer burden.

Beckman et al (2019) main objective was to determine if AWVs improved healthcare cost and clinical quality. For Medicare beneficiaries who had AWVs, there was a significant reduction

in hospital and outpatient services. The authors concluded practices efficiently utilizing AWVs could potentially improve health care quality and reduce health care cost.

Basu et al (2015) examined financial implications of chronic care management payment for primary care practices. The authors used the microsimulation model incorporating national data on primary care use, staffing, expenditures, and reimbursements over a ten-year period to compare chronic care management delivery approaches by staff and physicians. The study revealed net revenue improved most when chronic care management plans were developed through an annual preventative visit jointly delivered by a physician and a nurse care manager (RN or LPN). The study also revealed if an LPN delivered the services instead of an RN, net revenue increased to \$326 (Cl, \$193 to \$460) per patient in year 1 and \$372 (Cl, \$276 to \$468) annually thereafter because of the lower LPN salary and benefit costs.

### Method for improving the workflow of Medicare AWVs

There are numerous literatures supporting guidelines to develop and implement improved workflow in primary care. Holman et al (2015) main objective was to observe workflow in various clinics so when work flow guidelines are developed they are modified to accommodate both healthcare and non-healthcare personnel. The result of the research demonstrated workflow was impacted by physician work style, staff support, length of visit, policies, office layout, technology, and the relationship amongst staff members. The authors concluded, in order for providers to provide safe, effective, and efficient care newly developing tools need to be realistic and support the providers' mental and physical work.

Hysong et al (2019) support the ideology high quality and effective patient care is based on teamwork. The authors emphasize team-based care made up of individuals with an established work history displayed solidarity, reliance, and conduct, all of which can enrich the

team performance and patient satisfaction. The authors also mention, effective teamwork in primary care was associated with improvements in patient outcomes such as decreased ER utilization. Meyers et al (2019) concluded application of team-based workflow in primary care may be an advantage for patients with chronic disease by reducing visits to acute care facilities.

Recent research emphasizes team-based care improves patient health, enhances patient experience, reduces health care costs, and improves the work life of providers and staff (Wagner et al, 2017). The authors' main objective was to observe how team-based practice such as The Primary Care Team: Learning from Effective Ambulatory Practices (PCT-LEAP) may be more successful than traditional office practice. The authors acknowledge licensed practical nurses are most commonly used in medical assistant roles. They also emphasized successful LEAP required a good provider-medical assistant partnership. The authors encouraged MA and LPNs to be more involved in patient care. Expanding the roles of medical assistants and LPNs and providing previsit to review of the charts help identify gaps in necessary preventative and chronic care services.

Jerzak. Siddiqui, and Sinsky (2019) identified strategies to assist with an advanced teambased care model to improve Medicare AWVs. The authors' goal was to improve the work life of health care providers, enhance patient experience, improve population health, and reduce costs. The authors redesigned staffing and workflow to maximize the core skills of physicians by distributing ancillary tasks amongst up-trained certified medical assistants (CMAs) and licensed practical nurses (LPNs). The implementation of the advanced team-based care model demonstrated success through increased productivity, thorough service, new billable services, improved access for patients, improved opportunity for financial sustainability, and enhancing the organization's ability to retain and recruit employees.

Galvin et al (2017) examined the effectiveness of team-based Medicare AWVS on the patient's use of preventative services. The authors conducted a retrospective chart review of post-Medicare AWVS using the McNemar's test to observe for change over time in use of preventative services. The authors concluded team-based Medicare AWVS with a clinical pharmacist or an LPN, supervised by a physician were associated with notably improved utilization of preventative services. One limitation observed was generalization of results due to the use of clinics within one organization in one area of western North Carolina. The findings may not be reproducible in other parts of United States with greater ethnic and racial diversity along with varied access to preventative services.

Jerzak (2019) goal was redesign of the office visit, including an enhanced role for empowered certified medical assistants (CMAs) and licensed practical nurses (LPNs) who now close care gaps, review patient medication, and provide a key role working with the electronic health record (EHR) during visits. Jerzak believes improvement occurs because the entire team, not just the physician, is responsible for quality, and patients benefit from the care team coordinated pre-visit planning. Jerzak concluded adopting team-based care requires time, commitment, and collaboration. When successful, this enables practices to better manage their patient population's health while providing burnout relief for their health care workers.

### **METHOD**

### **Design**

The purpose of this evidence-based change project is to increase the utilization of Medicare AWVs by improving the visit's workflow through a team-based approach. At the current practice in Rockland County, providers should be able to perform seven Medicare AWVs in their eight-hour shift. But due to time constraint, the providers only allow their staff to

schedule three to four Medicare AWVs on any given day. The restructuring of the workflow does not require additional staffing, but require staff members to complete their tasks while communicating cohesively with other team members. The new workflow consists of the patient receiving with a reminder phone call one to two weeks prior to the appointment, and scheduling a pre-visit with an LPN or MA prior to meeting with the health care provider. The content and delivery method of the change project was evidence-based and supported by the consulting physician supervising the capstone project. The criteria for which the change was implemented was based on systematic review of the articles mentioned above, benchmarking practices using a team-based approved, and using the Consolidated Framework for Implementation Research (CFIR) for guidance.

# Objective and measurable outcome

The main objective is to increase Medicare AWVs from three visits to six visits per provider. To measure the increase in AWVs utilization, the office manager will keep track how often the CPT codes G0438 and G0439 are billed weekly. To ensure patients are being called prior to the appointment, secretaries will need to document the telephone encounter both electronically and on paper, which will be audited monthly by the lead secretary.

### **Setting**

The practice is a multi-specialty practice located in Rockland County, New York. The practice consists of board-certified physicians and nurse practitioners focused on internal medicine, pulmonary care, and sleep services. The practice is large consisting of four offices in various parts of Rockland County. On a typical work day, there are seven or more providers working at the two main offices and two to six providers working at the other two locations. One MA or LPN is usually assigned to one or two providers, depending on staffing and availability.

### Sample

Inclusion criteria for the patient population included all patients who had Medicare as the primary medical insurance coverage and did not have an AWV billed in the twelve months prior to the project implementation. The practice has a total of 1,047 Medicare beneficiaries on the roster. Of the 1,047 beneficiaries 434 patients did not receive an AWV for the year of 2019. The participants involved were one provider, the MA or LPN assigned to the provider, Medicare beneficiaries, and the provider's secretary. The decision to begin the project with my supporting physician, allowed flexibility to modify the evidence-based project to best suit the practice.

### **IMPLEMENTATION**

The first step of the CFIR consists of three domains. They are to figure out what is the intervention designed to achieve, determine features of the intervention, and discover who the intended target group is (Smith, Ashok, Morss, Wines, & Teixeira-Poit, 2014). The goal of the capstone project is to increase the occurrence of AWVS thus increasing the practice's internal revenue. The features identified to enable the success of the capstone project consisted of utilizing a team-based approach. Step one required secretary to provide the patient with a reminder phone call and obtain information to access outside medical records and update the EMR one week prior to the appointment. A pre-visit appointment was scheduled with an LPN or MA, 15 minutes before seeing the provider, to complete: Medicare forms, health risk assessments, and health care maintenance before meeting with the health care provider on the day of the appointment. The target group for the evidenced-based project is for all patients are enrolled in Medicare part B.

Assessing the technological environment provides insight of software that can be used for improvement of procedure. Patient satisfaction is the second step (Smith, Ashok, Morss, Wines,

& Teixeira-Poit, 2014). The EMR used is epic, which was recently updated to include a "rooming-in" order set. This enables the computer to alert the LPN and MA of key elements that must be addressed during the office visit. With the secretary calling a week prior to obtain outside records, once the documents are scanned into the patient's chart, overdue tasks such as mammogram will appear with a green check mark indicating the task was completed. An updated EMR reduces gaps in patient care by flagging tasks which need to be addressed.

The third step observes for components of current structure and process within the practice which will impact the implementation (Smith, Ashok, Morss, Wines, & Teixeira-Poit, 2014). The multi-specialty practice for this Capstone project holds the value of putting the patient first. The current AWVS workflow lacks consistency because the current expectations for MAs varies from the LPNs skills. The requirements and expectation for the AWVs are unchanged but currently lacks efficient execution. No one person is accountable for the completion of the required elements, so clerical and medical task falls on the provider performing the AWVs. By providing appropriate tasks within the staff member's (i.e., secretary, receptionist, medical assistant, LPN, and provider) scope of practice, accountability will promote efficient execution.

Step four involves observing the characteristics of individuals who will help make the implementation successful. This involves assessing their readiness to learn and change. On February 20, 2020 a staff meeting was held to discuss with staff about the intended goal to improve AWVs. Many providers and ancillary staff member expressed they were eager to be part of the change. Two secretaries volunteered to pilot the reminder phone call along with the task of obtaining outside records to update the patient's EMR. The LPN who would be responsible for the pre-AWVs visit expressed her support of the project. She verbalized her agreement with the

problems involved in the current workflow and her willingness to be involved in a change to improve the current workflow. The supporting physician agreed to allow her scheduled AWVs in the upcoming weeks to be piloted for the workflow change. The office manager assisted with providing data on the average length of office visits for an AWVS and also scheduled a meeting with all the staff members who were going to be involved in the initial change. At the meeting everyone was given verbal instructions on what was expected of them based on their scope of practice. An office space near the waiting room was designated as the pre-AWVS visit room, where the patient would first meet with the LPN. There the HRA and EMR are reviewed and updated.

Step five assesses the implementation processes required to achieve individual and organizational level use of the intervention (Smith et al, 2014). February 24, 2020 the secretaries began to make phone calls to the patients who were expected to have their AWVs the following week. The secretaries provided the patients with a reminder of their upcoming visit, completion of the AWV packet, and to arrive 30-minutes prior to their appointment to meet with the LPN or MA. They also received consent to obtain office notes from specialist, recent tests, and other health maintenance tasks to upload into the EMR. When the patient arrives for their scheduled appointment, the patient checks in providing legal identification and insurance card. The medical assistants (MA) or licensed practical nurse (LPN) brought the patient into the AWV interview room. The MA or LPN initiated the AWV note and addressed the HRAs and care gaps. This involves obtaining and completing: patient weight, vital signs, Snellen chart, Whisper test, depression and substance use screening, mini-cog (e.g. clock draw test, animal naming test), and fall risk assessment (e.g. get-up-and-go test, if they fell in the past 12 months the test is not indicated). They were also expected to verify all documents from other specialists, recent tests,

and HRAs were completed and uploaded in the EMR. Once all tasks are completed by the MA or LPN, the provider was given the patient's slip indicating the patient is ready to be evaluated by the provider. They also highlighted any tasks needing to be addressed by the provider. The provider then greeted the patient and completed the medication reconciliation, review of system (ROS), physical exam, advanced care planning, educations, prescriptions, refills, referrals, and vaccinations.

### **Measurement Tools**

To measure the utilization of AWV, a tracking audit tool was created to track the completion of the AWVs. The tool was separated into 7 columns (Appendix A). The columns included: name, age, gender, race, month of scheduled AWV, AWV completed, and HRA in chart. The audit tool remained at the secretaries' desk responsible for the pre-visit phone call, and was updated once a week. To ensure the tracking audit tool was documented correctly, the LPN would compare the AWV upcoming appointments to the AWV tracking tool.

Covid-19 pandemic interrupted the continuity of the capstone project. Further clarification of Covid-19 will be discussed later in the paper. If the capstone would have continued, a descriptive statistics would be utilized to calculate the mean age, race, history and AWV status of the sample. Standard deviation and ranges would calculate the ages of the patients observed in the implementation phase. Percentage of AWV completed per eligible person per week would compute and average utilization based on pre-intervention and post-intervention. The completed AWV post-intervention would then be compared to the completed AWV pre-intervention by using z-test sample proportions with a significance level of 0.05.

### Risks/Benefits Analysis

There are a few potential barriers to the implementation of the Capstone change project. For one an MA's scope of practice differs from an LPN's. MA's lack the skill to identify medications and understand their indication. Because of this, many times the medication reconciliation remains incomplete. Time is another barrier because Medicare AWVs are time consuming. Delay from either the patient, ancillary staff, or provider causes a considerable delay to other scheduled appointments. Because of the inconsistencies with the medication reconciliation, only the providers are now obligated to complete the medication reconciliation. Time remains as a potential barrier, but only if there is a delay from the patient, ancillary staff, or provider.

For the capstone to be successful, it is very apparent time and competence from staff members is a major factor. The provider and office manager can further contribute to sustainability by mandating a standard team-based workflow covering identification and scheduling of Medicare patients for AWVs yearly. Receiving documents to complete HRAs and care gaps, prior to the appointment considerably reduces the amount of time used during the visit for none patient-provider interactions. By delegating the screening questions and CMS requirements to the MAs and LPNs, this give the providers more time to focus on shared-decision making strategies with the patient. The practice will need to establish a system for tracking completed AWVs and comparing it to the roster of all their Medicare patients. There are no additional cost in the implementation of this evidence-based change project. The tasks do not involve additional staffing or a budget to be implemented.

Completing AWVs provides practice opportunity for large reimbursement when compared to routine office encounters. For initial "Welcome to Medicare AWVs", CPT code

G0438, a provider is reimbursed \$227 per visit. Each subsequent AWVs, CPT code G0439, following the initial visit is then \$152. Each year the provider and patient must discussed advanced care planning. For the first 30-minutes, the provider can bill the advanced care planning using the CPT code 99497 and receive \$86. Each additional half-hour costs \$75. To receive the full reimbursement the provider must complete the specific requirements and documentation to support the visit. With limited time and full expectation of CMS requirement, little time is offered to address other concerns patient may bring up during the visit. This can lead to dissatisfied encounter where the patient feels rushed or ignored.

AWVs bring in more revenue than routine office visits. For established patients who are evaluated for follow-up on chronic conditions or episodic visit, the CPT codes used for the visit ranges from 99212-99215. 99212 must be five to ten minutes in order to receive \$60 reimbursement. 99213 typically cost \$90 with a standard office visit of 10-15 minutes.

Commonly billed is a 99214 which cost \$130, because office visits typically last 20-30 minutes and are more complex. 99215 cost \$180 but are rarely billed because they require extensive documentation, beside office duration of 45 minutes, to support the charge.

With one AWV, a provider is expected to be reimbursed \$238 to \$313. A typical office visit such as a 99214 cost \$130. Currently the practice only books three to four AWVs for a typical work day. This ensures a daily reimbursement of \$952 to \$1,252 per provider. If the provider is able to improve their work flow allotting more AWVs to be schedule in one day, the provider can potentially be reimbursed \$1,666 to \$2,191 not including other office encounter such as: sick visits, new patients, preoperative visits, and follow-up.

### **Ethical Implications**

### **Respect for Persons**

The principle of ethics focused on the rights of full disclosure and self-determination involves the respect for persons and human dignity (Polit & Beck, 2017). The participants were provided with a full disclosure for participation in the project, which provided autonomy. No participant's demographic data was accessed, collected, or retained at any time during this project. This project complied with all Health Insurance Portability and Accountability Act of 1996 (HIPAA) guidelines regarding privacy as no personal identifiers were requested, gathered, or stored.

#### Beneficence

Beneficence is a value of ethics assisting in the prevention of any harm to participants and maximizing potential benefits (Polit & Beck, 2017). The risks of the Capstone evidence-based project were minimal. The participants were made aware in the disclosure that project participation would not positively or negatively affect their employment status at the site of implementation. The Medicare beneficiaries were advised the change would not reduce their allotted time with the provider to discussed shared-decision plan of care. Benefits to provider participants included improved workflow and improved quality of work life.

### **Justice**

Justice is a principle seeking to include the rights of privacy and fair treatment (Polit & Beck, 2017). The employees involved in the change were aware they would not work beyond their expected scope of practice. The project design was appropriate and safe to protect privacy while seeking to meet project objectives.

# **Nursing Implications**

Current research suggests improved utilization of wellness visits by educating providers, clinic staff, and patients about potential benefits of the Medicare AWVS (Cross-Barnet, Colligan, Mcneely, Strawbridge, & Lloyd, 2019). Researchers have shown Medicare AWVs are associated with a significant improvement in the use of preventative care and a reduction in total healthcare costs (Beckman, Becerra, Marcus, Lynch, Maxson, Mostashari, DuBard, & King, 2019). Rates of screening for fall risk and for clinical depression with follow-up plans were more than 70 % higher among beneficiaries who received a Medicare AWVs (Beckman et al, 2019). It also improved A1C control and increased secondary prevention in older adults such as breast and colorectal cancer screening and tobacco use screening with cessation intervention (Beckman et al, 2019).

#### **OUTCOMES AND EVALUATION**

The LPNs and MA stated the phone call provided by the secretary one week prior enable the patients to arrive on time. The secretaries were able to gather many of the documents needed for the AWV, they spent less time waiting for documents such as glaucoma screening results, colonoscopy reports, mammograms, and bone density result. This provided them with more time to perform the tasks such as the eye exam, hearing test, fall assessment, etc. The staff states if patients came on time and had all required documents already completed, they were able to complete their task in 10 to 15 minutes.

The supporting physician who piloted the evidence-based change project report she was very satisfied because she did not have to focus on meniscal and clerical task, thus focusing more on shared-decision making plan of care with her patients. This involved a thorough medication reconciliation, physical examination, discussion of advanced care planning, and shared-decision

for the patient's comorbidities. She expressed the visit was less time consuming and her patients expressed their gratitude because they now had more time to address other concerns. By Thursday and Friday of the piloted week, she had her secretaries' schedule five additional AWVs to her assignment.

The AWV allowed for the identification and mitigation of health risks all while promoting preventative screenings. Several patient referrals were initiated for screenings such as: colonoscopies, cervical cancer screenings, mammograms, depression, ophthalmology, and bone density. In addition, there were multiple patient referrals were given for the shingles vaccination. The fall risk and safety assessment included administration of fall risk education and referrals for home health and physical therapy.

#### **SUMMARY**

A total of nine Medicare beneficiaries were scheduled for AWVs between March 2, 2020 and March 6, 2020. The initiation of the HRAs task started during the pre-visit phone call and was then completed during the pre-visit with the MA or LPN on the day of the appointment. The mean age of the sample was 77 with a range of 65 to 94. Males numbered two (22.2%) with a mean age of 66.5 years, and females numbered seven (77.8%) and had a mean age of 80.2 years. Race was noted at 22.2% Black, 44.4% White, and 33.3% other, which consisted of Asian, Indian, and Hispanic. 89% had an AWV within the prior 12 to 24 months of the study.

A limitation to the Capstone was the inability to continue with the project. Due to the recent Covid-19 pandemic, the Capstone project was paused for several months, after being implemented only for the first week in March. In late 2019, a novel coronavirus labeled severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was identified as the source for a cluster of fatal pneumonia cases in Wuhan, China. By mid-February SARS-CoV-2 quickly

spread to Iran, Spain, and Italy leading to a travel ban to and from those countries in the United States of America. March 1, 2020 New York first Covid-19 positive case was a woman who recently travelled to Iran. By March 6, 2020 there were 45 Covid-19 positive cases and the cases continued to double overnight.

On March 7, 2020 Governor Cuomo declared a State of Emergency due to the rising cases of Covid-19 (Kariya, 2020). To reduce exposure in the office, all preventative visits were cancelled. All episodic office visits required screening via telephone and walk-in appointments were prohibited. One-third of the practice's providers were diverted to the hospital to support patient overflow. The remainder who were not diverted to the hospital, provided virtual episodic visits. Patients with Covid-like symptoms or fever were managed via telecommunication and prohibited from coming to the office. By March 16<sup>th</sup>, all in-office visit was ceased. Future AWVs were reschedule to the fall of 2020, and patient were advised they would receive a phone call to reschedule once the practice resumed its regular office visits.

In this evidence-based project, AWVs with completion of HRAs were implemented for Medicare beneficiaries. Findings were consistent with the literature in which changing the current workflow to a team-based workflow improved AWVs workflow, thus enabling increase occurrence of AWVs. Strengths of the project were identifying gaps in care and increased provider referral and patient adherence with preventative health screenings and vaccinations as recommended by the U.S. Preventative Services Task Force. Another strength included provider and staff engagement in the process. Ultimately, the Capstone provided insight the change would increase revenue within the practice because of claims submitted for the AWVs.

# **Conclusion and Recommendation**

The results of this Capstone demonstrated improving AWV workflow increased the capability to schedule more AWVs on a typical work day. Incorporation of interdisciplinary teams such as: physicians, nurse practitioners, practice managers, medical assistants, licensed practical nurses, and ancillary staff into workflow development was vital to the success of the program. Having the HRAs completed before the patient met with the provider allowed the provider and patient to have more time to establish a shared-decision plan of care, which best suited an individual's quality of life. Unfortunately, the Covid-19 pandemic interrupted the full evaluation of project. But the information gathered for the five days the project was implemented demonstrated favorable results. The practice recently resumed in office visits mid-June, 2020. They currently are understaffed because many of the ancillary staff were diverted to other practices in the organization during the pandemic. It is expected the project to resume once the office is fully staffed.

Staff education is imperative in understanding the variance between the AWV and other routine office visits. Additionally, scripting can assist the staff to schedule appointments properly. Other recommendations would include a larger sample size and longer time and duration of the implementation. Lastly, the use of an EMR with reminder pop-ups can improve the rates AWVs are completed. Prompt identification of patients eligible for upcoming AWVs and uncompleted HRA can be implemented to help increase capture rates.

### **AACN Essentials of Doctoral Education for Advanced Practice Nursing**

Level II of the DNP Essential – Organizational and Systems Leadership for Quality Improvement and System Thinking, nursing practice can improve patient and healthcare outcomes. Improving the current workflow to increase the utilization of the AWVs provide

patients with the opportunity to manage their chronic conditions, prevent and screen preventable disease, establish advance care directives, all while reducing hospitalizations. The goal of primary care is to prevent premature death and disability, maintain and enhance the quality of life, and enable personal growth and development.

# **Role of DNP in Capstone**

The capstone project enables a doctoral prepared nurse to become proficient as a leader and participate in leadership roles in healthcare organizations, hospitals and clinics. An APN who obtains their DNP can organize quality improvement teams, direct patient care, and provide cost saving solutions to patient care encounters thus improving patient outcomes (Edwards et al, 2018). Evidenced-based practice strengthens the application of research-based interventions used to improve patient outcomes, in nursing practice.

### References

- American Board of Preventative Medicine. (2020). *Preventative Medicince*. Retrieved January 29, 2020, from <a href="https://www.theabpm.org/about-us/">https://www.theabpm.org/about-us/</a>
- Basu, S., Phillips, R. S., Bitton, A., Song, Z., & Landon, B. E. (2015). Medicare Chronic Care
   Management Payments and Financial Returns to Primary Care Practices. *Annals of Internal Medicine*, 163(8), 580. doi: 10.7326/m14-2677
- Beckman, A. L., Becerra, A. Z., Marcus, A., DuBard, A., Lynch, K., Maxson, E., ... King, J. (2019). Medicare AWVS Association With Healthcare Quality and Costs. *AM J Manag Care*, 25(3), 294–300. Retrieved from <a href="https://calhipso.org/wp-content/uploads/2019/05/Succeeding-in-Value-Based-Care-Mat-Kendall.pdf">https://calhipso.org/wp-content/uploads/2019/05/Succeeding-in-Value-Based-Care-Mat-Kendall.pdf</a>
- Bluestein, D., Diduk-Smith, R., Jordan, L., Persaud, K., & Hughes, T. (2017). Medicare annual wellness visits: how to get patients and physicians on board. *American Academy of Family Physicians*, 12–16. Retrieved from https://pdfs.semanticscholar.org/5908/ec1cd7a1cdd2332fde6254817ed619cf9dcc.pdf
- Briggs, A. D. M., Fraze, T. K., Glick, A. L., Beidler, L. B., Shortell, S. M., & Fisher, E. S. (2019). How Do Accountable Care Organizations Deliver Preventative Care Services? A Mixed-Methods Study. *Journal of General Internal Medicine*, *34*(11), 2451–2459. doi: 10.1007/s11606-019-05271-5
- Camacho, F., Yao, N., & Anderson, R. (2017). The Effectiveness of Medicare Wellness Visits in Accessing Preventative Screening. *Journal of Primary Care & Community Health*, 8(4), 247-255. doi:10.1177/2150131917736613
- Chung, S., Lesser, L. I., Lauderdale, D. S., Johns, N. E., Palaniappan, L. P., & Luft, H. S. (2015).

  Medicare Annual Preventative Care Visits: Use Increased Among Fee-For-Service

- Patients, But Many Do Not Participate. *Health Affairs*, *34*(1), 11–20. doi: 10.1377/hlthaff.2014.0483
- Cross-Barnet, C., Colligan, E. M., Mcneely, J., Strawbridge, L. M., & Lloyd, J. T. (2019).

  Facilitators and barriers to optimal preventative service use among providers and older patients. *Geriatric Nursing*, 40(1), 72–77. doi: 10.1016/j.gerinurse.2018.06.017
- Edwards, N., Coddington, J., Erler, C., Kirkpatrick. (2018). The Impact of the Role of Doctor of Nursing Practice Nurses on Healthcare and Leadership. *Medical Research Archives*. 6 (4): 1-11.
- Fowler, N. R., Campbell, N. L., Pohl, G. M., Munsie, L. M., Kirson, N. Y., Desai, U., ...
  Boustani, M. A. (2018). One-Year Effect of the Medicare Annual Wellness Visit on
  Detection of Cognitive Impairment: A Cohort Study. *Journal of the American Geriatrics*Society, 66(5), 969–975. doi: 10.1111/jgs.15330
- Galvin, S. L., Grandy, R., Woodall, T., Parlier, A. B., Thach, S., & Landis, S. E. (2017).

  Improved Utilization of Preventative Services Among Patients Following Team-Based

  Medicare AWVS. North Carolina Medical Journal, 78(5), 287–295. Retrieved from

  file:///C:/Users/85382/Documents/capstone/Improved Utilization of Preventative Services

  Among Patients Following Team-Based.pdf
- Ganguli, I., Souza, J., Mcwilliams, J. M., & Mehrotra, A. (2018). Practices caring for the underserved are less likely to adopt Medicare's Medicare AWVS. *Health Affairs*, *37*(2), 283–291. doi: 10.1377/hlthaff.2017.1130
- Holman, G. T., Beasley, J. W., Karsh, B.-T., Stone, J. A., Smith, P. D., & Wetterneck, T. B. (2015). The myth of standardized workflow in primary care. *Journal of the American Medical Informatics Association*, 23(1), 29–37. doi: 10.1093/jamia/ocv107

Hysong, S. J., Amspoker, A. B., Hughes, A. M., Woodard, L., Oswald, F. L., Petersen, L. A., & Lester, H. F. (2019). Impact of team configuration and team stability on primary care quality. *Implementation Science*, *14*(1), 1–9. doi: 10.1186/s13012-019-0864-8

- Jerzak, J., Siddiqui, G., & Sinsky, C. A. (2019). Advanced team-based care: How we made it work. *The Journal of Family Practice*, 68(7), E1–E8. Retrieved from <a href="https://eds-a-ebscohost-com.libdb.dc.edu/eds/pdfviewer/pdfviewer?vid=2&sid=9698b108-2a19-401c-947e-3fe3def5f3e5@pdc-v-sessmgr06">https://eds-a-ebscohost-com.libdb.dc.edu/eds/pdfviewer/pdfviewer?vid=2&sid=9698b108-2a19-401c-947e-3fe3def5f3e5@pdc-v-sessmgr06</a>
- Jerzak, J. (2019,). Using Empowered CMAs and Nursing Staff to Improve Team-based Care.

  \*American Academy of Family Practice. Retrieved from <a href="https://www.aafp.org/fpm/2019/0100/p17.html">https://www.aafp.org/fpm/2019/0100/p17.html</a>
- Kariya, T. (2020). Rapid spread of COVID-19 in New York and the response of the community. *Global Health & Medicine*, 2(2), 123-126. doi:10.35772/ghm.2020.01032
- Keith, R. E., Crosson, J. C., O'Malley, A. S., Cromp, D., & Taylor, E. F. (2017). Using the Consolidated Framework for Implementation Research (CFIR) to produce actionable findings: a rapid-cycle evaluation approach to improving implementation. *Implementation Science*, 12(1), 1–12. doi: 10.1186/s13012-017-0550-7
- Lind, K. E., Hildreth, K. L., & Perraillon, M. C. (2019). Persistent Disparities in Medicare's Annual Wellness Visit Utilization. *Medical Care*, *57*(12), 984–989. doi: 10.1097/mlr.000000000001229

Medicare Interactive. (2020). *Medicare AWVs*. Retrieved January 29, 2020, from <a href="https://www.medicareinteractive.org/get-answers/medicare-covered-services/preventative-services/annual-wellness-visit">https://www.medicareinteractive.org/get-answers/medicare-covered-services/preventative-services/annual-wellness-visit</a>

- Meyers, D. J., Chien, A. T., Nguyen, K. H., Li, Z., Singer, S. J., & Rosenthal, M. B. (2019).

  Association of Team-Based Primary Care With Health Care Utilization and Costs Among
  Chronically Ill Patients. *JAMA Internal Medicine*, 179(1), 54-61.

  doi:10.1001/jamainternmed.2018.5118
- Musich, S., Wang, S., Hawkins, K., & Klemes, A. (2016). The impact of personalized preventative care on health care quality, utilization, and expenditures. *Population Health Management*, 19(6), 389–397. doi:10.1089/pop.2015.0171
- Nagykaldi, Z. J., Dave, A., Kristof, C. J., Watts, T. N., Utpala, S., & Wickersham, E. (2017).

  Improving Patient-Clinician Conversations During Medicare AWVs. *The Journal of the American Board of Family Medicine*, 30(2), 161–169. doi:

  10.3122/jabfm.2017.02.160229
- Office of Disease Prevention and Health Promotion. (2020). *Healthy People*. Retrieved January 29, 2020, from <a href="https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhitopics/Clinical-Preventative-Services">https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhitopics/Clinical-Preventative-Services</a>
- Panattoni, L., Hurlimann, L., Wilson, C., Durbin, M., &. Tai-Seale, M. (2017). Workflow standardization of a novel team care model to improve chronic care: a quasi-experimental study. *BMC Health Serv Res* 17 (286), 1-14. doi.org/10.1186/s12913-017-2240-1
- Polit, D. F. & Beck, C. T. (2017). Nursing research: Generating and assessing evidence for nursing practice (10th ed.). Philadelphia, PA: Wolters Kluwer

Rockliffe, L., Chorley, A. J., Marlow, L. A. V., & Forster, A. S. (2018). It's hard to reach the "hard-to-reach": the challenges of recruiting people who do not access preventative healthcare services into interview studies. *International Journal of Qualitative Studies on Health and Well-Being*, 13(1), 1479582. doi: 10.1080/17482631.2018.1479582

- Simpson, V., Edwards, N., & Berlin, K. (2018). Annual Medicare Wellness Visit: Advanced

  Nurse Practitioner Perceptions and Practices. *The Journal for Nurse Practitioners*, *14*(2),
  e45–e48. doi: 10.1016/j.nurpra.2017.11.008
- Simpson, V. L., & Kovich, M. (2019). Outcomes of primary care-based Medicare annual wellness visits with older adults: A scoping review. *Geriatric Nursing*, 40(6), 590–596. doi: 10.1016/j.gerinurse.2019.06.001
- Smith, L. R., Ashok, M., Morss, S., Wines, R. C., & Teixeira-Poit, S. (2014). Contextual

  Frameworks for Research on the Implementation of Complex System Interventions.

  Agency for Healthcare Research and Quality. Retrieved from

  <a href="https://www.ncbi.nlm.nih.gov/sites/books/NBK196199/pdf/Bookshelf">https://www.ncbi.nlm.nih.gov/sites/books/NBK196199/pdf/Bookshelf</a> NBK196199.pdf
- Tipirneni, R., Ganguli, I., Ayanian, J. Z., & Langa, K. M. (2018). Reducing Disparities in Healthy Aging Through an Enhanced Medicare AWVS. *Public Policy & Aging Report*, 29(1), 26–32. doi: 10.1093/ppar/pry048
- Tse, A. (2020). Leverage the Medicare AWVS. *Medical Economics*. Retrieved from <a href="https://www.medicaleconomics.com/news/leverage-annual-wellness-visit">https://www.medicaleconomics.com/news/leverage-annual-wellness-visit</a>
- Wagner, E. H., Flinter, M., Hsu, C., Cromp, D., Austin, B. T., Etz, R., ... Ladden, M. D. (2017).

  Effective team-based primary care: observations from innovative practices. *BMC Family Practice*, 18(1), 1–9. doi: 10.1186/s12875-017-0590-8

# Appendix A

# AWV Audit and Tracking Tool

Patient name	Age (years)	Gender (0=male, 1=female)	Race (0=White, 1= Black, 2=Hispanic, 3=Other)	Month AWV scheduled	Was AWV completed (0=No, 1=Yes)	Complete HRA in chart (0=No, 1=Yes)

## Appendix B

### Survey

- 1. How satisfied are you with the current AWV workflow? (please chose one
  - a. Satisfied
  - b. Unsatisfied
  - c. N/A
- 2. Do you find AWVs time consuming
  - a. Yes
  - b. No
- 3. How likely are you to schedule an AWV for your patient?
  - a. All the time
  - b. Sometimes
  - c. Never
- 4. If we developed a new workflow that improved time and could increase the utilization of AWVs, would you support it?
  - a. Yes
  - b. No

## **Tables**

Table 1 **Table of Evidence** 

Author/Year/Level	Title	Design/Location/Sa mple	Purpose/ Method/Instruments	Resu
Basu, S. et al, (2015).  Oxford Centre of EBM level 3	Medicare Chronic Care Management Payments and Financial Returns to Primary Care Practices.	Design: Microsimulation model incorporating national data on primary care use, staffing, expenditures, and reimbursements. Location: United States of America Sample: Physicians and non-physician staff	Purpose: To estimate financial implications of CCM payment for primary care practices.  Method: Microsimulation model incorporating national data on primary care use, staffing, expenditures, and reimbursements.  Instruments: National Ambulatory Medical Care Survey and other published sources.	Resu delive practi oppor Conc physi servic substa enroli patien
Beckman, A. L. et al, (2019).  Oxford Centre of EBM level 2	Medicare Annual Wellness Visit Association With Healthcare Quality and Costs	Design: A retrospective cohort study Location: United States of America Sample: Medicare beneficiaries	Purpose: Can AWVs improve healthcare costs and clinical quality.  Method: Between 2014 and 2016, we examined the association of an AWV with healthcare costs, ED visits, hospitalizations, and clinical quality measures.  Instruments: they used insurance claims from the CMS Claim and Claim Line Feed23 as our primary data source to assess the association of an AWV with cost and utilization.	Resu signif hospi service were recon service Conc care of mana impro- cost.
Briggs, A. D. M., et al, (2019).  Oxford Centre of EBM level 2	How Do Accountable Care Organizations Deliver Preventative Care Services?	Design: Quantitative and qualitative data from surveys and interview data. Location: United States of America	Purpose: To understand how Medicare ACOs provide preventative care services to their attributed patients. Method: Mixed-methods study using survey data reporting Medicare ACO capabilities in patient care management and	Resu being plann - incl preve benef collab

	A Mixed- Methods Study.	Sample: Medicare beneficiaries	interviews with high-performing ACOs.  Instrument: The National Survey of ACOs (NSACO).	motive service and no ACO payer care.
Camacho, F. et al, (2017).  Oxford Centre of EBM level 3	The Effectiveness of Medicare Wellness Visits in Accessing Preventative Screening.	Design: observational study Location: United States of America Sample: Medicare beneficiaries	Purpose: This study examines whether AWVs result in more recommended preventative care, on average and in racial/ethnic minorities and rural residents in Medicare fee-for-service (FFS) beneficiaries after Centers for Medicare and Medicaid Services adoption of ACA policies in 2011.  Method: Using 2011-2014  Medicare FFS (fee-for-service) claims data, seven preventative care services, including vaccinations and cancer screenings were compared among beneficiaries who received and did not receive AWVs.  Instruments: HCPCS (Healthcare Common Procedure Coding System) codes. Inverse probability weights (IPTW).	Resu receive with a The transfer AWV than a show age grural/differ Conceive with a screen cancer.
Chung, S. et al, (2015).  Oxford Centre of EBM level 3	Medicare Annual Preventative Care Visits: Use Increased Among Fee-For- Service Patients, But Many Do Not Participate	Design: Examine monthly patterns in the use of Medicare-covered preventative visits Location: Palo Alto Medical Foundation during 2007–13.  Sample: active primary care patients ages 65–75	Purpose: Our study investigates the uptake of preventative care visits among seniors in Northern California from 2007 through 2013 using a difference-indifferences approach.  Method: Compared trends in preventative visits and recommended preventative services among Medicare fee-forservice and Medicare health maintenance organization (HMO) patients as well as non-Medicare patients ages 65–75 who were covered by private fee-for-service and private HMO plans.  Instruments:	Resu increa Medi Conc expar senio

Cross-Barnet, C. et al, (2019).  Oxford Centre of EBM level 2	Facilitators and barriers to optimal preventative service use among providers and older patients.	Design: Retrospective cohort study Location: United States of America Sample: health care providers	Purpose: To understand barriers and facilitators to preventative service provision, access, and uptake.  Method: mixed methods approach synthesizing quantitative survey and qualitative focus group data.  Instruments: Medicare Current Beneficiary Survey (MCBS)	Result composition offering preverse concered care, provide health use of imple
Fowler, N. R. et al, (2018)  Oxford Centre of EBM level 2  Galvin, S. L. et al,	One-Year Effect of the Medicare Annual Wellness Visit on Detection of Cognitive Impairment: A Cohort Study	Design: Retrospective matched-cohort study. Location: United States of America Sample: Medicare beneficiaries	Purpose: To examine the effect of the Medicare Annual Wellness Visit (AWV) on the detection of cognitive impairment and on follow-up cognitive care for older adults.  Method: This study was conducted using de-identified administrative claims from Medicare Parts A, B, and D for a 5% random sample of Medicare beneficiaries from 2010 to 2014.  Instruments:  Purpose: To assess the	Resul differ group diagn Conc correl measure laborate cognito sub undet
(2017).  Oxford Centre of EBM level 2	Utilization of Preventative Services Among Patients Following Team- Based AWVs	Design: Retrospective Cohort Location: United States of America Sample: Medicare beneficiaries	effectiveness of the team-based AWV on receipt of preventative services at the visit and 6–12 months post-visit.  Method: Conducted a retrospective chart review on a random sample of 500 patients for 12 months post-Annual Wellness Visit.  Instruments: McNemar's test and e Poisson loglinear function.	Welln baseli progr Conc clinic super with s preve contin acces
Holman, G. T. et al, (2015).  Oxford Centre of EBM level 2	The myth of standardized workflow in primary care.	Design: Retrospective Cohort Location: United States of America Sample: primary care	Purpose: To describe the workflows happening in various clinics on any given day between a patient and physician, so that, when tools or guidelines for primary care are being developed, both healthcare and non-	visits indivieven or present shifts

Hysong, S. J. et al,	Impact of team	Design: mixed	healthcare personnel have a common basis for understanding the work that is to be supported.  Method: We conducted a secondary analysis, or postanalysis, of data gathered during two observational studies of primary care work in family and internal medicine, using both a qualitative and quantitative approach.  Instruments: Data were coded using NVivo software (QSR International, Inc., Burlington, MA)  Purpose: The goal of this study is to determine which primary care.	PCPs throu Conc shoul seque care. electr on the they a menta effect
(2019). Oxford Centre of EBM level 4	configuration and team stability on primary care quality	methods study Location: Veterans Affairs medical center primary care clinics Sample: primary care personnel and primary care provider	to determine which primary care configurations are associated with key clinical quality metrics indicative of high-quality primary care delivery, using one of the largest known samples of primary care team configuration and quality data.  Method: Instruments: Veterans Health Administration's Team Assignments Report (TAR). Productivity Measurement and Enhancement System	contri team of increa with it are no consider comp longitt as tho
Jerzak, J. (2019).  Oxford Centre of EBM level 4	Using Empowered CMAs and Nursing Staff to Improve Teambased Care.	Design: Qualitative Location: United States of America Sample: Primary care physicians and advanced practice clinicians	Purpose: This article will focus on the enhanced roles for the CMAs, LPNs, and RNs in our model and describe some of the ways we help these valuable team members become comfortable and efficient in their new roles.  Method: Development and introduction of advanced teambased care (aTBC) model	Result mode end of all of now it with of many care. Concirequint collaboration practices and the concineration of the collaboration of

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	J. et al, (2019).  Centre of EBM	Advanced teambased care: How we made it work.	Design: Qualitative Location: United States of America Sample: Primary care physicians and advanced practice clinicians	Purpose: The development and introduction of this new model arose from an iterative, multidisciplinary process driven by the desire to transform the Triple Aim— enhancing patient experience, improving population health, and reducing costs—into a Quadruple Aim8 by additionally focusing on improving the work life of health care providers, which, in turn, will help achieve the first 3 goals.  Method: Implementation of advanced team-based care (aTBC) model	Resul by St. Cente with 8 transi or ver exper traditi
Lind, K (2018).	K. E. et al,	Ethnoracial Disparities in Medicare Ann ual Wellness Visit Utilization	Design:Retrospective cohort Location: United States of America Sample: Medicare beneficiaries	Purpose: To estimate AWV utilization trends by ethnoracial group in a nationally representative sample of the Medicare population.  Method: We estimated the probability of AWV utilization using probit regression models with beneficiary-reported ethnoracial group as the primary predictor and demographics, socioeconomic indicators, and factors related to access and utilization of health care as covariates.  Instrument: Medicare Current Beneficiary Survey (MCBS)	Resultincreation (2013) non-Honor-House (2013) Concincreation (201
(2019).	C. E. et al, Centre of EBM	Persistent Disparities in Medicare's A nnual Wellness Visit Utilization.	Design:Retrospective cohort Location: United States of America Sample: Medicare beneficiaries	Purpose: To determine if AWV utilization disparities have persisted using the most recent data available.  Method: The authors analyzed AWV utilization in 2011–2013 and 2015–2016 by beneficiary-reported race and ethnicity, adjusting for potential confounders.  Instrument: Medicare Current Beneficiary Survey (MCBS)	Resul 8.1% betwee non-H utiliza non-H other minin Hispa utiliza mode mode

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Meyers, D. J. et a,	Association of	Design: Cohort	<b>Purpose:</b> To evaluate the	Resul
(2019).	Team-Based	study	association of establishing team-	2 or n
	Primary Care	<b>Location:</b> Boston,	based primary care with patient	statist
Oxford Centre of EBM	With Health	Massachusetts	health care use and costs.	in hos
level 2	Care Utilization	Sample: Primary	Method: We used difference-in-	emerg
	and Costs	care practices	differences to compare	36.7%
	Among	ļ	preutilization and postutilization	sensit
	Chronically Ill		rates between intervention and	Concl
	Patients.		comparison practices with inverse	based
			probability weighting to balance	differ
			observable differences.	there
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Nagykaldi, Z. J. et al,	Improving	<b>Design:</b> Prospective	<b>Purpose:</b> Aimed to bridge some	greate <b>Resul</b>
(2017).	Patient-Clinician	cohort	of these gaps by observing,	that d
(2017).	Conversations	Location:	analyzing, and improving HRA-	conve
Oxford Centre of EBM	During AWVs	University of	based health planning	sub-o
level 2	During 1111 VS	Oklahoma	conversations in primary care	and m
10 ( 01 2		Department of	settings.	promo
		Family and	<b>Method:</b> We used Conversation	more
		Preventative	Analysis techniques to analyze 40	motiv
		Medicine	AWVs conducted in an academic	visit.
		Sample:	family medicine residency	helpe
		Medicare beneficiari	practice. After a 3-month baseline	visit a
		es	period, a low-intensity	conve
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1			intervention was implemented to	eviaei
			intervention was implemented to explore improvements in the	evider Concl
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			explore improvements in the dynamics and content of conversations. Short exit	Conc HRAs educa
			explore improvements in the dynamics and content of conversations. Short exit interviews with patients and	Conc
			explore improvements in the dynamics and content of conversations. Short exit interviews with patients and clinicians were evaluated by	Conci HRAs educa not al
			explore improvements in the dynamics and content of conversations. Short exit interviews with patients and	Conclude HRAs educa not all levera

				qualit
Simpson, V. et al, (2018)  Oxford Centre of EBM level 2	Annual Medicare Wellness Visit: Advanced Nurse Practitioner Perceptions and Practices.	Design: descriptive exploratory study Location: Indiana annual conference and online via Qualtrics. Sample: A convenience sample of 51 APNs was recruited through the university's federally qualified community health centers and a statelevel professional APN organization	Purpose: Research focused on implementation of the HRA aspect of the AWV, the personalized prevention plan, and the perceptions and practices of APNs related to the AWV/HRA is minimal.  Method: This descriptive exploratory study surveyed APNs providing services to Medicare recipients.  Instruments: Likert scale	Resultitems respond to colliperson HRA prevente comformation with prevente conjunctions availated tools cognite can presupport
Simpson, V. L., & Kovich, M. (2019).  Oxford Centre of EBM level 1	Outcomes of primary carebased Medicare AWVs with older adults: A scoping review.	Design: Systematic Review Location: United States of America Sample: Medicare beneficiaries	Purpose: This manuscript uses a scoping review to answer the researchers' questions concerning the impact of the annual wellness visit on short-term outcomes related to preventative practices such as screenings and vaccinations, and long-term outcomes including acute care services use, lifestyle behavior changes, and implementation of risk-reduction strategies.  Method: This scoping review of the literature focused upon available literature including grey literature published from 2011 to 2018. Several  Instruments: Academic databases including MedLine, AgeLine, CINAHL, PsycInfo, and Web of Science. Search terms included Medicare + Annual Wellness  Visit and Medicare + Preventative Exam.	Resulthis repreve the arenhar preve Concolder scopin evide adults initiat

Tipirneni, R. et al (2018).  Oxford Centre of EBM level 4	Reducing Disparities in Healthy Aging Through an Enhanced Medicare Annual Wellness Visit	Design: Location: United States of America Sample: Medicare beneficiaries.	Purpose: Present local opportunities for AWV-related practice transformation, including screening tools, electronic health record templates, care team member roles, and workflows.	Conc. health senior them, Visit address
Wagner, E. H. et al, (2017).  Oxford Centre of EBM level 3	Effective teambased primary care: observations from innovative practices	Design: Location: Robert Wood Johnson Foundation, Sample: primary care practices.	Purpose: The purpose of this paper is to describe advances in the configuration and deployment of practice teams based on indepth study of 30 primary care practices viewed as innovators in team-based care.  Method: Used a modified Delphi process with all site visitors to identify advances in team configuration and roles observed during site visits	Resul the ro person skills functi medic Conc engag patien which expec up pro they co