

The University of San Francisco

USF Scholarship: a digital repository @ Gleeson Library | Geschke Center

Doctor of Nursing Practice (DNP) Projects

Theses, Dissertations, Capstones and Projects

Spring 5-20-2020

Increasing Access to Medicare Annual Wellness Visits in Primary Care; Utilizing Registered Nurses as part of an Interdisciplinary Team Based Approach

Iyo Kubota

ikubota@dons.usfca.edu

Follow this and additional works at: <https://repository.usfca.edu/dnp>



Part of the [Family Practice Nursing Commons](#), and the [Geriatric Nursing Commons](#)

Recommended Citation

Kubota, Iyo, "Increasing Access to Medicare Annual Wellness Visits in Primary Care; Utilizing Registered Nurses as part of an Interdisciplinary Team Based Approach" (2020). *Doctor of Nursing Practice (DNP) Projects*. 201.

<https://repository.usfca.edu/dnp/201>

This Project is brought to you for free and open access by the Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Doctor of Nursing Practice (DNP) Projects by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact repository@usfca.edu.

Increasing Access to Medicare Annual Wellness Visits in Primary Care;

Utilizing Registered Nurses as part of an Interdisciplinary Team Based Approach

Iyo Kubota, DNP(c), MSBH, BSN, RN

University of San Francisco

DNP Committee Chair: Dr. Prabjot Sandhu, DNP, FNP-C, PA-C, CNL

DNP Committee Member: Dr. Alexa Curtis, PhD, MPH, FNP-BC

Abstract

Background: In order to provide evidence-based preventive care to the aging population, Medicare began providing free annual wellness visits (AWVs) to its beneficiaries in 2011. The AWVs are a great opportunity for primary care providers to develop personalized preventive care as well as health promotion. However, many primary care practices especially those with limited resources struggle to incorporate AWVs into their busy primary care practice. Centers for Medicare and Medicaid Services allows other providers than physicians, NPs and PAs to perform those visits including registered nurses, health educators, and registered dietitians.

Methods: A pilot project was conducted with 12 patients using a RN/MA/physician team-based approach for AWV. Efficacy, satisfaction, and a cost benefit analysis was completed for analysis of the outcomes.

Results: Sixty-seven percent of the patients completed within one hour, and none of the visits required physician or other providers' attention during the wellness visit. Ten out of 12 patients reported satisfaction about the visits conducted by the RN, and all staff members were satisfied with the process. The cost-benefit analysis for 0.2 FTE of RN will demonstrate that a clinic can expect the return on investment of 37.2% in the first year, and 52% thereafter.

Conclusion: Primary care practices are increasingly concerned about how to meet the demand of the aging population. Moving forward into the future, team-based approaches in primary care to conduct AWVs is necessary in order to provide preventive care to a larger sector of the population. Registered nurses are well poised to provide necessary assessment and screening for AWVs as well as an added opportunity to provide education during AWVs, and it can be a feasible option to utilize an RN to conduct AWVs.

Keywords: *Medicare Annual Wellness, wellness, registered nurse, RN, nurse*

Table of Contents

Section I: Title and Abstract

Title.....	1
Abstract.....	2
Table of Contents.....	3

Section II: Introduction

Problem Description.....	6
Background Knowledge.....	7
Benefits of Annual Wellness Visits.....	8
Barrier and Challenges.....	10
Description of the Practice Setting.....	11
Available Knowledge.....	12
PICOT Question.....	13
Review of Literature.....	14
Rationale.....	16
Theoretical Framework.....	16
Specific Aims.....	19

Section III: Methods

Context.....	20
Intervention.....	20
Gap Analysis.....	21
Timeline.....	23
Phase I.....	24

Phase II.....	25
SWOT Analysis.....	26
Budget.....	28
Cost-Benefit Analysis.....	28
Outcome Measures.....	30
Analysis.....	31
Ethical Considerations.....	33
Section IV: Results	
Results.....	33
Section V: Discussion	
Summary.....	36
Interpretation.....	37
Limitations.....	38
Conclusions.....	39
Section VI: Other Information	
Funding.....	39
Section VII: References	
References.....	40
Section VIII: Appendices	
Appendix A: DNP Statement of Non-Research Determination Form	44
Appendix B: Search Process.....	47
Appendix C: Evidence Table.....	48
Appendix D: Needs Assessment.....	53

Appendix E: Gantt Chart.....54

Appendix F: Work Breakdown Structure.....55

Appendix G: SWOT Analysis.....56

Appendix H-1: Status Quo with NP providing AWVs.....56

Appendix H-2: Budget for 0.2 FTE of RN.....57

Appendix I: Break-Even Analysis for 0.2 FTE of RN.....57

Appendix J: Summary of staff feedback during meeting #2.....58

Appendix K: Proposed Workflow for Conducting AWVs.....59

Appendix L: Mini-Cog.....60

Appendix M: Developed Paper Intake Forms.....61

Appendix N: Provider Form and Plan for Preventive Care and Screening.....66

Section II: Introduction

Problem Description

As a result of the Affordable Care Act, in 2011, Medicare began providing a service called the annual wellness or Medicare visit/exam (AWV or MWE) to its beneficiaries with an aim to promote evidence-based preventive care as well as to assess risks of the aging population (Ganguli, Souza, McWilliams, & Mehrotra, 2018). The AWV creates an opportunity for primary care providers to develop personalized preventive care plans to promote health in the aging population. These exams provide an opportunity to assess medication issues, social needs, community resource needs, health referrals, and provide preventative screening updates.

Despite these potential benefits, AWV use among Medicare beneficiaries remains low. Several studies found that in 2014, four years after the AWV implementation, its uptake remained low between 14.0% to 15.6% (Hu, Jensen, Nerenz, & Tarraf, 2015; Ganguli, Souza, McWilliams, & Mehrotra, 2017). Although these numbers may not accurately represent the current uptake of AWVs in Los Angeles county, looking at how widely preventive care is delivered in the Medicare population helps illustrate the gap. According to Dartmouth College (2019), the percentage of diabetic Medicare enrollees who are receiving eye exam in 2015 was 65% in Los Angeles county. The percentage of female Medicare enrollees between the age of 67 to 69 who are receiving at least one mammogram in 2015 was 55.26%, which is lower than the state average of 59.52% (Dartmouth College, 2019). There is a gap between what is available for Medicare beneficiaries and what is being utilized, and the AWV can be an opportunity to promote the recommended preventive and screening measures.

Background Knowledge

Within the first 12 months of the effective date of the Medicare Part B coverage, beneficiaries are eligible for a one-time only Initial Preventive Physical Examination (IPPE) which is also known as “welcome to Medicare” visit (Centers for Medicare and Medicaid Services, 2018). IPPE is to be performed by physicians or qualified non-physician practitioners including physician assistants (PAs) or nurse practitioners (NPs) and should not be confused with annual wellness visits (AWVs) as the elements of the visits differ. After at least the 12 months of receiving IPPE, Medicare beneficiaries are eligible for the one-time only initial AWV (HCPCS code G0438), and subsequent AWVs every 12 months afterwards (HCPCS code G0439) (Centers for Medicare and Medicaid Services, 2018). Unlike the IPPE, both initial and subsequent AWVs can be performed by other medical professionals including a health educator, registered dietitian, or other licensed practitioners including registered nurses as well as other professionals directly supervised by a physician (Centers for Medicare and Medicaid Services, 2018).

Components of the initial AWV include (a) establishing or updating health risk assessment, (b) documentation of measurements including height, weight, BMI, and blood pressure, (c) documentation of current medications and supplements, (d) establishing or updating current list of providers, (e) obtaining or updating medical, surgical, and family history, (f) establishing or updating a list of patient’s risk factors, conditions, and treatment options, (g) depression screening, (h) cognitive function assessment, (i) reviewing patient’s functional ability and level of safety, (j) advance care planning with patient consent, (k) education, counseling and referrals based on components of the visit, and (l) provision of a written preventive screening schedule (Centers for Medicare and Medicaid Services, 2018). The difference in minimum

requirements for the initial and subsequent AWVs is that subsequent visits do not require depression screening and review of functional ability as well as safety (Centers for Medicare and Medicaid Services, 2018).

Benefits of AWVs. Annual Wellness Visits (AWVs) are meant to create an opportunity to make preventive care priority in the population where prevention is often overshadowed by acute concerns and chronic health problems (Beran & Craft, 2015). In order to fully understand the reasons for incorporating AWVs into practices, it is important to summarize the benefits as well as effectiveness of AWVs. Since the implementation of AWVs in January 2011, several studies have been published on the effectiveness and benefit of the AWVs. Jensen, Salloum, Hu, Ferdows, and Tarraf (2015) summarized the early effects of Medicare AWVs on preventive services including cholesterol screening, blood pressure screening, flu vaccination, endoscopy, fecal occult blood test, prostate specific antigen test, breast examination, and mammography. The study revealed that utilization of these preventive services did not increase significantly in 2012, one year after the implementation of AWVs (Jensen et al., 2015). Similarly, a cross-sectional study by Pfoh, Mojtabai, Bailey, Weiner, and Dy (2015) concluded that AWV did not lead to the increase in the uptake of depression screening. Among the patients who had AWVs (n=2,115), only 10% received depression screening while 15% of the patients who did not have AWVs (n=2,130) received depression screening (Pfoh et al., 2015). These earlier studies suggest very little to no benefits of AWVs on preventive care uptake.

On the contrary, studies conducted in more recent years suggest moderate benefits and effectiveness of AWVs (Camacho, Yao, & Anderson, 2017; Shen, Warnock, & Kelman, 2017; Tao, 2018). Shen et al. (2017) studied the effect of AWVs on the utilization of influenza and pneumococcal vaccination between 2011 to 2016. When comparing the patient groups who

received AWVs to those who did not, vaccination rates were higher among patients who received AWVs each year (Shen et al., 2017). In 2015, a total of 5,989,601 patients received AWVs, and 33% of those received PCV13 and 64% received flu vaccinations compared to 14% and 44% among patients who did not receive AWVs respectively (Shen et al., 2017). Another observational study by Camacho et al. (2017) supports the positive effect of AWVs on increasing the rates of seven screening events. The authors made comparisons between three groups with the patient group with wellness visit only (n=52,300), another group with prior screening or preventive visits within 90 days prior to AWVs (n=20,850), and the control group with no AWVs (n=586,000) (Camacho et al., 2017). Compared to the high rates of screening which were 82 to 89% in the two groups who received AWVs, screening rate was significantly lower (63%) among those who did not receive AWVs ($P < 0.01$) (Camacho et al., 2017). Similarly, in the study by Tao (2018), the group of patients who had AWVs was found to have significantly higher percentage of three chosen preventive services including depression screening, influenza vaccine, and STI screening compared to those who did not. These findings suggest that AWVs have positive effects on increasing vaccine and screening service uptake among Medicare beneficiaries.

From the provider's perspective, AWVs has the potential to increase revenue in primary care practices as Medicare pays more for the AWVs than for a typical problem-focused visit (Ganguli et al., 2018). For instance, according to the billing staff at which the DNP project took place, the most common billing codes used for visits with established patients include CPT codes of 99213, and 99214. The average reimbursement from Medicare for these codes are \$74 for CPT code 99213 and \$109 for CPT code 99214 respectively (American Osteopathic Association, 2018). In comparison, the national Medicare average allowance in 2017 for HCPCS code G0438

(initial AWW) was \$173.70, and G0439 (subsequent AWW) was \$117.71, which are much higher reimbursement than an established-patient visit (Bluestein et al., 2017).

Table 1: Comparison in Medicare reimbursement rates

CPT code: 99213 (established patient visit, expanded problem focused)	\$74.00
CPT code: 99214 (established patient visit, detailed)	\$109.00
CPT code: G0438 (Initial AWW)	\$173.70
CPT code: G0439 (subsequent AWW)	\$117.71

In addition to AWWs being well-reimbursed, Medicare also allows providers to bill an AWW concurrently with a problem-based visit for acute concerns, and Ganguli et al. (2018) estimate that roughly 40% of the AWWs are co-billed. Adopting AWWs can also lead to the stability of patients in the practice. Compared to the clinic which did not adopt AWWs, the clinic which adopted AWWs had a higher stability of patient visits by 6.2% ($P < 0.0001$) (Ganguli et al., 2018).

Barriers and Challenges. Several common barriers and challenges to the utilization of AWWs that may have been contributing to create this gap were highlighted during the literature review. One of barriers includes time constraints. In order incorporate AWWs, practices often need to modify workflow where providers are already pressed for time in a busy primary care office (Beran & Craft, 2015; Ganguli et al., 2018). Another challenge identified in the literature is the complex requirements of what constitutes AWWs (Beran & Craft, 2015). Some physicians and providers struggle with whether to include chronic disease management and acute concerns in the visit and most of them were going beyond the Medicare reimbursement criteria for the visit (Beran & Craft, 2015). In addition, there is confusion among patients about the purpose of

AWVs as some might mistake the visit same as a routine physical examination (Beran & Craft, 2015). Furthermore, practices serving low-income and minority populations with resource constrains are less likely to adopt AWVs as patients may present with more complex and compelling needs that their interest in preventive care may be low (Ganguli et al., 2018). Time and resource constraints, confusion about the visit itself, and patients presenting with multiple complex medical and social issues pose significant barriers to incorporating AWVs more widely into the practice. Utilizing other non-physician providers to perform AWVs and address these visits as a team was highlighted among several literature as a potential solution to these barriers as Medicare allows them to do so (Beran & Craft, 2015; Ganguli et al., 2018).

Description of the Practice Setting

The DNP project took place in a privately-owned primary care clinic located in the northeast corner of Los Angeles, California. On an average day, the number of medical patients seen in clinic ranges from 12 to 20 over an eight-hour day for one provider. The practice is privately owned and operated by the sole physician himself. There are a few per-diem Advanced Practice Providers (APPs) including one nurse practitioner (NP) who speaks Tagalog, and a physician's assistant (PA) who speaks Spanish. They both work on a per-diem bases; the NP is on site once a week, and the PA comes once a month. Supporting staff include three full-time medical assistants (MAs) and one full-time employee in charge of billing.

During the past year from January 1st to December 31st in 2018, the clinic saw the total of 963 patients and had 3,007 encounters. The clinic utilizes paper-based charting and is in the process of transferring to the electric medical health record system. Therefore, it was challenging to obtain and manage accurate data, and some values presented in this paper are approximation based on the information obtained from the physician and the billing staff.

The surrounding neighborhood includes Glassell Park and Eagle Rock where most of the patients reside. In these neighborhoods, demographics are represented by 40.3% Latino followed by 29.8% White, and 23.9% Asian (Los Angeles Times, n.d.). Mexican (27.1%) and Filipino (16.8%) are the most common ancestries reported (Los Angeles Times, n.d.), and Spanish and Tagalog are the two most spoken non-English languages among patients seen in the clinic. In terms of the educational level of the surrounding community, 30.4% of residents over 25 years of age have a four-year degree, which is about the average of Los Angeles County (Los Angeles Times, n.d.). The median household income in the surrounding neighborhoods ranges from \$32,349 to \$58,404, which are lower than the LA county average of \$61,338 in 2016 (Data USA, n.d.). The large majority of the patient population in the clinic are adult and geriatric, of whom a majority are Medicare beneficiaries. Currently, Los Angeles county has 456,700 Medicare enrollees, which is the largest number of Medicare population over 65 years of age in California (Dartmouth College, 2019). Medicare annual spending per beneficiary in Los Angeles county was also highest in the state of California in 2016, which was \$12,498.05 (Dartmouth College, 2019).

Available Knowledge

According to the Centers for Medicare and Medicaid Services (2018), Medicare covers an AWW if performed by a physician, qualified non-physician practitioner, or other medical professionals, and RNs are well-qualified to provide AWWs. In order to provide successful AWWs to a greater number of Medicare beneficiaries seen in the clinic, utilizing an RN as a main provider to facilitate AWWs was explored as a potentially feasible and effective solution. Utilizing an RN as a main provider instead of an NP or a PA can be cost-effective simply because it costs less. In addition, it seems safer and more beneficial for the patients to visit with

an RN than with an MA, as MAs may not be clinically equipped to provide necessary education and counseling. It can also improve the flow of the clinical practice to create more revenue by scheduling more AWWs as well as to promote interdisciplinary care to benefit the patient population. In order to guide the search process for available evidence, a PICOT question asked is as follows.

- 1) In elderly patients seen in the clinic who are Medicare beneficiaries, how does utilization of an RN compared to a NP, PA, or a physician as a main provider of AWWs affect the delivery of preventive care within 6 months?

CINAHL and PubMed databases were searched for articles in peer-reviewed journals that encompass an RN role in Medicare annual wellness visits (AWVs). The following keywords were used in various combinations: *annual wellness, Medicare, nurse or registered nurse*. The review was limited to those written in English only and those which would address the benefits of AWW with a RN, PA, or NP. The total yield was 105 in CINAHL and 98 in PubMed databases respectively. After reviewing abstracts and duplications removed, the total of 11 articles which mention the utilization or the role of RN in the delivery of AWWs in the primary care setting were chosen. Of those, expert opinions and articles in which RNs are not direct facilitator of the visits were excluded (N=7). One article mentioned in one of the chosen studies was manually selected and included in the review based on relativity to the PICOT question (Appendix B).

Johns Hopkins Nursing Research Evidence Appraisal Tool (Johns Hopkins Hospital/The Johns Hopkins University, 2012) was used to evaluate the chosen studies. The strength of evidence was categorized as level I being the strongest, II, III, IV, and V based on the study design. The overall quality of the evidence for its consistency and study design was rated A

being the highest quality, B, or C (Appendix C).

Review of Literature. The literature review revealed that utilizing an RN as one of the main providers of AWVs in a team-based process has a potential to increase productivity, revenue, as well as the quality of preventive care to the geriatric population. In one study involving two practice sites and a total of 99 patients and 38 providers, the team-based approach significantly increased the total number of AWVs provided over a period of nine months and improved their financial performance (Bluestein, Diduk-Smith, Jordan, Persaud, & Hughes, 2017). Team members included RN managers, licensed practical nurses (LPNs), MAs, and physicians (Bluestein et al., 2017). RN managers as well as LPNs played central roles in patient recruitment and conducting actual visits while physicians supervised the process (Bluestein et al., 2017). Similarly, another study reported that the team-based quality improvement intervention to provide AWVs led to the significant decrease in time physicians spent for AWVs (Cuenca, 2012). In this report, the approach of two-part visit was employed (Cuenca, 2012). First, an LPN or a MA conduct a pre-visit over a period of 30 minutes reviewing and updating patient history, conducting a health risk assessment, and necessary screenings. Then a physician visits the patient signing off the history and plans discussed in the previous visit, performing a focused physical exam if necessary, and providing education and counseling as well as the summary of the written plan (Cuenca, 2012). The second visit by physicians took on the average of 15 to 20 minutes, which was significantly shorter than one hour or more spent prior to the implementation of this approach (Cuenca, 2012).

Galvin et al. (2017) also reports that employing a team-based approach with pharmacists, LPNs, and physicians led to the increase in utilization of AWVs. The retrospective chart review of randomly selected 500 patients was conducted after patients have received AWVs conducted

mainly by pharmacists and LPNs with physicians' supervision (Galvin et al., 2017). As a result of the program, utilization of AWVs increased from 14% to 44%, and when patients were followed up within six months and increased the percentage of patients who were up-to-date with all the screening and preventive care recommendations from 17.4% to 42% (Galvin et al., 2017). Although these studies are non-experimental in design, these do suggest that team-based approach with RNs or LPNs as main providers can increase the uptake of AWVs in the patient population.

When approaching the team-based picture from the perspective of a physician, Lichtenstein et al. (2015) examined the effect of physician delegation of tasks to other health care disciplines on the quality of care for the geriatric population who are Medicare beneficiaries. This pooled analysis study involving a large sample of 4,776 geriatric patients suggests that delegation of tasks by physicians to other providers including RNs and LPNs led to higher quality of care for some of the most common geriatric conditions including falls, cognitive impairment, and urinary incontinence (Lichtenstein et al., 2015).

In terms of looking at the RN's competency in providing high-quality preventive care, one study by Tetuan et al. (2014) explored how AWVs provided at the nurse-run wellness clinic led to the adherence to mammogram and colonoscopy recommendations. The retrospective chart review at this clinic demonstrated that patients who received wellness visits with (n=38) or without (n=64) follow-up physician visits had significantly higher rates of adherence (67% and 72% respectively) to the mammogram recommendations (20%) ($P < 0.001$) (Tetuan et al., 2014). The result for colonoscopy was statistically insignificant ($P = 0.0991$); however, this could be due to the small percentage of patients requiring one during the study period (Tetuan et al., 2014). Tetuan et al. (2014) investigated nurse-led wellness visits in Kansas with a predominantly

white (87.1%) and female (77.6%) patient population. While this does not resemble the population of interest for this project, the results may suggest that nurse-led wellness visits with or without physician follow-up visits can lead to increased uptake of recommended screening including mammogram.

These findings support that utilizing an RN as part of an interdisciplinary team or a team of all nurses. Bringing in an RN to the current team of a physician, a NP, a PA and MAs may lead to providing high quality of preventive care to a larger number of geriatric population.

Rationale

Theoretical Framework. Although the RN may be the main facilitator, in this particular primary care clinical setting, it is vital to think in the context of a team as it is unrealistic for one RN to be responsible for the entire process. For this reason, the team-based model of care has been used to guide the process of this project. Team-based care is defined as the model in which at least two health care providers work collaboratively to provide coordinated and high-quality care with patients and their caregivers to achieve shared goals (Mitchell et al., 2012). In the outpatient setting, each visit typically involves four major stages: gathering data, physical examination and data synthesis, decision-making, and plan-of-care implementation and patient education (Hopkins & Sinsky, 2014). Conventionally, a physician can be responsible for most of these four stages. Unlike the typical problem-focused visits in primary care, wellness visits involve extensive assessment of patients' overall health risks, education, and shared decision-making, which inevitably leads to longer visits. As the patient volume continues to increase for many primary care providers and the shifting attention to value-based care, many argue that creating a high-performing team is necessary in order to improve quality of care at lower costs (Hopkins & Sinsky, 2014; Mitchell et al., 2012). When incorporating an RN role in the process

of providing wellness visits, it is inevitable to organize and approach the visit with the team-based model and principles in mind.

The core principles of team-based care are shared goals, clear roles, mutual trust, effective communication, and measurable processes and outcomes (Mitchell et al., 2012). These core principles help guide the process of improving the delivery of geriatric preventive care as well as to streamline the workflow. First, the foundation of a successful team is clear shared goals among all team members including providers, staff, and patients (Mitchell et al., 2012). One strategy is to establish the missions and goals around the patients' needs in mind; team members are encouraged to think from the patients' point of view to acknowledge that patients and families are center to the plan of care (Mitchell et al., 2012). When applying this principle to the wellness visits, providers and staff members can engage in the discussion to establish patient-centered goals as well as goals for performance as a team. In order to involve patients as part of the team, staff can interview patients and families, to begin the process of developing shared goals of patient-centered plan of care for risk management and prevention. Once the goals are clearly established and shared among all team members including patients, periodic evaluation of the progress towards the shared goals should be incorporated in the ongoing process in order to move toward the goals (Mitchell et al., 2012).

The second principle is clear roles. The key members are a patient, a physician, an NP, and a PA as well as three MAs and an RN who all come from different backgrounds, knowledge, beliefs, and skills. Mitchell et al. (2012) emphasizes the importance of developing an understanding and respect for responsibilities in each discipline and role with the shared goals in mind. In the context of the wellness visits, roles and responsibilities of each member should be clearly defined and assigned. This can be done with the scope of practice in mind as well as each

member's function in the team. As an active member of the team, patients also must be informed of their roles and expectations (Mitchell et al., 2012). In many cases, physicians are often naturally the clinical leader due to their legal accountability; however, in a successful team, they are often in the role of collaboratively working with other disciplines instead of micromanaging the entire team (Mitchell et al., 2012). In the process of incorporating an RN role in the wellness visits, physicians and other providers may take a supervising role and to collaborate with an RN who brings the nursing expertise to their full scope of practice. It was also noted that flexibility and adoptability are essential in a team as different patients come in and out of the picture (Mitchell et al., 2012). Patients are a central part of the team, yet the level of engagement and accountability to their role as a patient may differ in each case. In addition, as some of the staff share the same cultural background as the patient, he or she may take a more active role in conducting the visit.

The third principle is mutual trust, which is central to a high-functioning team (Mitchell et al., 2012). This principle may take time and effort to be established and maintained. In addition to the trust that each member carries out appropriate duties, it is critical to ensure that all team members feel that their voices matter (Mitchell et al., 2012). In order to work towards this principle, providing time and space to support team members is essential. The fourth principle, effective communication also is tied to the same values that underline mutual trust which are honesty, discipline, creativity, humility, and curiosity (Mitchell et al., 2012). All team members should be encouraged to speak with honesty and share observation rather than personal opinion, listen actively to each other, and show willingness to learn from others (Mitchell et al., 2012). Although it may take time, simple measures such as providing ample time and space in each

meeting as well as to facilitate easy and continuous communication can be implemented in an effort to incorporate these principles in the process.

Lastly, measurable processes and outcomes must be established (Mitchell et al., 2012). The established goals and processes should be continuously and rigorously assessed and potential barriers as well as new strategies should be discussed. Three types of processes and outcomes identified in the literature include patient outcomes, patient care processes, and value outcomes (Mitchell et al., 2012). In the application to the wellness visits, specific patient outcomes related to preventive care as well as processes and value outcomes should be evaluated through interviews and feedback.

Specific Aims

This project aimed to increase the number of AWVs in order to provide care to the larger sector of Medicare beneficiaries in the community and also improve efficacy in practice by the end of September 2019. The goal was to optimize the delivery of AWVs by utilizing an RN to facilitate AWVs in the team-based approach. With these aims in mind, the following objectives were established:

- To design the most efficient delivery process of AWVs for this particular clinical setting
- To assess and evaluate the feasibility of the piloted model for optimizing the delivery of AWVs
- To improve provider and staff knowledge around AWVs including benefits, challenges, requirements of the visits
- To promote team-based approach throughout the process based on the team-based model of care

Section III: Methods

Context

The key stakeholders in this project include the clinic owner who is a physician, an NP, a PA, three MAs, one biller, the DNP/FNP student who is an RN, and patients who are Medicare beneficiaries. The idea of the project to utilize an RN in conducting AWVs was introduced to all staff members, and the initial feedback was positive and supportive with no single staff member objecting to the implementation.

Intervention

This DNP project took place between April 2019 and December 2019 with a 16 weeks of implementation phase. The author was primarily responsible for all components of the project. The work breakdown structure was created to guide the planning, implementation, and evaluation (Appendix F). The author worked closely with the DNP chair who hold expertise in primary care in creating the implementation plan and contents of the intervention as well as in evaluation of the data. The site leader, who is the physician, also was involved in all processes of this project.

The RN facilitated staff meetings to analyze the existing gap and barriers as well as to coordinate the process and educate staff members about the visit and proposed process of delivery. The RN also streamlined the process by developing the universal forms which were utilized for all patients who were seen for AWVs. The recruitment was done by phone calls and in person in collaboration with MAs to schedule one-hour visits with the RN. The actual visits conducted during this project were done by the author followed with sign-off visits by either the physician or other available providers.

Gap Analysis

On April 3, 2019, the physician and all MAs were asked to fill out brief survey about the current way to conduct Annual Wellness Visits. The questions asked on a brief survey included the perceived benefits of AWVs, how AWVs were affecting the workflow, and challenges. Most staff members acknowledged that AWVs were necessary and potentially beneficial to patients as it creates an opportunity for encounter to address issues that are not part of regular visits.

Another benefit mentioned is the revenue AWVs can bring to the clinical practice. However, all staff identified AWVs as one of the biggest challenges due to the time-consuming nature of these visits which can be burdensome for the providers who are already pressed for time. All MAs expressed their confusion as to the purpose of the visits. The common theme that emerged is a shared concern for the lack of an established process. Currently at this practice, each AWV can take one to two hours to complete, and both the NP and the PA as well as one MA are in charge of completing the wellness visits. Since the NP and the PA are not full-time staff, one MA completes a large portion of each visit because the physician simply cannot afford one hour with each patient. The patient recruitment was largely done by one MA, and the recruitment was sometimes done on the same day as when patients came into clinic for other reasons. As all staff members tried to take part in completing the wellness visits in addition to their daily tasks, this also made it difficult to keep track of the progress.

To make the matter more challenging, there were at least six different paper forms being utilized for each and every insurance and IPA, and there was no single universal form that can be used to complete the visit. All staff agree that AWVs affect the workflow in the challenging way as it is extremely time consuming, and there is no single person currently in charge for AWVs (Appendix D).

Due to these challenges, not all Medicare beneficiaries seen in the clinic received AWWs in the past year. According to the billing staff, the number of patients who were currently eligible for AWWs for the year of was approximately 184 patients. Of those, there are 98 active patients who are only on Medicare. Some geriatric patients were on Medi-Cal and Medicare. Others have the various Medicare-HMO payers including LA Care, Central Health, Preferred IPA of California, Humana, Health Care Partners Medical Group, and CareFirst. Due to the nature of paper-based health records combined with electronic billing and scheduling currently in place at this practice, it was a challenge to accurately organize the data for all eligible Medicare-HMO. For this reason, the data for Medicare-only patients was used to highlight the gap. During the year of 2018, among those 98 Medicare patients, only 63 patients came in for AWWs (64%) and the visits were billed, and 35 others did not receive AWWs (36%).

In addition to the time-consuming nature of the visits, other barriers to incorporating AWWs were identified by staff members. The clinic experiences high rates of patients who do not show, and patients are not penalized for last-minute cancellation or for failure to keep the appointment. All clinic staff felt it to be challenging to bring patients in for AWWs when it was already difficult to bring some patients in for follow-up visits for chronic health conditions.

Moreover, many staff also shared the impression that patients are confused about the purpose of AWWs and how AWWs differs from annual physical exam. In addition, all staff agree that patients often expect AWWs as places to address their chronic health conditions. This mismatch of expectations from both provider's and patient's sides was mentioned as one contributing reason to extending a visit.

Based on this data and feedback, it was decided that one universal paper intake form for the clinic should be developed in order to streamline the process. One form should be used for

every visit, and the MAs later can transfer information to different formats if necessary, as some insurance groups require their own forms to be submitted. Another shared need identified was staff education as well as patient education about AWVs in general including benefits, purposes, and requirements of initial and subsequent AWVs.

Timeline

The critical milestones of the project are summarized in the Gantt chart (Appendix E). The needs assessment, gap analysis, and review of evidence were conducted during the month of April. During the month of May, patient history and health risk assessment forms as well as the provider form were developed using few existing resources (Banner Health Network, n.d.; Johns Hopkins Medicine, n.d.; Hughes, 2012). Prior to the implementation of this project, all the AWV questions were reviewed face-to-face by a MA with a patient in the room, which was contributing to the time-consuming nature of the visit. Newly developed patient history and health risk assessment forms were to be filled out by patient prior to the AWVs, and for this purpose, it was written in larger fonts and space in-between lines (Appendix N). The patient history form consists of four pages, and health risk assessment form is five-page long questionnaires which mostly require checking boxes (Appendix N). The developed paper intake forms were presented to the physician and MAs for finalization and for the approval to use with actual patients during a staff meeting. During the same meeting, brief education about AWVs focusing on the difference between initial and subsequent AWVs was provided using a single-page print-out. The concerns raised by staff were that some patients may find the forms too long, and some may not be able to read or write or require translator. Due to these concerns, the time each patient took to finish filling out these forms was measured with each visit. Along with developing these forms, patient recruitment was conducted during the month of May. Six dates

in June and July were selected as the first phase of the pilot period, and in addition to wellness visits already scheduled for those dates, patients were recruited by phone.

Phase I. The total of 16 visits were scheduled over those six days, and the total of 13 visits were actually conducted. Three patients cancelled the appointments or did not show. Out of those 13 visits, two patients received the initial preventive physical examination (HCPT code G0402) also known as Welcome to Medicare visit (Centers for Medicare and Medicaid Services, 2018). These visits were excluded from the analysis for this pilot project as the visit requirements differ from annual wellness visits (Centers for Medicare and Medicaid Services, 2018). All of these patients were given the forms to fill out prior to their scheduled visit in the waiting room or in the examination room. Vital signs, weight, and height were taken by MAs. In the room, the questionnaires were reviewed, and screening tests were conducted in person by an RN, the author herself. To screen for cognitive impairment, the Mini-Cog (Mini-Cog, n.d.) was used (Appendix L). For fall screening, fall risk assessment algorithm from Centers for Disease Control and Prevention (CDC) were utilized (2019) and if risk was identified, Timed Up and Go (TUG) test was administered to assess patient's balance and gait (CDC, 2017). For depression screening, the PHQ-9 was embedded in the questionnaires patient filled out, and the result was reviewed with each patient (US Preventive Services Task Force, 2005). When all the screenings were complete, the preventive and screening plans were discussed with a physician in the end. During the first phase of the pilot, the total of 11 patients were seen for initial or subsequent AWWs.

In order to survey patient feedback, patients were asked two open-ended questions at the beginning and the end of each visit. Prior to a visit, patients were verbally asked if they know what an annual wellness visit was. At the end of the visit, patients are asked what they thought of

the visit verbally.

Phase II. On August 14, the second staff meeting was held to analyze those 11 visits and to discuss next steps while also hoping to further clarify the roles of each staff member. Despite the initial concern for the implemented forms to be time-consuming, the average time for patients to complete both health history and health risk assessment forms were around 15 minutes. All the staff agreed that utilizing the forms prior to the visit was helpful and was a better alternative than going over those questionnaires in person. Out of those 11 patients, two of them were unable to fill out the forms on their own and needed assistance from the family members. The use of validated fall screening tool was easier and faster than a questionnaire used prior to the pilot. Also, having one person in charge of the AWVs who prepares for the visit by reviewing the chart helped save time when organizing preventive and screening plans for each patient (Appendix J).

One challenge discussed during the meeting was the high rate of back-to-back visits, which required physician intervention and time. Nine out of those 11 patients had either acute complaints or requested follow-up visits for their chronic illness concerns immediately after their AWVs. The physician ended up having to address those issues after reviewing the preventive care plans, which added time burden to the workflow. Also, the challenge for scheduling patients for wellnesses was discussed. One patient was not able to be reached by phone numbers listed in chart, and another patient refused to come in when it was mentioned that AWVs could take one hour. The recruitment process was more challenging than initially anticipated. Given the identified needs to educate patients more about AWVs, the attempt to educate patients about AWVs was done over the phone during the recruitment phase. Even after the education was given, there was some sense of confusion when patients actually came into clinic. One staff

member suggested that it might be easier to just tell the patients especially of Hispanic background that they need to come in for “a physical” rather than the lengthy explanation of what AWVs are because patients tend to understand the word “physical” better. The lack of engagement or interest in preventive care among patients was identified as a challenge, and it was assumed that this could be contributing to the difficulty of recruitment. It was also mentioned by staff that the fact AWVs cost nothing to patients should be emphasized during the recruitment process as cost is a large barrier to many of the patients seen in clinic (Appendix J).

Given the feedback, it was decided that expectations should be set more clearly with patients prior to each AWV that back-to-back visits are not encouraged unless the matter was urgent. Also, the suggested workflow of how AWVs should be conducted was presented to staff after the meeting in order ensure every staff member is clear about their role in the process (Appendix K). Three more days were chosen as the second phase of the pilot to schedule more patients for AWVs in August and September. Due to the summer vacation season, scheduling patients was unexpectedly challenging. During those three days, only three patients were seen and one patient was excluded from the data as the visit was the initial preventive physical examination.

SWOT Analysis

Strengths: In the current clinical setting, hiring an RN can bring several internal strengths. Most importantly, it can increase the number of AWVs, which can lead to making preventive care accessible to a larger number of local Medicare beneficiaries. As AWVs are well-reimbursed, this can increase revenue to the clinic. It is also demonstrated that adopting AWVs can lead to the stability of patients in the clinic, and AWVs can lead to potential increase in future appointments to address issues discussed during the AWVs. Another big internal

strength is for its potential to improve the workflow in the clinic by implementing a process to conduct the visit. It can lessen the burden for the MA who is taking on the tasks she feels are out of her scope, as well as for the NP and the PA who try to fit as many AWWs as possible in the limited amount of time.

Weaknesses: The potential weakness includes the financial capacity of the clinic which may affect the number of hours a newly hired RN can work. In addition, as there is currently no established process to conduct these visits in place, the implementation process is likely going to take time and effort with trial and error. As not many RNs are likely to have experiences with AWWs, the willingness to take on a new task as well as the flexibility will be required. The revenue will depend on the number of visits conducted; therefore, there might be additional tasks he or she must take in addition to AWWs especially initially before the flow of scheduling patients as well as the visit itself is established. From the patient perspective, some patients might feel negatively about an RN conducting the visit if they expect the visits done by a physician or other providers.

Opportunities: In analyzing the external factors, opportunities include the existing need to improve preventive care in Los Angeles county for Medicare beneficiaries. In the growing number of aging population, there are growing opportunities for the practice to participate in an effort to lower risks of preventable illnesses as well as early detection of cancers through screening in order to decrease healthcare spending. Furthermore, caring for aging population can bring more opportunities for the practice as Medicare has shifted emphasis on preventive care.

Threats: The external threats include limited resources available for referrals and providers which create longer wait time and fragmentation of care. Even if the correct referrals are made, it might take months for them to be seen by specialists. Also, patients often complain

that they did receive the approval letters in mail, which can push back the initiation of care with specialist even further. Another big threat is the competition for RN workforce in the area.

Finding an RN who is interested in preventive care and chronic health management who will be willing to work per diem might be a challenge given a higher competition in the surrounding area with multiple hospitals and healthcare settings. Lastly, the cultural communities in the area are tightly connected, patient dissatisfaction can easily lead to less business for the clinic (Appendix G).

Budget

This DNP project required minimal financial cost as the student who was primarily responsible for all processes received no financial compensation. The staff education was held during the monthly lunch meetings for staff members, and no additional cost was required. The cost of printing the developed forms was also insignificant. Patients who were seen for AWWs during this project were those who were due to receive AWWs and no financial compensation was provided for participating in the project.

Cost-benefit analysis

The analysis of the cost effectiveness is a key aspect of the project in order to evaluate the feasibility of the implemented change in the long term. In order to assess the feasibility, a comparison was made between the hypothetical cost-benefit analysis of an NP conducting 64% of all eligible AWWs, and the analysis of an RN conducting all possible 184 AWWs.

If all of the possible 184 AWWs are to be conducted over one year, 16 AWWs must take place each month. Until the RN gains more experience in the process, the estimated time allocation for each visit is one hour per visit. The minimum hours needed to conduct 16 visits per month is 16 hours. When one additional hour per visit to review each patient's chart prior to the

visit and to finish documentations is added, the number of hours needed to complete 16 visits per month will be 32 hours. Based on these assumptions, 8 hours per week of RN time is required to conduct 16 visits per month. This will be calculated as 0.2 FTE of an RN.

The NP and PA are both paid hourly wages at the clinic. In 2017, the national Medicare average allowance for HCPCS code G0438 (initial AWW) was \$173.70, and G0439 (subsequent AWW) was \$117.71, which are much higher reimbursement than an established-patient visit (Bluestein et al., 2017). At this particular clinical setting, the direct reimbursements for subsequent AWWs with HCPCS code G0439 was between \$124.95 and \$247.05 last year. If the lowest amount of \$124.95 per subsequent AWW that the clinic was reimbursed in 2018 is to be applied to the calculation, the potential revenue lost is the total of $\$124.95 \times 35 = \$4,373.25$. Although this is an estimate for the Medicare-only patients, the number highlights the area for increasing the potential revenue increase.

If no change is made to the status quo, it is estimated that 65% of the 184 eligible patients will be seen for AWWs with the current method in place with an NP and a MA. This call for 120 visits. If two hour per visit is to be allocated, there will be 220 hours of time minimally required to conduct 120 AWWs. The average hourly wage of \$58 per hour in Los Angeles for an estimated NP wage (“Average Family Nurse Practitioner Salary,” 2015). The cost for the entire year for using the NP hours will be \$12,760 ($\58×220 hours). To simplify the estimation, the lowest amount reimbursed for G0439 which was \$124.95 is used for all 120 visits. The revenue from conducting 120 visits in a year is projected to be \$14,994. The estimated net profit if the status quo is kept will be \$2,134 (Appendix H-1).

The analysis for hiring an RN is made based on the estimate that all 184 eligible Medicare enrollees will be seen in one year. For the amount of reimbursement per visit, the

lowest amount of reimbursement rate, \$124.95 for subsequent AWW (HCPCS code G0429), was used for the analysis. Based on these estimates, the total net revenue for the first year was projected to be \$22,990.8. If the number of Medicare enrollees are to stay the same, the same amount of net revenue was projected for the second and third year.

For the expenses, the mean hourly RN wage of \$39.14 in Los Angeles was used for the cost calculation (“Average RN Hourly Pay,” 2015). For 0.2 FTE of RN, the projection of annual wage is \$15,024. As this position is a per-diem employment, there will be no additional cost for benefits. For the first year, the cost of additional furniture (\$1,000) as well the cost of orientation for sixteen hours (\$626) are included in the overhead cost. Based on the estimated revenue and expenses, the total net profit for 0.2 FTE of RN for the first year is projected to be \$6,240, which is 37.2% of return on investment (ROI). The net profit for the following each year for 0.2 FTE is projected to be \$22,990.80, which is 52% ROI (Appendix H-2).

In the break-even analysis, an applied assumption is that 15 visits will be made during the first eight months, then 16 visits per month thereafter for the first year. The analysis of adding shows that the third month will be the break-even point after hiring 0.2 FTE of RN (Appendix I). This financial analysis demonstrates that 0.2 FTE position can be financially feasible and profitable to the practice. As there is much need for promoting preventive care in the geriatric population, increasing the number of AWWs will be the opportunity which benefits both the practice and the patients.

Outcome Measures

The proposed intervention aims to provide care to the larger sector of Medicare beneficiaries in the community by increasing the number of AWWs and optimizing the delivery of AWWs by utilizing an RN to facilitate AWWs in the team-based approach. The effectiveness

of the interventions was measured in several ways through qualitative and quantitative data. The following measures were used to evaluate this project.

- 1) At least 50% of the AWVs would be completed within one hour.
- 2) Less than 20% of the visits should require attention from the primary care providers (physician or NP) during the AWVs before the sign-off of the visits.
- 3) At least 80% of the staff would be satisfied with the process of an RN conducting the AWVs.
- 4) At least 80% of patients would be satisfied with the process of an RN conducting the AWVs.

Analysis

A feasibility analysis of looking at the effectiveness of the entire process including conduction of the visits, role of the RN, role of the physician, and patient satisfaction was conducted. Quantitative data included non-discriminatory demographic information of each patient including age, gender, and ethnicity. As an instrument of outcome measure, the total time patients spent in filling out the developed form, the total time spent face-to-face with an RN, and the time spent with the physician or an NP at the end of the visit were also collected for feasibility analysis. The total number of visits conducted during the pilot period was used to estimate the hours needed to complete all 184 AWVs. In addition, the number of referrals made and screening tests ordered during the intervention were also recorded as patient-related outcomes.

Qualitative data included pre and post surveys given among staff members during staff meetings to assess satisfaction as well as the perception of how utilizing an RN effected the overall workflow. To assess patient satisfaction, a brief survey was conducted verbally prior and

after each AWW to assess the patients' perception of the visits. The collected data was organized and used for analysis using Microsoft Word (Table 2).

Table 2: Staff Post Survey

Question asked	Answers
1. Are you satisfied with the new approach of RN conducting AWWs?	All staff members felt satisfied
2. What were the positive parts of the new change?	<ul style="list-style-type: none"> • Forms saved time. It took shorter amount of time to have patients fill out the HRA than to go through all questions in person. • Use of validated tools was easier and faster • Most patients found the form to be easy to fill out. None had questions regarding the questionnaires. • Preparation (reviewing patient chart in advance) helped save time.
3. What are the challenges moving forward?	<ul style="list-style-type: none"> • Patients did not know the purpose of wellness → we need to work on setting expectations for what a wellness visit is about, and how long the visit is going to take, and who is performing most of the visit etc. • Almost all patients needed follow-up on chronic health issues or acute complaint visits along with wellness → we should expect back-to-back visits almost in all cases. • Some found health history form redundant → Health history form should be taken only once, and then updated every year instead of having patient fill out the entire history • Some patients had pressing needs that they wanted taken care of instead of wellness visits • Need to develop the form in other languages • Scheduling challenges • Different ways of reimbursement (per visit vs HEDIS measures) → need for more comprehensive coding sheet

Ethical Considerations

This is an evidence-based change in practice project that is based on the current literature and is not a research study. For this reason, prior approval by the University Institutional Review Board for the Protection of Human Subjects Committee was considered unnecessary. In order to protect patient privacy, patient data presented in the project will be limited to the minimal nondiscriminatory demographic data including age, gender, ethnicity, and number of chronic illnesses. The project reflects Jesuit values of social justice and a culture of service to promote dignity of the others as this project aims to pilot a way to increase the provision of preventive care to the older adult population in the community.

The project aims to provide higher satisfaction to patients and providers for annual wellness exams and was intended to improve the quality of overall health care delivery among Medicare beneficiaries enrolled during the pilot period.

Section IV: Results

The total of 12 patient visits were conducted during the entire project period for AWWs. Two patients identified themselves as Filipino, four as Hispanic, and six as white. The average age of the patients is 72.2 with 94 being the oldest and 58 being the youngest. Six patients were male, and six were female. The number of diagnoses for chronic illnesses was counted for each patient, and the average was 7.7 diagnoses per patient (Table 3).

Table 3: Demographic data of patients

Category	Total $n = 12$	
Ethnicity	Filipino	2
	Hispanic	4
	White	6
Age	Mean	72.2
	Oldest	94
	Youngest	58
Gender	Male	6

	Female	6
Number of Diagnoses in Past Medical History	Mean	7.7
	Min	3
	Max	10
Diagnosis	HTN	12
	HLD	11
	DMII	6

Of 12 visits, three were the initial AWVs (HCPT code G0438) and nine were subsequent visits (HCPT code G0439). The average time it took for the patients to fill out the health history and risk assessment forms was 18.5 minutes in total (Table 3). Nine out of 12 patients were able to fill out the forms without difficulty, two patients required assistance of the family members or staff due to their cognitive limitation or the language barrier. The average time spent face-to-face with an RN was 48 minutes. Ten out of 12 patients needed back-to-back visit after AWVs to address their concern or requests, and the time spent with a physician was 11 minutes on average. The total time of patient stay from check-in to check-out was 74.45 minutes on average (Table 4).

Table 4: Visit detail

CPT code	G0438	3
	G0439	9
Back to back visit to address chronic or acute problems	Yes	10
	No (only here for wellness)	2
Able to fill out health risk assessment form	Yes	9
	Yes, with assistance from family	2
	No	1
Time spent for filling out health risk assessment form (n = 11)	Mean	18.5 mins
	Mode	15 mins
	Min	10 mins
	Max	30 mins
Time spent face-to-face with RN (n= 12)	Mean	48.4 minutes
	Min	30 mins

	Max	105 mins
Time spent face-to-face with physician or NP (n= 12)	Mean	9.9 minutes
	Min	5 minutes
	Max	15 minutes
Total time of patient stay including back-to-back visit (n= 12)	Mean	75.3 minutes
	Min	50 mins
	Max	150 mins

Table 5: Outcome measures

Outcome measures	Yes	No	Percentage
Visits completed within one hour (n = 12)? (Time spent in filling out forms is excluded from the total time)	8	4	67%
Visits required provider's attention before the sign-off (n = 12)?	0	12	0%
Patient – satisfied with the visit (n = 12)?	10	2	83%
Staff – satisfied with the process? (n= 6)	6	0	100%

The total of 32 laboratory tests were ordered with the average of 2.5 tests per patient; two mammograms; and three bone density screening referrals were made. For colorectal cancer screening, four FOBTs were ordered and one colonoscopy referral was made given a positive FOBT result. Four pneumococcal vaccines were given, and seven referrals were made to other specialists including dermatology, ophthalmology, and psychological services (Table 6).

Table 6: Tests and referrals ordered as a result of AWVs

Number of labs ordered (a panel is counted as one)	Total	32
	Mean	2.46
	Min	0
	Max	7
Women's health (n=6)	Mammogram referral total	2
	Dexa scan referral total	3
	Total # of pap smear scheduled	3
Number of colorectal screening ordered (FOBT or colonoscopy)	FOBT ordered	4
	# of Colonoscopy referrals made	1

Number of referrals made to other specialty	Total	7
Number of pneumococcal vaccines given	Total	4

In terms of patient feedback, nine out of 12 patients did not know what an AWV was or the purpose of the AWV visit prior to the appointment. Three (25%) patients verbalized understanding of the importance of preventive care in general. When asked what they thought of the visit, 10 (83%) patients had positive feedback that the visit was thorough, educational, and beneficial to them. One patient (8%) verbalized appreciation for the amount of time the RN spent in the room with the patient. Two patients (16%) found the visit to be unnecessary, too time-consuming, and unsure of the benefits. For staff satisfaction, all staff were satisfied with the piloted approach (Table 5).

Section V: Discussion

Summary

The total of 12 annual wellness visits were conducted by an RN and analyzed as a result of this project. Sixty-seven percent of the patients completed within one hour, and it was found to be more challenging than expected to complete visits in one hour. None of the visits required physician or other providers' attention during the wellness visit and the RN was able to conduct necessary assessment, screening, and education within the professional scope of practice. Ten out of 12 patients (83%) reported satisfaction about the visits conducted by the RN, and all staff members were satisfied with the process.

During the intervention period, several challenges were identified including high cancellation rates, difficulty of recruitment, and high rate of back-to-back visits after AWVs even when the expectation was previously set with the patient.

Interpretation

Compared to the previous delivery method, utilizing the RN led to significantly decreasing the time the physician or the NP spends with a patient for AWVs. Questions evaluated and screening assessments done during the visit were well within the scope of RN practice, and having an RN to organize patient information, and make a proposed plan as well as a problem list prior to the patient seen by a provider helped save time.

Given the high rates of back-to-back visits after AWVs resulting in an average time of 75 minutes per patient visit to complete, it is realistic to schedule six AWVs at maximum during an 8-hour day. For this reason, 0.2 FTE of an RN should suffice to conduct 184 patients who are eligible for AWVs at the clinic in one year. The time for patient recruitment as well as reviewing chart should be taken into consideration; however, less than 0.2 FTE of an RN can also be considered in the future at this particular practice. The RN can see patients for AWVs during one 8-hour day with a goal of 32 patients per month. For the financial analysis, because some of the visits conducted were not yet billed and the majority of the visits not reimbursed except one at the time of analysis, no further additional analysis was made. The hypothetical cost-benefit analysis discussed in the financial section is applied if the RN hourly wage was to be \$39.14 and the minimal reimbursement rate of \$124.95 from the previous year was used. It is expected that 0.2FTE of an RN should be able to cover 184 all eligible patients for their AWVs. However, one of the biggest challenges was the lack of interest in preventive care from patients which may have led to the difficulty of recruitment along with other causes including transportation and time constraint. This finding is consistent with what was found in the literature. Research shows that practices serving minority high medical risk patients face more challenges to adopt AWVs due to patient's high pressing needs and limited recourses, and those patients may also place lesser

value on prevention (Ganguli et al., 2018). How we can better engage these patients into preventive care should be studied further.

The overall findings of this DNP project suggest that systematic process with multiple disciplines has the potential to make the process of AWVs more efficacious with an RN conducting the largest portion of each visit. All staff members and the majority of the patients seen during the pilot period felt that a team of MAs, an RN, and a physician or an NP was a positive experience. Given the only 65% of eligible patients received AWVs in the previous year, bringing in a 0.2 FTE of RN makes it possible and realistic to reach almost all of the eligible patients without increasing the burden on the current practice.

Limitations

This project had number of limitations including a small sample size, language barrier, lack of more accurate financial analysis, and lack of data for follow-up with the referrals made. The total number of visits analyzed was 12, which is a very small sample size. The second phase of the pilot overlapped with the summer season, and this may have additionally contributed to the difficulty of recruitment.

Another limitation is the language barrier. Tagalog and Spanish are the two other common languages spoken among patient population, and translation of the developed forms into those languages were not done during this pilot due to limited time and resources. Moreover, utilizing an MA as a main provider for AWVs may be a more financially appealing option for small private practice, and the analysis of bringing in one MA versus one RN was not made during this pilot. The more accurate financial analysis was also not done due to the reimbursement not being made at the end of the pilot program. Lastly, following up on laboratory and screening ordered as well as the referrals made during AWVs was also not

conducted due to the time constraint. Although the total of 32 tests were ordered and many referrals made based on recommendations, the actual number of those tests and referrals kept was unknown at the time of analysis.

Conclusion

Primary care practices are increasingly concerned about how to meet the demand of the aging population. Since the implementation of Affordable Care Act, Medicare annual wellness visits (AWVs) were introduced to provide preventive care to the geriatric population. However, the reality of incorporating those visits into practice poses many challenges especially in small practices where practitioners are already pressed for time with limited resources. Moving forward into the future, team-based approaches in primary care to conduct AWVs is necessary in order to provide preventive care to a larger sector of the population. Registered nurses are well poised to provide necessary assessment and screening for AWVs as well as to provide education during AWVs, and it can be a feasible option to utilize an RN to conduct AWVs.

Section VI: Other Information

Funding

This project received no funding from any organization or other sources in its all aspects.

Section VII. References

- American Osteopathic Association [AOA] (July, 2018). Proposed CMS physician fee schedule cut paperwork and payments. Retrieved from (*Creating Patient-centered Team-based Primary Care*, n.d.)
- “Average Registered Nurse (RN) Hourly Pay in Los Angeles, California,” (2015). Retrieved from [https://www.payscale.com/research/US/Job=Registered_Nurse_\(RN\)/Hourly_Rate/e638c650/Los-Angeles-CA](https://www.payscale.com/research/US/Job=Registered_Nurse_(RN)/Hourly_Rate/e638c650/Los-Angeles-CA)
- “Average Family Nurse Practitioner (NP) Salary,” (2015) [https://www.payscale.com/research/US/Job=Family_Nurse_Practitioner_\(NP\)/Salary#CareerPaths](https://www.payscale.com/research/US/Job=Family_Nurse_Practitioner_(NP)/Salary#CareerPaths)
- Banner Health Network (n.d.). *Annual Wellness Visit Practice Checklist*. Retrieved from <http://www.bannerhealthnetwork.com/media.ashx/awv-package-basic-v2-non-branded.pdf>
- Beran, M. S., & Craft, C. (2015). Medicare annual wellness visits. *Minnesota Medicine*, 98(3), 38-41.
- Bluestein, D., Diduk-Smith, R., Jordan, L., Persaud, K., & Hughes, T. (2017). Medicare annual wellness visits. *Family Practice Management*, 24(2), 12-16.
- Centers for Disease Control and Prevention (CDC) (2019). Algorithm for fall risk screening, assessment and intervention. Retrieved from <https://www.cdc.gov/steady/pdf/STEADI-Algorithm-508.pdf>
- Centers for Disease Control and Prevention (CDC) (2017). Timed up and go (TUG). Retrieved from <https://www.cdc.gov/steady/pdf/STEADI-Assessment-TUG-508.pdf>

- Centers for Medicare and Medicaid Services (2018). Medicare learning network booklet: Annual wellness visit. Retrieved from https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/AWV_Chart_ICN905706.pdf
- Centers for Medicare and Medicaid Services (2018). Medicare learning network booklet: Initial preventive physical examination. Retrieved from https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/MPS_QRI_IPPE001a.pdf
- Cuenca, E.A. (2012) Making Medicare wellness visits work in practice. *Family Practice Management, 19*(5): 11-16.
- Dartmouth College (2019). Dartmouth Atlas Project. Medicare reimbursement. Retrieved from <https://www.dartmouthatlas.org/interactive-apps/medicare-reimbursements/#county>
- Data USA (n.d). Los Angeles County, CA. Retrieved from <https://datausa.io/profile/geo/los-angeles-county-ca/>
- Galvin, S. L., Grandy, R., Woodall, T., Parlier, A. B., Thach, S., & Landis, S. E. (n.d.). Improved utilization of preventive services among patients following team-based annual wellness visits. *North Carolina Medical Journal 78*(5), 9.
- Ganguli, I., Souza, J., McWilliams, J. M., & Mehrotra, A. (2018). Practices caring for the underserved are less likely to adopt Medicare's Annual Wellness Visit. *Health Affairs, 37*(2), 283–291.
- Ganguli, I., Souza, J., McWilliams, J. M., & Mehrotra, A. (2017). Trends in use of the US Medicare Annual Wellness Visit, 2011-2014. *The Journal of the American Medical Association, 317*(21), 3.

Hopkins, D.K. & Sinsky, A.C. (2014). Team-based care: saving time and improving efficiency.

Family Practice Management, 21(6), 23-29.

Hu, J., Jensen, G., Nerenz, D., & Tarraf, W. (2015). Medicare's Annual Wellness Visit in a large health care organization: Who is using it? *Annals of Internal Medicine*, 163(7), 5.

Hughes, C. (2012). Medicare annual wellness visits: Don't forget the health risk assessment.

Family Practice Management. 19(2): 11-12. Retrieved from

<https://www.aafp.org/fpm/2012/0300/p11.html>

Jensen, G. A., Salloum, R. G., Hu, J., Ferdows, N. B., & Tarraf, W. (2015). A slow start: Use of preventive services among seniors following the Affordable Care Act's enhancement of Medicare benefits in the U.S. *Preventive Medicine*, 76, 37-42.

<https://doi.org/10.1016/j.ypmed.2015.03.023>

Johns Hopkins Hospital/The Johns Hopkins University (2012). Appendix E: Research evidence appraisal tool. In S. L. Dearholt & D. Dang. (Eds.). *Johns Hopkins nursing evidence-based practice: Model and guidelines* (2nd ed., pp.

Johns Hopkins Medicine (n.d.). Patient History Form. Retrieved from

https://www.hopkinsmedicine.org/moods/docs/pt_medi_history_form

Los Angeles Times (n.d.). Eagle Rock profile: Mapping LA. Retrieved from

<http://maps.latimes.com/neighborhoods/neighborhood/eagle-rock/>

Lichtenstein, B. J., Reuben, D. B., Karlamangla, A. S., Han, W., Roth, C. P., & Wenger, N. S.

(2015). Effect of physician delegation to other healthcare providers on the quality of care for geriatric conditions. *Journal of the American Geriatrics Society*, 63(10), 2164-2170.

<https://doi.org/10.1111/jgs.13654>

Mini-Cog (n.d.). Standardized Mini-Cog Instrument. Retrieved from <https://mini-cog.com/mini-cog-instrument/standardized-mini-cog-instrument/>

Mitchell, P., M. Wynia, R. Golden, B. McNellis, S. Okun, C.E. Webb, V. Rohrbach, & I. Von Kohorn. (2012). *Core principles & values of effective team-based health care*. Discussion Paper, Institute of Medicine, Washington, DC. <https://doi.org/10.31478/201210c>

Pfoh, E., Mojtabai, R., Bailey, J., Weiner, J. P., & Dy, S. M. (2015). Impact of Medicare Annual Wellness Visits on uptake of depression screening. *Psychiatric Services*, *66*(11), 1207–1212. <https://doi.org/10.1176/appi.ps.201400524>

Shen, A. K., Warnock, R., & Kelman, J. A. (2017). Driving immunization through the Medicare Annual Wellness Visit: A growing opportunity. *Vaccine*, *35*(50), 6938–6940. <https://doi.org/10.1016/j.vaccine.2017.10.055>

Tao, G. (2018). Utilization pattern of other preventive services during the US Medicare annual wellness visit. *Preventive Medicine Reports*, *10*, 210–211. <https://doi.org/10.1016/j.pmedr.2017.12.014>

Tetuan, T. M., Ohm, R., Herynk, M. H., Ebberts, M., Wendling, T., & Mosier, M. C. (2014). The Affordable Health Care Act annual wellness visits: The effectiveness of a nurse-run clinic in promoting adherence to mammogram and colonoscopy recommendations. *JONA: The Journal of Nursing Administration*, *44*(5), 270–275. <https://doi.org/10.1097/NNA.0000000000000066>

US Preventive Services Task Force (2005) PHQ-9. Retrieved from

<https://www.uspreventiveservicestaskforce.org> › Home › GetFileByID

Section VIII. Appendices

Appendix A: DNP Statement of Non-Research Determination Form

DNP Statement of Non-Research Determination Form**Student Name: Iyo Kubota****Title of Project:**

Utilization of RN in Medicare Annual Wellness Visits (AWVs) in Primary Care

Brief Description of Project:**A) Aim Statement:**

To assess the feasibility of RN-conducted AWVs in a primary care clinic in order to improve access to preventative care in the geriatric population in the community.

B) Description of Intervention:

- Utilization of an RN to conduct MWW
- Back to back appointment shared with physician in order to address acute and chronic conditions when necessary
- Streamline the form as well as the process by using one universal form and establishing the process of delivery for time optimization

C) How will this intervention change practice?

The intervention has potential to improve the efficacy of the primary care clinic operation by optimizing the delivery of AWVs.

D) Outcome measurements:

Number of visits conducted in the pilot period, estimated revenue from the visit, provider and staff satisfaction as well as patient satisfaction.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used:

(<http://answers.hhs.gov/ohrp/categories/1569>)

- This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title:	YES	NO
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	X	
The specific aim is to improve performance on a specific service or program and is a part of usual care . ALL participants will receive standard of care.	X	
The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does NOT follow a protocol that overrides clinical decision-making.	X	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.	X	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.	X	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	X	
The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	X	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X	
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: <i>“This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board.”</i>	X	

ANSWER KEY: If the answer to **ALL** of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is **NO**, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

STUDENT NAME (Please print): Iyo Kubota

Signature of Student:

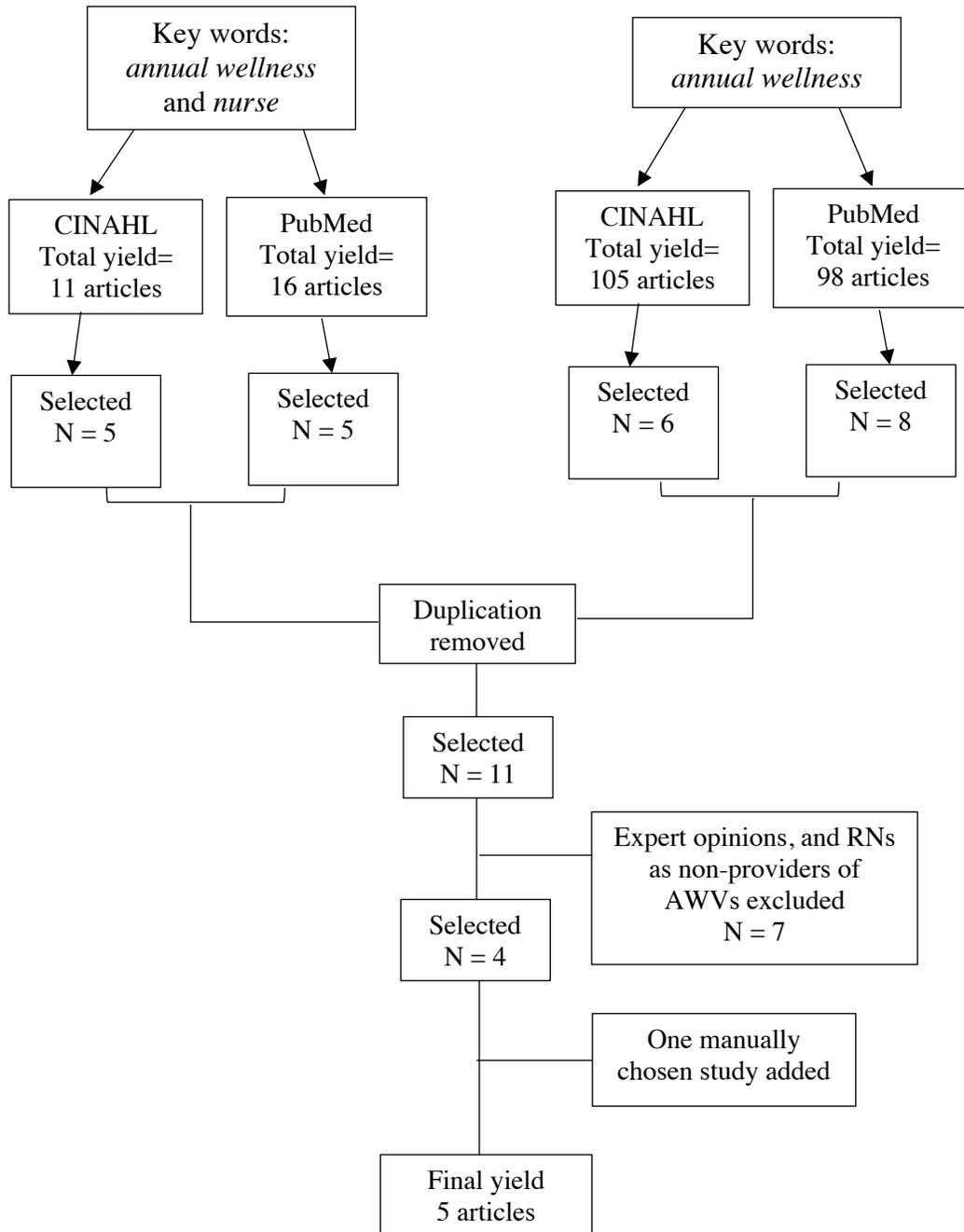
DATE

SUPERVISING FACULTY MEMBER (CHAIR) NAME (Please print):

Signature of Supervising Faculty Member (Chair):

DATE

Appendix B: Search Process



Appendix C: Evidence Table

Citation	Conceptual Framework	Design/ Method	Sample/Setting	Variables Studied	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
<p>Bluestain et al. (2017)</p> <p>“Medicare Annual Wellness Visits: How to get patients and physician on board”</p>	<p>Plan-Do-Study-Act quality improvement model</p> <p>Team-based approach</p> <p>(Nurse manager, LPN, MA, Physicians)</p>	<p>Quality Improvement Intervention:</p> <ol style="list-style-type: none"> Survey of patients and providers Nurse manager review daily schedule to ID patients who are eligible for AWVs Nurse case manager recruited patients, conducted visits Later involved LPN and MA in recruitment effort 	<p>Sample for survey: 99 patients (29 who had AWVs and 70 who had not) and 38 providers</p> <p>Patient mean age = 74 50% Female, 50% Male, 30% African-American 53% White 13% Other</p>	<p>Number of visits</p> <p>Financial performance</p>	<p>Number of visits during 9 months</p> <p>Profit gain from AWVs reimbursement compared to the pre-intervention year</p>	<p>Comparison of numbers of visits pre- and post-quality improvement intervention</p>	<p>During 9 months, the total of 344 AWVs at 2 practice sites compared to 153 AWVs in all of 2015 → 300% annual increase</p> <p>The annual estimated profit gain of \$27,630 after intervention (which does not include secondary revenue from immunizations, labs draws, and other billable services)</p>	<p>Strength</p> <p>Practical insights about QI intervention</p> <p>Tips for recruitment strategy that can be directly applied and utilized</p> <p>Limitations</p> <p>Study design</p> <p>Generalizability of the intervention as needs might be different in other clinical settings</p> <p>The flow of the actual visit unclear</p> <p>Level V</p> <p>Quality B</p>

<p>Galvin et al. (2017)</p> <p>“Improved utilization of preventive services among patients following team-based annual wellness visits”</p>	<p>Team-based approach</p> <p>(Pharmacist, LPN, and physician)</p>	<p>Quasi-Experimental (Retrospective chart review)</p> <p>Intervention: team-based Annual Wellness Visits over 20 months</p> <p>Team members: 4 clinical pharmacists (1.5 FTE) one licensed practical nurse (0.5 FTE) and a scheduler (0.5FTE)</p> <p>Detail: pharmacists saw high-complexity patients with 5 or more medications; LPN with low-complexity pts with less than 4 medications) → communicate results to physicians</p>	<p>Random sample of 500 patients were selected out of 881 total patients who received AWVs over the 9-month period</p> <p>for 12 months post-Annual wellness Visit from 5 different clinic settings</p>	<p>AWV utilization</p> <p># of questionnaires completed at the AWVs</p> <p>Adherence to recommendation</p>	<p>% of patients who received AWVs = # of patients who received AWVs/ # of patients who are eligible</p> <p>% of completion of 8 main questionnaires including PHQ-9, tobacco use, Activities of Daily Living etc</p> <p>Comparison of % of patients who are up-to-date with person-specific recommendations at the beginning and after 6 months post AWVs</p>	<p>Chi square analysis</p> <p>Generalized linear models with Poisson logliner function</p> <p>Significance was P<0/05</p>	<p>Utilization of AWV increased from 14% at baseline to 44% after the 20-month program</p> <p>The % of patients up-to-date with all recommended services increased from 17.4% at the AWVs to 42% within 6 months</p>	<p><u>Strength</u></p> <p>Large sample size selected randomly</p> <p>Specific to the utilization of AWVs</p> <p>Use of statistical analysis</p> <p><u>Limitations</u></p> <p>Might not be generalizable to small private practices</p> <p>No control group, pre-post design</p> <p>Level II</p> <p>Quality B</p>
---	--	--	---	--	--	--	--	--

<p>Tetuan at al. (2014)</p> <p>“The Affordable Health Care Act Annual Wellness visits. Effectiveness of a nurse-run clinic in promoting adherence to mammogram and colonoscopy recommendations.”</p>	<p>Health Belief Model to identify predictors of adherence to screening recommendations</p> <p>Nurse-led clinic</p>	<p>Quasi-experimental (retrospective chart review)</p> <p>Nurse wellness clinics offered AWWs to all eligible Medicare beneficiaries</p> <p>Setting: nurse-run wellness clinic as part of Stormont-Vail HealthCare, which is an integrated healthcare system that include 28 outpatient clinics in north Kansas</p>	<p>Sample size = 170, mean age of 70.75 years, 87.1% white, 77.6% women</p> <p>3 Groups: Group A = convenience sample of patients who attended the wellness clinic without encouragement by physicians (n=64)</p> <p>Group B= convenience sample of patients where AWWs were linked to a follow-up physician visits (n=38)</p> <p>Group C = randomly selected patients who did not attend wellness clinic (n= 68)</p>	<p>Adherence to mammogram and colonoscopy recommendations</p> <p>Effect of having physician office visit link on obtaining mammogram</p>	<p>Mammogram and colonoscopy done vs not done among A, B, C groups</p>	<p>Descriptive statistics</p> <p>2-way contingency table analysis</p> <p><i>Pearson x^2 test</i></p> <p>Fisher exact tests</p> <p>Logistic regression</p>	<p>Women in group A and B are more likely to have a mammogram compared to group C, 67% and 72% compared to 20% in C (P<0.001).</p> <p>There is not a increased likelihood of a patient obtaining mammogram if the wellness is linked with a physician visit</p> <p>The date for colonoscopy was statistically insignificant (P=0.0991)</p>	<p><u>Strength</u></p> <p>Large sample size</p> <p>Nurse-led visits</p> <p><u>Limitations</u></p> <p>Majority of the sample are women, and white (87.1%) → limited ethnical and racial variation</p> <p>Only 7 colonoscopies recorded in the sample → small sample for the date for colonoscopy</p> <p>Education levels and SES reported in less than 5% of the control group</p> <p>Level II</p> <p>Quality C</p>
--	---	---	---	--	--	--	---	--

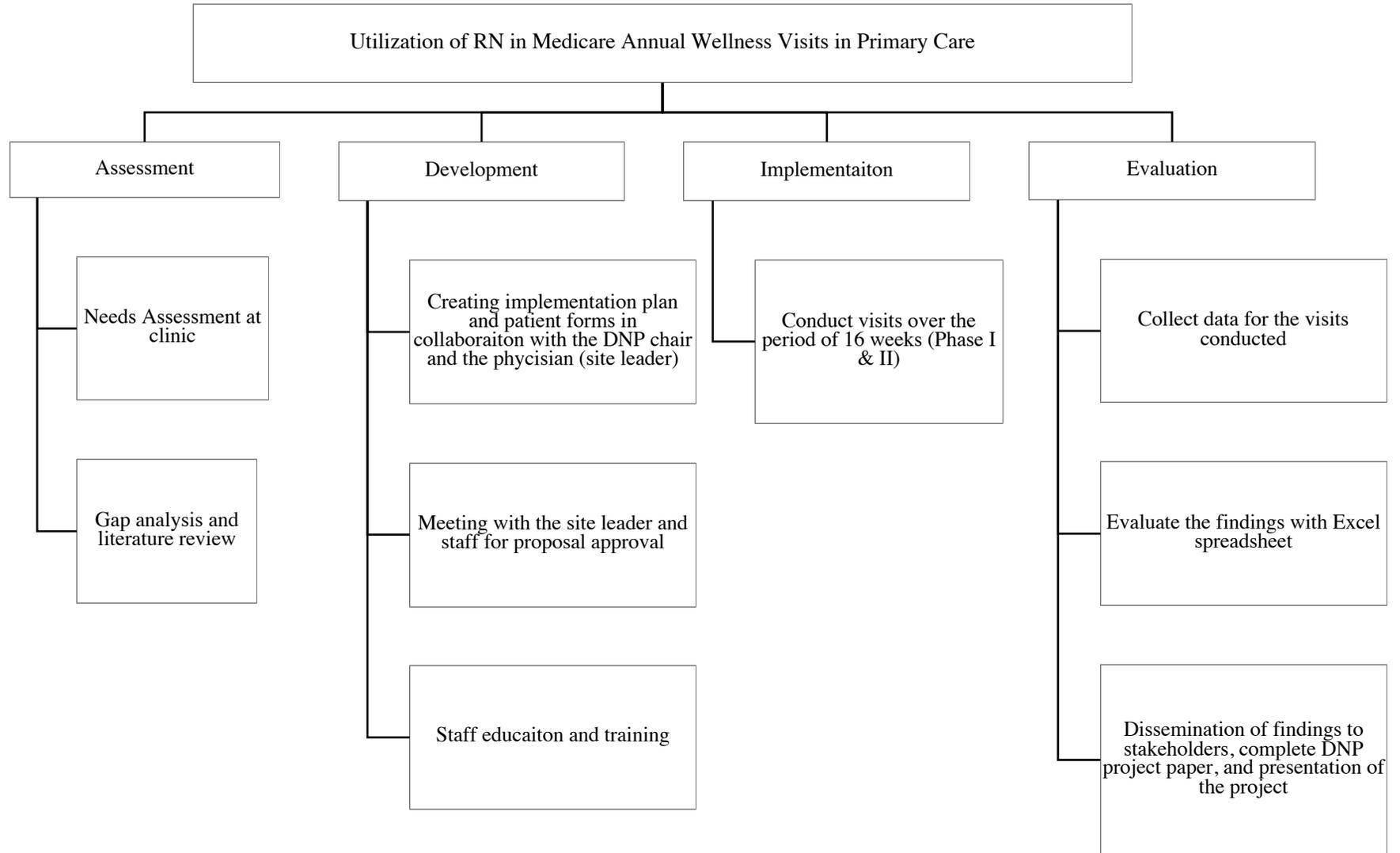
<p>Cuenca (2012)</p> <p>“Making Medicare Wellness visits work in practice”</p>	<p>Plan-Do-Study-Act quality improvement model</p> <p>Team-based approach (physician, clerical staff, LVN, office manager, coding staff)</p>	<p>Quality Improvement Intervention:</p> <p>Team-based collaborative approach</p> <p>Nursing resources to complete some elements of the visits (30-minute, same day pre-visit)</p> <p>MAs fill-in when LVN not available</p> <p>Physician sign off on the history obtained by LVN, follow-up if necessary, discuss end-of-life planning if needed, provide counseling, and referrals</p>	<p>No mention of sample size</p>	<p>Workflow and efficacy</p>	<p>Time spent on each visit before and after the implementation of the new delivery method</p>	<p>None</p>	<p>One hour or more average visit → after the intervention, pre-visit averaged 30 minutes, and physician or provider visit averaged 15-20 minutes</p>	<p><u>Strength</u></p> <p>Applicable to small practices with limited resources</p> <p>Practical and detailed recommendations</p> <p><u>Limitations</u></p> <p>Results of the intervention were only measured through time spend with each visit</p> <p>Level V</p> <p>Quality C</p>
--	--	--	----------------------------------	------------------------------	--	-------------	---	---

<p>Lichtenstein et al. (2015)</p> <p>“The effect of physician delegation to other health care providers on the quality of care for geriatric conditions”</p>	<p>Physician delegation to other health care providers (team-based approach)</p>	<p>Multivariate pooled analysis prior 8 studies that are observational cohort studies (chart review) and quasi-experimental in design between 1998 and 2010</p>	<p>4,776 patients who are age 65 years or older</p> <p>All insured through Medicare</p> <p>Mixed demographic background</p> <p>2/3 female, mean age 80 y/o</p> <p>51-95% patients non-hispanic</p>	<p>Level of delegation 1, 2, or 3</p> <p>Quality indicator pass probability for geriatric conditions</p> <p>Examined relationship between a patient’s likelihood of passing a QI and clinic’s delegation score for that QI</p>	<p>Sites classified by “intent to delegate”</p> <p>NPs, PA, RNs, LVNs and MAs → delegation score with values between 1 to 3 (1 by physician alone, 2 by NP, PA or RN, 3 by LVN or MA)</p> <p>Whether patients receive recommended process of care for three target geriatric conditions including falls, cognitive impairment, and urinary incontinence</p>	<p>Multivariate, modified Poisson regression</p> <p>Spearman’s rho test</p>	<p>QI pass probability for physician-performed tasks was 0.36, for NP- or PA- delegated tasks (delegation level 2) was 0.55, and for LVN- or MA- delegated tasks (delegation level 3) was 0.61</p> <p>Delegation improved quality of care provided for these 3 common geriatric conditions</p>	<p><u>Strength</u></p> <p>Large sample size</p> <p>Results likely generalizable (Medicare patients, most physician providers have no geriatric specialty training, mixed settings including non-affiliating clinic with academic institution etc)</p> <p><u>Limitations</u></p> <p>Analysis included both observational and quasi-experimental</p> <p>Intent-to-delegate is not actual delegation for each patient</p> <p>Level III</p> <p>Quality A</p>
--	--	---	--	--	---	---	--	--

Appendix D: Needs Assessment

Question asked	Answers from staff
<p>1. How do you think Medicare Annual Wellness Visits (AVWs) are benefiting your patient population? Can you share any feedbacks you have received from patients in the past about AVWs if any?</p>	<ul style="list-style-type: none"> - It is beneficial as it forces patients to come in at least once a year - Patients think it is the same as annual physical exam - Patients are confused about the visit - Not sure about the actual benefit for patients but it financially benefits the clinic
<p>2. What are the barriers of conducting successful Medicare Annual Wellness Visits (AWVs) at Fletcher Family Medical Center?</p>	<ul style="list-style-type: none"> - Patients often end up as no shows - It is challenging to bring patients in for wellnesses only - Many forms for AWVs depending on insurance and IPAs, it is confusing - We are not being proactive, so it takes time and process is messy
<p>3. How is AWV affecting your workflow?</p>	<ul style="list-style-type: none"> - It is very time consuming - It is overwhelming - It negatively affects workflow: physician does not have the time to complete the entire visit and it is mostly done by an MA
<p>4. What are your thoughts about bringing an RN or LVN to conduct AWVs?</p>	<ul style="list-style-type: none"> - Can potentially work - It can be positive but not sure about how financially it will be beneficial

Appendix F: Work Breakdown Structure



Appendix G: SWOT Analysis

<p>Strength</p> <ul style="list-style-type: none"> • Improve preventive care • Improve quality of preventive care visit (MA vs RN) • Increase in # of AWVs • Increase in # of patients seen for chronic health management • Increase revenue to clinic • Improving workflow and staff satisfaction • Supportive of interdisciplinary culture 	<p>Weakness</p> <ul style="list-style-type: none"> • Cost to hire an RN (hourly wage is higher than MA) • A newly hired RN has to establish the workflow and take on the project • Requires time and research to streamline the flow • Revenue depends on # of visits conducted • Patient may have mixed feelings about RNs conducting the visits
<p>Opportunity</p> <ul style="list-style-type: none"> • Strong need for preventive care in the population • Room to improve the practice structure • Growing number of aging population and 	<p>Threat</p> <ul style="list-style-type: none"> • Care fragmentation • Competitors can take market share of RNs • Customer dissatisfaction may lead to less business

Appendix H-1: Status Quo with NP providing AWVs to 65% of eligible patients

	Year 1
Net Revenue	\$14,994 (for 120 visits)
NP Wages	\$12,760
Overhead cost	\$100
Total Expenses	\$12,860
Total Net Profit	\$2,134
Return on Investment (ROI)	16.6%

Appendix H-2: Budget for 0.2 FTE of RN

	Year 1	Year 2	Year 3
Net Revenue from 184 visits	\$22,990.8	\$22,990.8	\$22,990.8
RN Wages	\$15,024	\$15,024	\$15,024
Additional furniture	\$1,000	\$0	\$0
Orientation	\$626	\$0	\$0
Other overhead cost	\$100	\$100	\$100
Total Expenses	\$16,750	\$15,124	\$15,124
Total Net Profit	\$6,240	\$7,866.8	\$28,608
Return on Investment (ROI)	37.2%	52%	52%

Appendix I: Break-Even Analysis for 0.2 FTE of RN

Break-Even Analysis			
	0.2 FTE RN Cost	0.2 FTE RN Revenue (Rev. – Cost)	Net Profit
June (15 visits)	\$ 2,978.48	\$1,874.25 (-\$1,104.23)	-\$1,104.23
July (15 visits)	\$ 1,252.48	\$1,874.25 (\$621.77)	-\$482.46
August (15 visits)	\$ 1,252.48	\$1,874.25 (\$621.77)	\$139.31
September (15 visits)	\$ 1,252.48	\$1,874.25 (\$621.77)	\$761.08
October (15 visits)	\$ 1,252.48	\$1,874.25 (\$621.77)	\$1,382.85
November (15 visits)	\$ 1,252.48	\$1,874.25 (\$621.77)	\$2,004.62
December (15 visits)	\$ 1,252.48	\$1,874.25 (\$621.77)	\$2,626.39
January (15 visits)	\$ 1,252.48	\$1,874.25 (\$621.77)	\$3,248.16
February (16 visits)	\$ 1,252.48	\$1,999.2 (\$739.72)	\$3,987.88
March (16 visits)	\$ 1,252.48	\$1,999.2 (\$739.72)	\$4,727.6
April (16 visits)	\$ 1,252.48	\$1,999.2 (\$739.72)	\$5,467.32
May (16 visits)	\$ 1,252.48	\$1,999.2 (\$739.72)	\$6,207.04

Appendix J: Summary of staff feedback during meeting #2

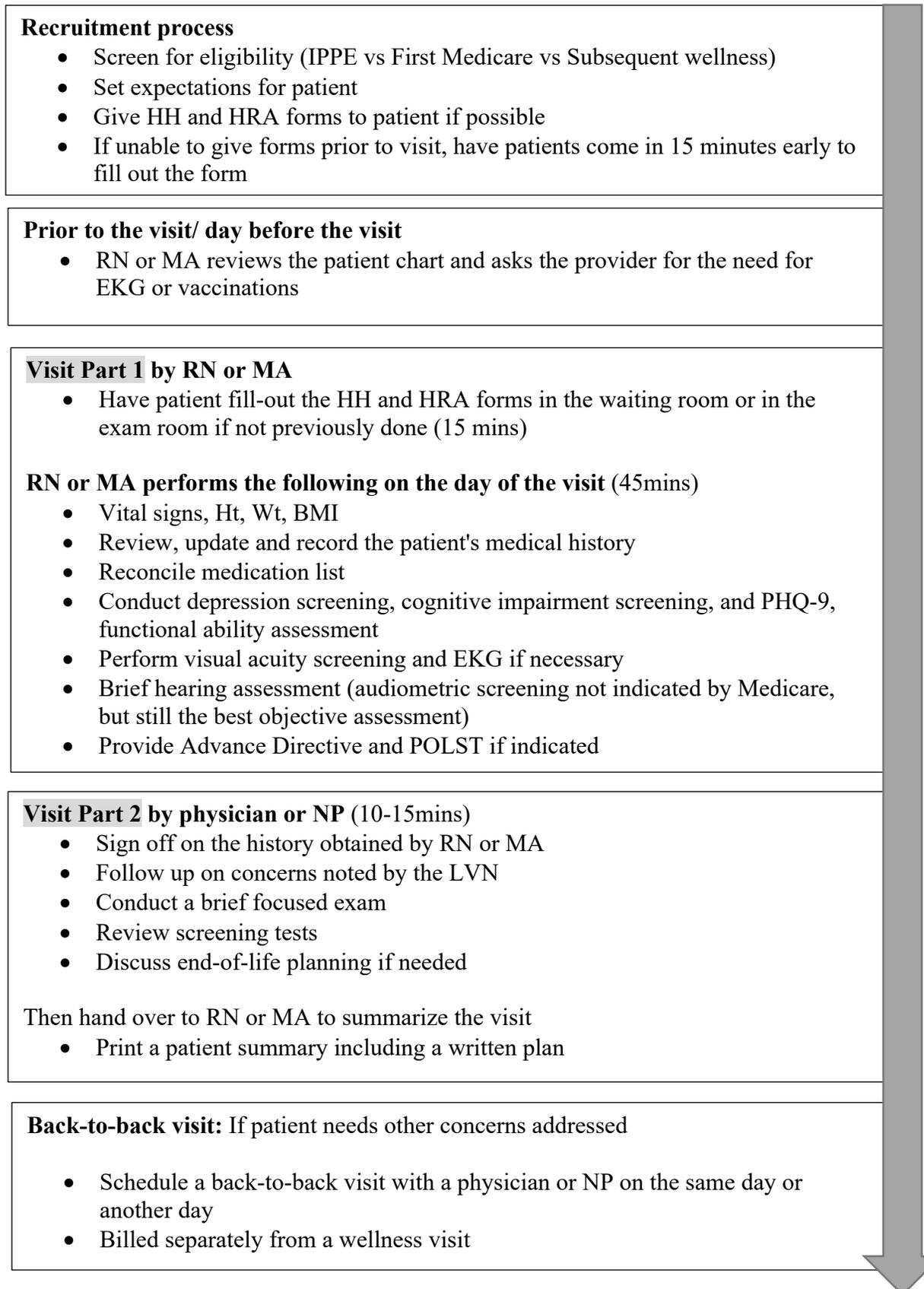
Positive findings

- Forms saved time. It took shorter amount of time to have patients fill out the HRA than to go through all questions in person.
- Use of validated tools was easier and faster
- Most patients found the form to be easy to fill out. None had questions regarding the questionnaires.
- Preparation (reviewing patient chart in advance) helped save time.

Challenge

- Patients did not know the purpose of wellness → we need to work on setting expectations for what a wellness visit is about, and how long the visit is going to take, and who is performing most of the visit etc.
- Almost ALL patients needed follow-up on chronic health issues or acute complaint visits along with wellness → we should expect back-to-back visits almost in all cases.
- Some found health history form redundant → Health history form should be taken only once, and then updated every year instead of having patient fill out the entire history
- Some patients had pressing needs that they wanted taken care of instead of wellness visits
- Need to develop the form in other languages
- Scheduling challenges
- Different ways of reimbursement (per visit vs HEDIS measures) → more comprehensive coding sheet

Appendix K: Proposed Workflow for Conducting AWWs



Appendix L: Mini-Cog

Mini-Cog®

Instructions for Administration & Scoring

ID: _____ Date: _____

Step 1: Three Word Registration

Look directly at person and say, "Please listen carefully. I am going to say three words that I want you to repeat back to me now and try to remember. The words are [select a list of words from the versions below]. Please say them for me now." If the person is unable to repeat the words after three attempts, move on to Step 2 (clock drawing).

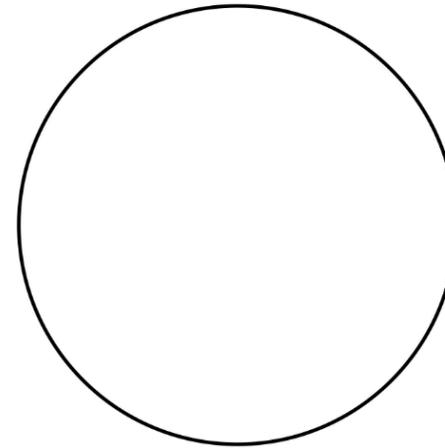
The following and other word lists have been used in one or more clinical studies.^{1,3} For repeated administrations, use of an alternative word list is recommended.

Version 1	Version 2	Version 3	Version 4	Version 5	Version 6
Banana	Leader	Village	River	Captain	Daughter
Sunrise	Season	Kitchen	Nation	Garden	Heaven
Chair	Table	Baby	Finger	Picture	Mountain

Step 2: Clock Drawing

Say: "Next, I want you to draw a clock for me. First, put in all of the numbers where they go." When that is completed, say: "Now, set the hands to 10 past 11."

Use preprinted circle (see next page) for this exercise. Repeat instructions as needed as this is not a memory test. Move to Step 3 if the clock is not complete within three minutes.



Step 3: Three Word Recall

Ask the person to recall the three words you stated in Step 1. Say, "What were the three words I asked you to remember?" Record the word list version number and the person's answers below.

Word List Version: _____ Person's Answers: _____

Scoring

Word Recall: _____ (0-3 points)	1 point for each word spontaneously recalled without cueing.
Clock Draw: _____ (0 or 2 points)	Normal clock = 2 points. A normal clock has all numbers placed in the correct sequence and approximately correct position (e.g., 12, 3, 6 and 9 are in anchor positions) with no missing or duplicate numbers. Hands are pointing to the 11 and 2 (11:10). Hand length is not scored. Inability or refusal to draw a clock (abnormal) = 0 points.
Total Score: _____ (0-5 points)	Total score = Word Recall score + Clock Draw score. A cut point of <3 on the Mini-Cog™ has been validated for dementia screening, but many individuals with clinically meaningful cognitive impairment will score higher. When greater sensitivity is desired, a cut point of <4 is recommended as it may indicate a need for further evaluation of cognitive status.

Clock Drawing

ID: _____ Date: _____

References

- Borson S, Scanlan JM, Chen PJ et al. The Mini-Cog as a screen for dementia: Validation in a population based sample. *J Am Geriatr Soc* 2003;51:1451–1454.
- Borson S, Scanlan JM, Watanabe J et al. Improving identification of cognitive impairment in primary care. *Int J Geriatr Psychiatry* 2006;21: 349–355.
- Lessig M, Scanlan J et al. Time that tells: Critical clock-drawing errors for dementia screening. *Int Psychogeriatr*. 2008 June; 20(3): 459–470.
- Tsoi K, Chan J et al. Cognitive tests to detect dementia: A systematic review and meta-analysis. *JAMA Intern Med*. 2015; E1-E9.
- McCarten J, Anderson P et al. Screening for cognitive impairment in an elderly veteran population: Acceptability and results using different versions of the Mini-Cog. *J Am Geriatr Soc* 2011; 59: 309-213.
- McCarten J, Anderson P et al. Finding dementia in primary care: The results of a clinical demonstration project. *J Am Geriatr Soc* 2012; 60: 210-217.
- Scanlan J & Borson S. The Mini-Cog: Receiver operating characteristics with the expert and naive raters. *Int J Geriatr Psychiatry* 2001; 16: 216-222.

Health Risk Assessment Questionnaires

<Self-Assessment of Health Status>

1. In general, would you say your health is:
 Excellent Very Good Good Fair Poor

2. How have things going for you in the past 4 weeks?
 Very well Pretty good Good and bad are about equal
 Pretty bad Very bad

3. How confident are you that you can control and manage most of your health problems?
 Very confident Somewhat confident Not very confident
 I do not have any health problems

4. How often do you have trouble taking medicines the way you have been told to take them?
 I do not have to take medicine
 I always take the as prescribed
 Sometimes I take them as prescribed
 I seldom or do not take them as prescribed

<Psychosocial risks>

5. Do you have a history of depression or mood disorders? Yes No

6. During the past 4 weeks, how much have you been bothered by anxiety, depression, irritability of sadness?
 Not at all Quite a bit Slightly Moderately Extremely

7. During the past 4 weeks, has your physical or emotional health limited your social activities with family and friends?
 Not at all Quite a bit Slightly Moderately Extremely

8. Do you have someone who is available to help you if you needed or wanted help?
 Yes, as much as I need/want Yes, some No, not at all

9. During the last 2 weeks, how often have you been bothered by any of the following problems? Please circle a number in each column.

	Not at all	Several Days	More than half of the days	Nearly everyday
Little interest of pleasure in doing things	0	1	2	3
Feeling down, depressed, or hopeless	0	1	2	3
Trouble falling asleep or staying asleep, or sleeping too much	0	1	2	3
Feeling tired or having little energy	0	1	2	3
Poor appetite or overeating	0	1	2	3
Feeling bad about yourself – or that you are a failure or have let yourself or your family down	0	1	2	3
Trouble concentrating on things such as reading the newspaper or watching TV	0	1	2	3
Moving or speaking so slowly that people have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
Thoughts that you would be better off dead, or hurting yourself	0	1	2	3

PHQ-9 Total Score: _____

<ADLs>

10. Because of any health problems, do you need the help of another person with shopping, preparation of meals, or house work?
 Yes No
11. Because of any health problems, do you need the help of another person with your personal care needs such as eating, bathing, dressing, or getting around the house?
 Yes No
12. Can you handle your own money without help?
 Yes No
13. Do you have any difficulty doing any of the following activities by yourself?
 Yes No

If yes, check all the activities you have difficulty with.

- Dressing Preparing food Feeding Using toilet Grooming Walking
 Getting to and from bed or chair Shopping Using a phone
 Housekeeping (laundry etc.) Paying bills Managing your own medications
 Using transportations (What mode of transportation? _____)

< Safety >

14. Home Safety Checklist (Please check Yes or No about your home)
 Are entrance ways well-lit and maintained? Yes No
 Is carbon monoxide detector installed? Yes No
 Are smoke detectors installed? Yes No
 Are all medicines kept in original containers with original labels? Yes No
 Do you throw out all out-of-date or unidentified medicines? Yes No
15. Are you having difficulties driving your car?
 Yes, often Sometimes No, not at all I do not drive/ do not use a car

16. Do you always fasten your seat belt when you are in a car?
 Yes, always/usually Yes, sometimes No
17. Do you have problems with your vision?
 Yes No
18. Hearing Assessment: How often in the last 4 weeks have you experienced the following?
 Straining to understand conversation
 Never Seldom Sometimes Often Always
 Trouble hearing in a noisy background
 Never Seldom Sometimes Often Always
 Misunderstanding what others are saying
 Never Seldom Sometimes Often Always
 Do you use a hearing aid? Yes No

<Fall Screening>

19. Have you fallen in the past year?
 Yes No
 If yes, how many times? ____ Were you injured? Yes No
20. Do you worry about falling? Yes No
21. Do you feel unsteady when standing or walking? Yes No
22. Do you use any of the following assisted devices?
 Cane Walker Wheelchair None, I do not use any devices

<Pain Assessment>

23. During the past 4 weeks, how much bodily pain have you generally had? (circle #)
 (no pain) 0...1...2...3...4...5...6...7...8...9...10 (extreme pain)
 If pain, what do you do/use to manage pain? _____

<Behavioral Risks>

24. How many times a week do you engage in physical activity?
 0 1-3 times 4-5 times 6 or more

25. When you exercise, how intensely do you typically exercise?

- Light (stretching/slow walking)
- Moderate (brisk walking)
- Heavy (jogging/swimming)
- Very heavy (running/stair climbing)

26. Do you drink alcohol?

- Yes No

27. If yes, how many drinks do you have per week?

_____ (Beer / Wine / Liquor)

28. Have or do you smoke cigarettes, pipe, or cigars?

- Never
- I have smoked in the past but I quit
- Yes, currently a smoker and I am interested in quitting
- Yes, currently a smoker but I am not ready to quit

29. If you are a current smoker, how much and for how long?

Packs/day: _____ # of years: _____

30. Do you use recreational drugs? Yes No If yes, specify type: _____

31. Can you briefly describe your diet/ nutrition? _____

< Advanced Care Planning >

32. Do you have a living will, an advance directive, or POLST?

- Yes No

33. If Yes, when was the date? _____

If No, would you like to discuss with provider? Yes No

Provider name _____ Signature _____ Reviewed date _____

Appendix N: Provider Form and Plan for Preventive Care and Screening (5 pages)

Annual Wellness Visit

(Provider to complete)

Service Date: ____/____/____

Patient Full Name: _____

DOB: ____/____/____ Age: _____

Gender: Male / Female/ Other

Allergy: _____

Medical Group: _____

Health Plan: _____

Initial Annual Wellness Visit G0438
 Subsequent Annual Wellness Visit G0439

Vital Signs:

BP: ____/____ HR: ____ Temp: _____

Ht: ____ Wt: ____ BMI: _____

Hearing: _____

Vision: R ____/____, L ____/____

EKG _____

- 1. Review Health History Form (list of providers, medications, medical history)
- 2. Review Health Risk Assessment form

3. Review Depression Screening

Patient's PHQ-9 score: _____

0-4 = No depression
 5-9 = Mild Depression
 10-14 = Moderate Depression
 15-19 = Moderately Severe Depression
 20-27 = Severe Depression

Plan:
 No treatment required/ Observation
 Prescribe medications
 Consultations
 Specialist Referral
 Others: specify _____

4. Fall Risk Assessment: If yes to question #14 and #15, administer *Timed-Up-and-Go (TUG) test*

Assessment _____

Plan _____

5. Administer *Mini-Cog Status Test*

Assessment _____

Plan _____

6. Update the patient's list of risk factors and discuss personalized plan (referral to health education or preventative counseling services or programs)

7. Update screening schedule for the patient

8. Discuss Advanced Care Planning

Provider Name _____ Provider Signature _____ Date : ____/____/____

Patient Full Name: _____ DOB: ____/____/____ Gender: ____ Service Date: ____/____/____

Problem List and Interventions

Diagnosis/ Problem	Status	ICD-10 Code	Plan
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral
	<input type="checkbox"/> Stable <input type="checkbox"/> Worsening <input type="checkbox"/> Improving		<input type="checkbox"/> Medication <input type="checkbox"/> Labs <input type="checkbox"/> Other: _____ <input type="checkbox"/> Monitor <input type="checkbox"/> Referral

Patient Full Name: _____ DOB: ____/____/____ Gender: ____ Service Date: ____/____/____

Depression Screening	PHQ-9			Date: _____ PHQ-9 score: _____	
Tobacco Use	Screening for tobacco use	Adult tobacco smoker	Annually	Date: _____ Tobacco user? <input type="checkbox"/> Yes, and intervention given <input type="checkbox"/> No	
Cardiovascular Disease	Adult ages 21 years and older Previous or current diagnosis of ASCVD/ Familial or Pure Hypercholesterolemia Or Fasting LDL-C = >190mg/dl Or Diabetes with fasting or direct LDL-C of 70-189 mg/dl (age 45-75) who was prescribed Statin Therapy			<input type="checkbox"/> ASCVD or familial/ Pure hypercholesterolemia diagnosis <input type="checkbox"/> LDL-Cholesterol result _____ Date: _____ OR <input type="checkbox"/> DM diagnosis and LDL-C result: _____ Date: _____ <input type="checkbox"/> and Statin Therapy Rx	
Lung Cancer Screening	Low-dose CT	Adults aged 55-80 who have 30-pack year smoking history and smoking cessation <15 years (US Preventative Task Force)	Annually until individual has stopped smoking for 15 years	Date: _____	<input type="checkbox"/>
Advance Care Planning	Advanced Care Planning or Legal document in chart	Adult aged 21 years and older	Annually	Date: _____	<input type="checkbox"/>
For Male patients only					
Abdominal Aortic Aneurysm (AAA) screening	Ultrasound	Men 65 – 75 years old who have smoked >100 cigarettes in a lifetime, have CV disease or 1-st degree relative with AAA	Once in a lifetime	Date: _____	<input type="checkbox"/>
Prostate cancer screening	PSA	Men 55-69 years The decision should be an individual one No need to screen patients with no preference		Date: _____	<input type="checkbox"/>

Patient Full Name: _____ DOB: ____/____/____ Gender: ____ Service Date: ____/____/____

Quality Measure Checklist (Give a copy to patient)

Measure	Guideline	Who?	Recommendations	Last DOS	Need
Adult BMI Assessment	Body Mass Index	Ages: 18-74 years	Annually	Date: _____ BMI: _____	
Controlling High Blood Pressure		Ages 60-85 years With Diabetes: <140/90 Without Diabetes: <150/90	Each Visit	Date: _____ BP ____/____ <input type="checkbox"/> Diagnosis of essential of primary hypertension	
Colorectal Cancer Screening	FOBT Fit test Sigmoidoscopy Colonoscopy	Ages: 50-75 years	FOBT – annually Fit test – annually Sigmoidoscopy – every 5 years Colonoscopy – every 10 years	Test: _____ Date: _____ <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal	<input type="checkbox"/>
Influenza Vaccine	1 influenza vaccine	Ages 65 years and older	Annually	Date: _____ <input type="checkbox"/> Patient reported receipt of previous immunization <input type="checkbox"/> Patient declined Influenza Immunization	<input type="checkbox"/>
Pneumococcal Vaccine	2 recommended in lifetime (PVC13 and PPSV23)		1 dose of PVC13 and PPSV23 at least 1 year after PVC13	Date: _____ <input type="checkbox"/> Patient reported receipt of previous immunization <input type="checkbox"/> Patient declined Influenza Immunization	<input type="checkbox"/>
Medication Reconciliation Post Discharge	To be completed by physician or RN		Date: _____		
Fall Screening	STEADI		Date: _____		
Pain Assessment	Pain Scale		Date: _____		
Functional Status	Functional Status Assessment	Annually	Date: _____		

Patient Full Name: _____ DOB: ____ / ____ / ____ Gender: ____ Service Date: ____ / ____ / ____

For Female Patients Only					
Breast Cancer Screening	Mammogram	Female Ages: 50-74 years	Every 2 years if normal result	Date: _____ <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal	<input type="checkbox"/>
Cervical Cancer Screening	Pap Smear	<u>Female Ages: 21-64 years</u> • Ages 21-64: cytology every 3 years • Ages 30-64: cytology with HPV testing every 5 years		Date: _____ <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal	<input type="checkbox"/>
Bone mineral density test	DEXA scan	Female 65 years + & Postmenopausal women younger than 65 who are at increased risk of osteoporosis	Every 2 years Or within 6 months of every fracture	Date: _____	<input type="checkbox"/>
For Diabetic Patients					
HgA1C Screening	HgA1C <9% controlled	Ages 18-75 years with diabetes	Every 3 months if uncontrolled	Date: _____ HgA1C: _____	<input type="checkbox"/>
Retinal or Dilated Eye Exam	Dilated Eye Exam by Optometrist or Ophthalmologist		Annually	Date: _____	<input type="checkbox"/>
Nephropathy Monitoring (Kidney function)	Urine protein test Microalbumin test			Date: _____	<input type="checkbox"/>
Foot exam	Monofilament test			Date: _____ Result: _____	<input type="checkbox"/>