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Needs Assessment and Management in Geriatric Patients of a Federally Qualified Health Center

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Needs Assessment and Management in Geriatric Patients of a Federally Qualified Health Center: Opportunities for Quality Improvement via the Medicare Annual Wellness Visit

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Abstract

The purpose of this project was to identify opportunities for quality improvement in the care of geriatric patients at OneWorld Community Health Centers (OneWorld) by applying the principles of Community Oriented Primary Care (COPC) in the implementation of the Medicare Annual Wellness Visit (AWV).

Specific objectives were to better understand factors affecting geriatric health risk assessment and management (including implementation of the Medicare AWV) in federally qualified health centers (FQHCs) and to utilize data from pilot visits to better understand patient health needs in one FQHC, with emphasis on fall risk, cognitive loss, activities of daily living, and compliance with United States Preventive Services Task Force (USPSTF) recommendations. To meet these goals, this project utilized semi-structured interviews with key staff, a provider survey, and electronic health record (EHR) review.

Over the course of pilot implementation, a total of 71 visits were completed using the AWV template. This included 58 visits with patients aged 65 and older, which were subsequently analyzed for health data. Nearly all (89.7%) of these 58 visits identified a patient need in at least one of the above-mentioned health domains (fall risk, cognitive loss, functional status, and compliance with USPSTF recommendations). Examined as separate outcomes, each of these four domains was identified as a need in at least one-fourth of patients.

Semi-structured interviews with providers and clinic staff during the implementation process revealed several core themes in attitudes and suggestions regarding these visits, which were defined as *opportunities, streamlining,* and *buy-in.* AWVs were seen as an opportunity for improving quality of care, but interviewees were also concerned about the potential to disrupt clinic workflow and offered some suggestions to avoid this (e.g., EHR elements, broader staff

training, reference sheets for clinic staff). Several respondents also expressed concern that not all patients, providers, and staff fully understood or recognized the importance of these visits.

In a survey of FQHC providers, most respondents (67%) stated that they saw multiple older patients over the course of an average work day. The vast majority (91.7%) rated themselves as "mostly confident" or "very confident" in recognizing fall risk and polypharmacy, but fewer expressed these levels of confidence in recognizing cognitive loss or nutritional deficits, or in managing any of the four conditions. Asked about their knowledge of community resources for older adults, one-fourth of respondents denied adequate knowledge. Regarding familiarity with the Medicare AWV, 41.7% stated that they had performed at least one of these visits.

This project demonstrates significant value of the Medicare AWV as a tool for geriatric assessment in FQHCs and highlights important considerations for implementation. The results also illustrate potential new roles for FQHCs in serving the rapidly-growing geriatric patient demographic.

Introduction

Community oriented primary care is "the practice of primary care with population responsibility, oriented to the health improvement of a defined community…with the progressive participation of the community and in coordination with all services involved with the health of the community or its determinants" (Gofin and Gofin, 2011). Its five theoretical principles are responsibility for a defined community, care based on identified health needs, prioritization, intervention covering all stages of the health-illness continuum, and community participation. These are reflected in the COPC cycle, whose major tasks are to (1) define and characterize a community, (2) prioritize health needs, (3) perform detailed needs assessment, (4) plan an

intervention, (5) implement the intervention, and (6) evaluate outcomes. This is a non-linear process, involving continual reassessment and adaptation. The model seeks to create practices whose core characteristics are accessibility, comprehensive care, and a proactive approach that draws from multiple healthcare disciplines and sectors (Gofin and Gofin, 2011).

The COPC approach extends from the work of Sidney and Emily Kark, a physician couple who established a health center in the low-income community of Pholela, South Africa during the mid-1900s. Beyond providing primary care, the Karks incorporated principles of epidemiology in understanding the population's health needs and utilized community health workers and outreach nurses to extend care into the community, including the home. The model began to spread throughout the country but met resistance with the institution of apartheid. As the Karks and their collaborators began to leave South Africa, the COPC model spread to other settings, as well. One of the Karks' students – Jack Geiger – was a founder of the community health center movement in the United States (Mullan and Epstein, 2002). Today, over 1,400 FQHCs provide care to underserved communities nationwide [Health Resources and Services Administration (HRSA), 2018].

OneWorld Community Health Centers is a FQHC operating in southeast Omaha, Nebraska. As an organization with longstanding ties to its community and significant attention to partnerships, both between its own departments and with other local organizations, OneWorld is a thriving example of the application of the COPC framework and principles. Prior to this project, the health center had identified improvement of geriatric care as an organizational priority and the Medicare AWV as a potentially valuable intervention. For my service learning and capstone experience, I assisted with pilot implementation of the Medicare AWV, and in

doing so facilitated more detailed needs assessment, ongoing intervention planning, and preparations for long-term implementation.

This project represents one potential approach to ensuring high-quality care for older adults in underserved populations, and in emphasizing the role of the FQHC is a model that could be replicated throughout the United States. Broader application could prove useful as the population continues to age in the coming decades.

OneWorld Community Health Centers

OneWorld's mission is to *"in partnership with the community, provide culturally respectful, quality health care with special attention to the underserved."* The health center began in 1970 as a volunteer-based walk-in clinic serving the Hispanic and Native American communities. Since then it has grown to become the largest primary care provider in South Omaha and has attained certification from the National Committee for Quality Assurance as a patient-centered medical home. It supports a central clinic in Southeast Omaha as well as several satellite locations, a mobile dental clinic, and four school-based health centers. In 2016, OneWorld provided care to over 37,000 individual patients (HRSA, 2017).

OneWorld is the majority-service community health center (based on percentage of FQHC patients who identify OneWorld as their primary provider) for eleven zip codes in Omaha and the surrounding metropolitan area (68005, 54048, 68105, 68106, 68107, 68117, 68127, 68131, 68134, 68147). These are primarily located in Douglas County, Nebraska, with some extension into surrounding counties. A map of the health center's 75% and 100% service areas (i.e., those areas that contain 75% and 100% of its patients) is included as Appendix A (Bureau of Primary Health Care, 2017).

OneWorld serves a population that is more diverse and more vulnerable than Douglas County as a whole. In 2016, 81.4% of its patients were from racial or ethnic minorities, with 35.7% best served in a language other than English. Over 90% were at or below 200% of the federal poverty level, and 60% were in poverty (HRSA, 2017). In contrast, over 80% of Douglas County residents are non-Hispanic white, with 31.9% below 200% of the federal poverty level (Professional Research Consultants, 2015; United States Census Bureau, 2017).

Despite serving a challenging population, OneWorld is a high-performing health center: in the HRSA's 2016 health center measures, OneWorld ranked in the top quartile of all FQHCs for 14 of 15 quality of care measures, including all measures of chronic disease management and all measures for preventive health screening and services (HRSA, 2017).

Older adults comprise a small but growing proportion of OneWorld's patient pool. Only 3.4% of patients were aged 65 and older in 2016, far behind the 11.8% of adults aged 65 and older in Douglas County (United States Census Bureau, 2017). However, this still represents over 1,200 individuals. Moreover, since 2014, the health center has seen a 40% increase in the number of older patients and a 20% increase in the proportion of patients over 65 (HRSA, 2017). From 2011-2015, all but three of the zip codes identified above (68134, 68106, and 68107) showed growth in the proportion of the population that was over 65 years of age (Bureau of Primary Health Care, 2017). Older adults represent a patient profile that may be relatively unfamiliar to many of OneWorld's providers at this point in time, but that will likely make up an increasing proportion of the health center's patients in the coming years.

As an organization that has long played a central role in providing high-quality care for underserved patients in the Omaha area and a national leader in quality care, OneWorld is uniquely positioned to lead efforts in quality improvement. This includes accommodating the

health care needs of older adults - particularly those who are most vulnerable – as their numbers increase. By facilitating OneWorld's efforts to improve care for geriatric patients and assessing the clinic's barriers in providing quality care, this project seeks to position OneWorld for this effort, and to translate its lessons learned into a useful format for other FQHCs.

Health Issues Addressed

As of 2015, there were over 44.5 million individuals aged 65 years and older living in the United States (United States Census Bureau, 2017). By 2060, this number is expected to more than double to approximately 98 million and to represent more than 20% of the population. The elderly demographic is also becoming more diverse: between 2014 and 2030, its minority segment is projected to grow more than twice as fast as that for non-Hispanic whites, with anticipated increases of 110% and 46%, respectively (Administration on Aging, 2016).

In addition to their growing numbers, older adults utilize healthcare at higher rates than members of other age groups. They account for over 80% of Medicare spending, 26% of physician office visits, 35% of hospital stays, 34% of prescriptions, and 38% of emergency medical services responses. They are also medically complex: over 20% of older adults have five or more chronic conditions (American Geriatrics Society, 2016). This combination of growing patient numbers, increasing diversity, and high utilization makes providing adequate, culturally appropriate care for older adults a necessary priority for the coming decades.

Ensuring care for geriatric patients presents unique challenges, ranging from the needed workforce to the details of patient visits. In its Healthy People 2020 objectives, the Office of Disease Prevention and Health Promotion (ODPHP) notes that there is already a personnel shortage (2017). According to its baseline measurements (dates vary from 2004-2009 by field),

only 2.7% of physicians, 4.3% of psychiatrists, 1.4% of registered nurses, and less than one percent of dentists, physical therapists, and dietitians hold geriatric certification. One study in medical students and physicians regarding hospital-based care for the elderly found that they had mostly negative emotions related to caring for older patients. Specific challenges noted were taking complex histories and making diagnoses in the context of medical comorbidity, the need for adjustment of communication style to accommodate difficulties with hearing and cognition, attitudes from peers that decline is inevitable and care is therefore wasteful, anxiety in dealing with frail patients, the lack of medical research in older patients, and difficulties of discharge in complex social situations (Samra et al., 2015). While improving provider education might help to address these challenges, integrating geriatric content into health sciences curricula presents its own difficulties, including limited time in the context of teaching other topics, a lack of geriatrics-trained educators, low financial incentive, and low student demand (Bardach and Rowles, 2012).

Increasing the number of providers with geriatric certification is one of multiple items included in the U.S. Department of Health and Human Services (DHHS) quality objectives for older adults, as outlined within the Healthy People 2020 initiative (ODPHP, 2017). Other selected quality items for geriatric care include improving compliance with recommendations for core preventive services (e.g., cancer screenings and vaccinations); increasing the proportion of older adults who utilize the Welcome to Medicare benefit; and decreasing emergency department visits due to falls, hip fractures among those with osteoporosis, and the proportion of older adults who have moderate to severe functional limitations. For individuals with dementia, the initiative seeks to increase the proportion who are aware of their diagnosis, and to reduce preventable hospitalizations.

Based on these national priorities, this project focused specifically on fall risk, functional status, cognition, and compliance with recommendations for preventive services. In addition, questions regarding nutrition and polypharmacy were included in the provider survey. These latter two items have direct implications for the preceding health issues, and so were added to examine the extent to which interdisciplinary support from pharmacists or nutritionists might aid providers in addressing higher-profile diagnoses such as frequent falls or cognitive decline.

Falls

Falls are the leading cause of injury among older adults, accounting for over 800,000 hospitalizations and over $50 billion in medical costs annually. About one in three older adults will fall each year, and those who have fallen once are twice as likely to fall again. Still, less than half of older adults who fall tell their doctors about the incident. A broad range of health issues can contribute to fall risk, including weakness, vitamin D deficiency, medications, and difficulties with vision, but other factors like improper footwear or unsafe arrangements at home can also play a role. Interventions including physical therapy, exercise, and home safety evaluations can help to prevent falls, but without input from medical providers many older adults might not recognize their level of risk or realize what options are available for fall prevention (CDC, 2017).

Functional status in older adults

As adults age, unmanaged health issues can interfere with their ability to complete day-to-day tasks. These can include the basic "activities of daily living" (ADLs; e.g., bathing, dressing, eating, using the toilet) or more complex "instrumental activities of daily living" (IADLs; e.g.,

managing finances, organizing medications, driving or using public transportation, grocery shopping). In 2011, 32.2% of older adults had difficulty with at least one ADL (ODPHP, 2017). Being aware of functional status can help providers to refer patients for therapies and ensure that care plans are feasible, and declines in functional status can also serve as red flags for physical or cognitive diagnoses.

Cognitive decline

Dementia is a broad term that describes loss of cognitive functioning that interferes with everyday life. It includes Alzheimer's disease and a range of other causes. Recent estimates of dementia prevalence in U.S. adults aged 65 and older suggest that about 11% of individuals in this age group are affected, amounting to over 5 million people (Alzheimer's Association, 2016; Herbert et al., 2010). However, as of 2009, only 34.8% of persons with dementia (or their caregiver) were aware of their diagnosis (ODPHP, 2017). This lack of awareness prevents patients from receiving treatment and makes it more difficult for them and their caregivers to access community resources. Increasing screening and regular discussions among medical providers, patients, and caregivers could help to improve awareness and outcomes.

Preventive services recommendations

As of 2014, only 41.2% of males and 42.6% of females aged 65 and older were up to date on a core set of DHHS-recommended preventive services such as influenza and pneumococcal vaccination and screening for colorectal and breast cancer. Nebraska rated above average, with 46.9% of males and 45.2% of females up to date (ODPHP, 2017). While OneWorld typically

ranks far above average among FQHCs in preventive care, this project helped to reveal opportunities for quality improvement.

Importance of Project

Geriatric care in FQHCs

As front-line healthcare contacts for many patients, primary care providers are uniquely positioned to help older adults maintain functional status, manage chronic conditions, and avoid unnecessary hospitalizations. FQHCs provide comprehensive primary care to underserved populations throughout the United States. These organizations actively involve their communities in decisions regarding healthcare services (e.g., by utilizing governing boards with patient majorities) and offer comprehensive, culturally competent care regardless of recipients' ability to pay. Overall, FQHCs have shown high efficacy in managing chronic conditions: for example, an analysis of visits in the 2006-2008 National Medical Care Survey showed that FQHCs performed as well or better than private practice primary care physicians on 17 of 18 quality measures (Goldman et al., 2012). Other studies have noted that counties with FQHCs have lower rates of emergency department use (Falik et al., 2001; Rust et al., 2009) and preventable hospitalizations (Falik et al, 2001; Probst et al., 2009), including in low-income and elderly populations (Epstein, 2001).

However, recent findings suggest that FQHCs' outcomes might be more complex for vulnerable older adults. An examination of several years of Medicare claims data (Wright et al., 2017) found that dual eligibles (individuals eligible for both Medicare and Medicaid based on age and low income, disability, or long-term care status) who use FQHCs have higher rates of hospitalization for conditions sensitive to ambulatory care than those who do not, but another

study that compared patients based on their level of FQHC use reported that predominant users (those who had greater than 50% of their evaluation and management visits at an FQHC) had fewer physician visits and hospitalizations than nonusers (Chang et al., 2016). Older dual-eligibles who use FQHCs have 23-43% more emergency department visits than those who do not, depending on race (Wright et al., 2015), and there is evidence that FQHCs with higher levels of patient-centered medical home status may have higher rates of emergency department visits (Timbie et al., 2017). However, Medicare beneficiaries aged 65 and older who use FQHCs have fewer chronic conditions and lower mortality than those who do not (Chang et al., 2016), and one study found that FQHCs with higher levels of patient-centered medical home certification were more likely to administer recommended diabetes tests (Timbie et al., 2017).

These mixed results make it difficult to draw conclusions about the status of geriatric care in FQHCs. Moreover, there is a shortage of data on knowledge, attitudes, barriers, and best practices at the patient and provider levels. While some of the above research has examined provider and student attitudes in managing geriatric patients, there has been relatively scant research in provider confidence levels and self-assessed education needs in managing older patients across a range of settings, including in FQHCs. The case study and survey components of this project seek to address this gap in the literature.

The Medicare AWV

Regardless of care setting, providing care for older adults includes providing adequate preventive care. This includes regularly assessing health risks to allow for timely response. One specific opportunity for health risk assessment is the Medicare AWV. This once-yearly appointment includes evaluation for risks such as falls, cognitive decline, depression, anxiety,

and poor nutrition or unhealthy weight (either overweight/obesity or weight loss); updating of core preventive services; and review of medications, family history, and past medical history. The benefit was added in 2011 as part of the Affordable Care Act, and Medicare covers the visit without a patient copay at a generous reimbursement rate for providers. Increased use of the Welcome to Medicare Benefit, a subtype of the AWV, has been identified as a nationwide quality goal as part of the Healthy People 2020 initiative (ODPHP, 2017).

Despite strong encouragement of its use, to date the AWV has been underutilized. From 2011 to 2014, use of the AWV benefit doubled, but was still limited to 15.6% of eligible beneficiaries. This included significant regional variation in use, from 3.0% in San Angelo, Texas to over 30% in Appleton, Wisconsin. Only 40.8% of primary care physicians who billed Medicare in 2014 performed an AWV (Ganguli et al., 2017).

In sum, this project applies a well-supported but underutilized approach to care, the Medicare AWV, within a widely available care setting, the FQHC. In doing so, it represents a care model that could be implemented across a broad range of communities, while also providing more detailed insights regarding the overall status of geriatric care in one specific FQHC.

Objectives and Background

The objectives of this research are (1) to improve the process of health risk assessment and management for geriatric patients at OneWorld Community Health Centers and (2) to identify provider, health system, and patient barriers in this process and propose solutions. By examining this process in one high-performing FQHC, the project aims to provide useful insights for other health centers.

As noted above, the Medicare AWV is a means for healthcare providers to assess health risks. Regular health risk assessment (HRA) can improve both patient outcomes and the experience of care, including in geriatric patients. In one randomized controlled trial of a regularly-delivered electronic HRA intervention for older adults, participants improved health behaviors and increased preventive care use at two years, and mortality for participants versus non-participants was decreased at eight years (Stuck et al., 2015). In a study of the Medicare AWV, a 45-minute educational intervention for physicians that combined motivational interviewing and HRA topics led to improved visit experiences for both patients and providers. Patients treated after the intervention reported feeling more informed and empowered, and clinicians felt that their treatment agendas aligned more closely with evidence-based recommendations and would be more effective (Nagykaldi et al., 2017).

However, as noted above, preventive measures such as HRA tend to be underutilized. While there is limited information on barriers specific to HRA, studies from other types of preventive care can provide some insight. On the patient side, physicians' recommendations for preventive care are important: for example, in a study of colorectal cancer screening rates among Hispanic older adults, only 17% of charts noted a physician recommendation, but having a recommendation increased the odds of a patient being screened by 9.8 times (Lopez-Class et al., 2012). Another barrier is cost, as patients are often unaware that preventive services are covered without a copay or deductible (Reed et al., 2012). For providers, time constraints, reimbursement levels, and lack of awareness of updated recommendations for screenings and treatments can all play a role in setting practice priorities (Lavoie et al., 2017).

Looking specifically at the Medicare AWV, several studies in patients and providers have helped to identify factors that affect its use. Beneficiaries are more likely to receive the visit if

they are white, of higher income, live in an urban setting, have one or two comorbidities, and have used it in the previous year (Ganguli et al., 2017). As with preventive care in general, awareness and provider recommendation matter: in a survey within one practice, 61% of patients who had never received an AWV had never heard of the benefit, and 90% of those who had utilized it did so at the recommendation of their provider. On the provider side, barriers include complexities in billing and documentation and competing demands (Beran and Craft, 2015; Bluestein et al., 2017; Cuenca, 2012).

These difficulties are even more pronounced in FQHCs: for example, while Medicare requirements allow flexibility in which staff may administer AWVs in most practices (e.g., allowing unlicensed health educators to administer all screenings and review the care plan), policies for FQHCs and in rural health centers require that the visit include face-to-face time with a more limited range of practitioners (Centers for Medicare and Medicaid Services, 2016).

Several practices have published case studies of the implementation methods used to overcome the challenges of the AWV. In one study, the provider recommended the AWV and arranged a warm handoff to the practice care manager. The manager then scheduled the AWV as a component of the next clinic visit, before the patient's time with the doctor. This model more than doubled the number of AWVs that the practice performed from one year to the next from 153 to well over 300, and the care manager also reported improved rapport with patients in other types of follow-up as a result of these interactions (Bluestein et al., 2017). Another practice utilized a similar model, with nurses or medical assistants performing 30-minute AWVs prior to a 15-20 minute visit with the primary provider (Bern and Craft, 2015). This model of combining the AWV with a provider visit is common: in 2014, over 40% of AWVs had a

concurrently-billed problem-based visit (Ganguli et al., 2017). While these insights are useful, it is worth noting that none of the case studies noted above examined implementation in an FQHC.

This project addresses the above knowledge gap through a case study of a Medicare AWV pilot in an FQHC. On a local level, it also will better equip OneWorld to address the needs of its growing pool of older patients.

Methods

Research Questions

The specific research questions identified for this project are as follows:

(1) How was the AWV implemented at OneWorld Community Health Centers? What aspects of the process were effective, and what were the challenges, barriers, and lessons learned as identified by core team members?

(2) What patient findings emerged from implementation of these visits?

(3) What barriers to geriatric health risk assessment and management exist at the provider level in FQHCs? What are provider comfort levels in managing common geriatric conditions?

Theories and Models

As noted above, this study drew from the COPC approach in addressing its research questions. To review, the core principles of this model are responsibility for a defined community, care based on identified health needs, prioritization, interventions addressing the full health-illness continuum, and community involvement. The core tasks in this model are to (1) define and characterize a community, (2) prioritize needs, (3) perform detailed needs assessment,

(4) plan an intervention, (5) implement the intervention, and (6) evaluate outcomes (Gofin and Gofin, 2011).

Upon initiation, this project relied upon OneWorld's decades-long commitment and attention to its community. Based on their experience with the patient base, as well as their awareness of broader population trends, the organization's leadership had identified improving care for older patients as a priority and the Medicare AWV as a potential intervention. Thus, this project began at the stage of planning and implementation.

Pilot implementation allowed for progress to other steps in the COPC process. Accumulation of patient data permitted new detailed needs assessment. Application of plan-do-study-act (PDSA) cycles allowed for evaluation of this initial effort, creation of materials to better equip team members to perform the visit and address identified needs, and adjustment of the intervention for more streamlined implementation. All of this was undertaken in accordance with OneWorld's commitment to "culturally respectful, quality healthcare" and attention to the vulnerabilities of its patient population

Study Design and Data Collection

There were several components to this project: (1) an instrumental case study of Medicare AWV implementation, including review of PDSA cycles and semi-structured interviews with team members, (2) a review of the EHR to better characterize the patient needs identified during pilot implementation, and (3) a survey of FQHC providers across Nebraska, to further clarify what types of supports might facilitate broader use of the Medicare AWV.

Case study and semi-structured interviews

This project began with development of an AWV template by the study author and the health center's Chief Medical Officer. This included all required elements of the Medicare AWV as described by the Centers for Medicare and Medicaid Services (2017; e.g., vital signs, medication review, family and social history, a questionnaire-style health risk assessment, and a review of required screenings and vaccinations). The study team also decided to include additional items to improve the quality of geriatric assessment. Patients completed the Mini-Cog (Borson et al., 2000) or mini-mental status exam (Folstein et al., 1975) to assess for cognitive decline and the timed up and go (TUG) test (Podsiadlo and Richardson, 1991) to screen for fall risk, as well as assessments for nutritional risk and frailty (Saint Louis University, 2016).

Pilot implementation of the AWV began in May 2017. Patients recruited for this pilot were prioritized based on insurance plan, as one particular Medicare plan was concurrently offering incentives to the project site to encourage AWV completion. Clinic and project staff called patients to offer an appointment, and interested patients were scheduled. All patients were told that the visit was optional, and those who declined visits were removed from the list.

In May 2017, the primary pilot visit structure was a separate visit scheduled with the author (then a senior medical student) and one of the clinic's experienced registered nurses for completion of health risk assessment, followed by a separately-scheduled provider visit to review findings. This was attempted both in the traditional clinic setting and in the health center's urgent care clinic, where a physician's assistant was available to sign off on the AWV screening. After several weeks of visits, the author met with the health center's Chief Medical Officer to review outcomes and discuss possible adjustments.

In June 2017, another structure was attempted, in which the author completed screenings during preexisting clinic visits originally scheduled for other reasons. Several times per week the author would review the clinic schedule and identify patients who had the prioritized (or any other) Medicare plan, as well as older patients who were not on Medicare but might serve as good test cases for visit implementation. The author would then discuss with providers whether each patient might benefit from screening. Providers were also able to contact the author in clinic to refer a patient for health risk assessment. In these cases, the author administered screenings to the patient during the previously-scheduled clinic visit after the nurse or medical assistant had roomed the patient, then discussed screening results with the provider before he or she entered the room.

During the earliest visits, screenings were completed on paper forms and then scanned to the EHR. By mid-June, the visit template had been loaded to the EHR and responses were entered into the template electronically.

In fall 2017, clinic providers were encouraged to attempt AWVs with their regular clinic staff. In early 2018, the author met with the clinic's Chief Medical Officer and Director of Nursing to discuss identified barriers in implementation. A provider education session and materials for nursing were developed as a result of these conversations.

Following these sessions, the author met with individual providers and clinic staff to complete semi-structured interviews regarding the implementation process. Participants were identified based on recommendation of the Chief Medical Officer and Nursing Director. Participants were asked to identify (1) perceived benefits of AWVs, (2) their concerns regarding AWVs, (3) workflows that they thought would improve implementation of AWVs, and (4) resources that would assist with implementation of AWVs. All interviews took place with the

study author. Notes from responses were recorded by hand during the interviews, then transferred to a Microsoft Excel spreadsheet for later analysis.

Electronic health record review

During pilot implementation of AWVs, the author maintained a list of completed visits on OneWorld's secure server. In November 2017, an additional query of the EHR was submitted to identify visits that providers and clinic staff had completed throughout the fall without the author's assistance.

A Microsoft Excel spreadsheet was then created with selected data points from all AWVs. Fields included patient demographics (patient MRN, age, gender, race, ethnicity, preferred language, insurance status), AWV type (separate versus transitioned clinic visit), number of days since last visit at time of AWV, fall risk assessments (subjective report of falls and TUG test result), cognitive assessments (subjective report of forgetfulness and MiniCog or MMSE result), independence level for activities of daily living, and whether the AWV identified an overdue screening or vaccination that had gone unaddressed at the previous visit. This spreadsheet was created on OneWorld's server, then shared with the author via institutional email in de-identified form for final analysis.

Provider Survey

Study data were collected and managed using the REDCap electronic data capture tools hosted at the University of Nebraska Medical Center. Participants completed a survey that included questions about qualification (MD/DO, PA, advanced nursing, other) and frequency of visits with geriatric patients. Self-rated competency in identifying and managing fall risk,

cognitive decline, polypharmacy, and nutritional risk in older adults was assessed using a five-point Likert scale (very confident, mostly confident, somewhat confident, minimally confident, not confident). Providers were also asked to rate their familiarity with community resources for older adults and the Medicare AWV.

The survey was shared with a representative from the Health Center Association of Nebraska, who distributed it to leadership of all FQHCs in the state and requested that they forward it to their providers. A three-week deadline was given for completion, then extended by one week due to low response. A copy of the survey is included as Appendix B.

IRB and PHI Protection

All project components were reviewed with the University of Nebraska Medical Center Institutional Review Board. The project was defined as quality improvement, specifically needs assessment/program evaluation, and was therefore determined not to constitute human subjects research; thus, a full IRB was not submitted.

A data use agreement was drafted by the author and approved by administrators at OneWorld Community Health Centers. Data from chart review were compiled on OneWorld's secure server. Deidentified data were subsequently shared with the author via institutional email servers for analysis on the University of Nebraska Medical Center campus, with the understanding that a draft of the project would be shared with and approved by OneWorld leadership before any public presentation.

Study Population

Case study

Data collection for the case study included conversations with OneWorld's Chief Medical Officer, as well as semi-structured interviews with seven core staff members: three medical providers and four nursing/health assistant (HA) staff.

Initially, the Chief Medical Officer identified five providers based on their level of involvement in the pilot (one had created the EHR template; another had a significant number of patients complete visits), capacity as peer leaders, and ability to represent diverse clinic locations (two worked outside of the main campus at a satellite clinic). Ultimately, three of the five providers elected to participate. Two were leaders with high levels of involvement in implementation, and one was from a satellite clinic. The Chief Medical Officer and Director of Nursing also recommended a group of four nurses and HAs based on level of pilot involvement (one took part in some of the initial visits) and leadership roles within clinic. All of these individuals participated.

Electronic health record review

The chart review consisted of a convenience sample of those individuals who completed AWVs between May and December 2017. A total 71 visits were completed; 13 of these were excluded from final analysis because the patients were under age 65 and had qualified for Medicare for reasons besides age (e.g., chronic kidney disease), resulting in a final sample of 58 individuals.

Due to the practical considerations during recruitment for the pilot implementation (i.e., selective recruitment of individuals based on insurance plan, completion of AWV requirements

with patients who were already seeing their provider in clinic), the final sample likely consisted of individuals who were less vulnerable in terms of insurance status and visited the clinic more regularly than average. The sample consisted primarily of older adults who were on Medicare, and very few patients who were uninsured. Thus, it is representative of a particular subset of the clinic's older patients, but not of its geriatric patient pool as a whole.

Provider survey

The survey was open to all FQHC providers in Nebraska, but as the recruitment method relied on distribution by clinic leadership, it may be that some did not receive an invitation. The survey received 15 total responses, but three were from non-medical personnel (e.g., chief executive officer, licensed mental health practitioner) and were excluded from analysis. Of the 12 clinical respondents, five completed a printed version of the survey that omitted the multiple-choice options for several questions and included written-in responses. These five respondents were from the same health center. A tally of providers listed on individual FQHC websites suggests there are approximately 80 providers across Nebraska's eight FQHCs, and so it is likely that multiple health centers were not represented. While this sample did not adequately represent the target statewide population of FQHC providers or have sufficient power for full analysis, results were still analyzed for basic descriptive statistics.

Statistical and/or analytical methods

Case study and semi-structured interviews

Formal review consisted of a qualitative themes analysis of the seven semi-structured interviews. All responses were entered into a spreadsheet, and three core themes were identified:

(1) “opportunities,” which emphasized the potential role of the AWV in improving clinical care; (2) “streamlining,” which included concerns regarding the logistics of the visits and suggestions for improving workflow, and (3) “buy-in,” which included comments that noted potential skepticism from patients, providers, or clinic staff. Comments were sorted into these categories, and response patterns were further examined based on respondent type (provider versus nursing or HA).

Electronic health record review

Following compilation from the EHR, data were transferred into SPSS Statistics software on the University of Nebraska Medical Center server. Descriptive statistics were performed to characterize patient demographics and visit findings. The scale variable of age was converted to a nominal variable by specifying age ranges at 5-year intervals. A similar approach was utilized for the scale variable of time since last visit: patients were designated as having been seen within the preceding 30 days, 30-60 days ago, or more than 90 days ago. As there was only one black patient in the sample, non-Hispanic white and black patients were combined into one “non-Hispanic” group for analysis, with Hispanic as the complementary group.

Data were then analyzed for descriptive statistics (counts and frequencies) and chi-square tests of significance were performed, with Fisher’s exact test performed when any group contained less than five cases. A value of $p<0.05$ was defined as statistically significant.

Provider survey

Responses were analyzed in Microsoft Excel. This included basic descriptive statistics (counts and frequencies) of respondent characteristics (qualification, frequency of visits with

older adults), self-assessed confidence in managing geriatric conditions, and self-rated familiarity with community resources for older adults and the Medicare AWV.

Results

AWV Implementation

In its first defined research question, this study sought to examine how the Medicare AWV was implemented at OneWorld Community Health Centers, and to characterize challenges, barriers, and lessons learned. This was achieved through an instrumental case study of implementation, whose findings can be summarized as a series of PDSA cycles (Table 1).

Prior to conducting any visits, the author and Chief Medical Officer of the organization created a visit template. As noted above, the template included all Medicare requirements as well as items to allow for improved geriatric assessment. In early visits, the author assisted patients with completing the visits on paper templates. One of the health center's physicians programmed the template into the EHR, and the electronic form was utilized once available.

In the initial implementation and first PDSA cycle, recruited patients completed separate visits with the study author and a registered nurse. The team discovered a high no-show rate for these visits. Clinic staff tasked with scheduling the visits also noted confusion and skepticism from patients about the reason for the visit and a patient preference to be seen by their regular provider. Additionally, ongoing review of approaches to the AWV revealed a Medicare requirement specific to FQHCs that was previously unknown to the study team. While Medicare AWVs in most practice settings can be completed by almost any member of the healthcare team (e.g., community health workers), visits in FQHCs and rural health centers require face-to-face contact with a licensed provider.

As a result, the next PDSA cycle focused on integration of the AWV requirements into the regular clinic, with the author completing screening after the nurse or HA had roomed the patient but before the provider entered the room. This approach yielded successful health risk assessment with minimal disruption to clinic workflow but meant that the provider entered the room with competing priorities: the health risk assessment items and the patient's initial concerns in scheduling the visit. Another drawback to this model was that it depended upon the presence of an additional team member (the study author), which was not sustainable.

During this second cycle the study team also completed one pilot visit in the health center's urgent care center, where a physician's assistant was available for the face-to-face component. Like the first cycle, this approach was noted to be in potential conflict with patient-centered care, as it required an additional visit in a different location than the patient's usual appointments and did not prioritize time with the preferred provider.

Following this second cycle the study author met with the Chief Medical Officer and Nursing Director to discuss ways to equip clinic staff to complete the AWV without on-site assistance. At their request a brief presentation was created for an upcoming provider meeting, which reviewed visit requirements and instructions for the MiniCog and TUG tests, and a quick-reference sheet was created for use by nursing staff in clinic (Appendix C).

Table 1: PDSA Cycles in AWV Implementation

	Plan	**Do**	**Study**	**Act**
Cycle 1	Prepare visit template Recruit patients for visits	Separate AWVs in clinic with author and RN. Scheduled follow-up with provider.	• High no-show rate • Patients express preference for visits with provider • Awareness of previously-overlooked Medicare requirement for provider involvement in AWV in FQHCs	Attempt incorporation into clinic Attempt visits in urgent care
Cycle 2	Attendance at provider meeting Instruction sheets for providers, staff Review of upcoming clinic schedules	Visits in clinic with provider, author present Visit in urgent care, author present	• Some disruption to clinic flow • Provider enters room with competing priorities (original vs. identified) • Patient confused about visit structure during urgent care visit • Urgent care visit still required follow-up • Structure not sustainable without presence of student • AWV highly useful in identifying unaddressed needs • Add-on AWV screening takes 10-15 minutes	Reference sheets for clinic Prepare providers and clinic staff to perform visits independently
Cycle 3	Provider meeting Meeting with nursing leadership	Visits in clinic with provider, author not present	• Difficulty with template if not scheduled/checked in as AWV • Some team members still unsure of visit requirements • Visits tend to disrupt clinic schedule • Patient frustrated with length of transitioned visit • Providers unsure regarding follow up options for identified needs • Providers/staff unsure how to identify eligible patients	Adjust visit scheduling to include time with nursing before provider visit Better dissemination of reference sheets Updates to EHR capacities for clinical reminders, scheduling
Cycle 4	Semi-structured interviews and relevant follow up	Visits in clinic with provider, author not present	TBD	TBD

Semi-structured interviews

Comments recorded during these conversations were categorized based on three core themes (opportunities, streamlining, and buy-in). Results are summarized in Table 2. Comments that expressed a concern about performing AWVs or that offered feedback and suggestions were also integrated into a process map (Appendix D).

Regarding opportunities, both providers and nursing/HA staff noted the utility of the AWV for identifying health risks, particularly those that would otherwise be overlooked. Providers acknowledged the tendency to miss certain health risks in the average visit, and commented that the AWV helps them to fill in those gaps:

> *It's hard for the kinds of things in the AWV to rise to the top of the agenda and get on the stage.*
>
> *We catch some things with (*our EHR's*) reminders, but focused time lets us find the gaps that we would otherwise just space off.*

They also appreciated the style of the visit. Providers noted the difference between "hitting reminders versus taking time to talk," and the "focus on function, frailty, and healthcare maintenance opportunities." One nurse mentioned the opportunity to "identify risks like fall risk or the beginning stages of dementia." She went on to note, "We don't do things like that in the regular visit." In addition to clinical quality, two interviewees also recognized the visits as a way to support the priorities of the organization. For example, even though the benefit does not cover uninsured patients, one respondent noted that they "can do more visits for uninsured patients" with the reimbursements. One respondent called the AWV "a way to expand the mission and improve care."

More concerns arose in the "streamlining" category. Two nursing/HA staff voiced concerns about "clinic getting behind" or "falling behind in clinic." Respondents had some suggestions to

avoid this, including making sure AWVs were "not scheduled back to back" and "not the first of the day." One respondent opined that the AWV would likely not fit in the time slot of a normal visit, noting "15-20 minutes is not enough, especially to observe cognitive symptoms," and another was concerned that "If the MA gets most of the time in the room and does lots of things, the patient might get less time with the provider." Two respondents recommended scheduling a nursing visit or HA visit ("like a nursing triage visit") before the provider visit to ensure adequate time.

Two respondents specifically requested an "algorithm"-type resource for clinic, both to help with the visit workflow and with "next steps for positive findings." Two identified a need for more staff training ("Staff needs to be trained more"). One provider explained,

> *I should be able to say (*we need an*) Annual Wellness Visit, and someone else goes in; then the care plan is tasked to me and I give my blessing.*

Two providers identified a "need to cleanly define what is the mechanism for transitioning from a regular visit" as a particularly difficult workflow. Others were concerned with care following the AWV. One respondent suggested "an interdisciplinary team approach to the aging population," with nursing, pharmacy, physician, behavioral health, and social work. Another simply asked, "What are the resources?"

The last recurring theme was a need for buy-in from patients, their families, staff, and providers. Regarding patients, respondents were concerned that they "lack understanding of the purpose" of the visits, or that the visits were "not important to the patient." One provider explained:

> *Patients often come in with a sick or chronic disease mindset and not 'I'm here for…quality of life'*

A nurse commented that the patients "aren't used to this" and "need to know what this is about." Another stated that on one occasion when she was completing an AWV the patient "got up and left because he was frustrated with the length." Another nurse was concerned that patients might not have enough family support following the visits, stating, "Family might think mom and dad are just getting old and crabby."

Buy-in among health center employees was also a concern. One respondent noted that the burden was on their side – "the provider needs to take initiative." Another staff member stated,

*We need to make sure (*the staff*) know 'Why are we doing this?' It's for the patients.*

Another noted the need for "provider and nursing champions."

Overall, there were few and minor differences in provider and nurse/HA response patterns. Comments about benefits or opportunities were similar, as were comments regarding the need for increased understanding and buy-in from both patients and staff. Regarding streamlining, both expressed need for an algorithm-type resource, list of eligible patients, increased training, and incorporation of resources into the EHR. Nurses and HAs were more likely to express concern about clinic falling behind or the length of the AWV requirements (all comments in this area were from clinic staff rather than providers). Providers were more likely to express concerns about follow-up after the visit (2 out of 3 providers versus 1 out of 4 nurses/HA respondents).

Table 2: Qualitative Themes Analysis – Team Member Perspectives on the AWV

Opportunities	
Increase visit numbers Reimbursable visit/ Fund visits for uninsured Expand clinic mission "Chance to talk" "Attention to patient" "Perspective on patient views"	Identify missed or overlooked items (x2) Identify health risks early/preventive mindset (x2) Includes items not included in regular visit Strengthen relationship with provider Opportunity for nursing to do assessment
Streamlining	
May take >15-20 minutes (x2) Questionnaire long (x2) Clinic may fall behind (x2) Patient may have less time with provider if HA in room longer Generate list of patients who need it Have questions on laminated sheets Place questions in clinic and on hard drives "Algorithm" (x2) Better display of AWVs in schedule EHR template is helpful More detailed care plan (x2) More resources for positive findings Would like quick text *(point and click versions of frequently-used treatments or referrals)* built into care plan	Staff need more training (x2) Don't schedule back to back Don't schedule as first of the day Prepare before the visit (call patient ahead) Need better mechanism for transition from regular visit (x2) Try scheduling nursing/HA visit before provider (x2) Difficulty with pharmacological assessment Interdisciplinary team approach in follow-up of complex cases
Buy-in	
Patient frustration with length Visit not a priority for the patient (x2) Patients don't understand reason for visit (x3) Need to involve family – may not be present	Need for provider to take initiative Need more support from providers and staff Need "champions" from providers and nursing

Patient Needs Assessment

The second research question for this project pertained to the patient findings that emerged from pilot implementation of the AWV. Overall, results from the chart review suggested that the AWV was successful in identifying needs that providers had not previously addressed.

Demographic characteristics of patients who completed AWV screenings are summarized in Appendix E. The final analyzed sample consisted of 58 participants, with an average age of 71.4 years. Sixty percent of patients were female, and 77.6% were Hispanic. Most patients (60.3%) were on Medicare only, while 27.6% were enrolled in both Medicare and Medicaid. The average interval between the AWV and the previous visit was 91.9 days.

Patient findings from pilot implementation of the AWV are summarized in Table 3. The clear majority of visits (89.7%) identified a patient need in at least one of the examined domains (fall risk, cognitive decline, functional status, USPSTF recommendations), and screening in each of these domains showed previously unidentified findings in at least one-quarter of patients. The most common issue was overdue vaccinations, with 41 patients (70.7%) overdue for at least one immunization. The most common were Tdap (32 patients), zoster (30 patients), and vaccinations in the pneumonia series (18 patients). Twenty-four patients (41.4%) were overdue for a recommended screening, most often a DEXA bone scan (14 women). Non-diabetic screening A1c tests (9 patients) and mammograms (3 patients) followed.

In the domain of cognitive screening, 34.5% of patients reported subjective forgetfulness, and 27.6% screened positive for cognitive loss on the MiniCog. Thirty-one percent of patients had fallen in the past year, and four patients (6.9%) had fallen four or more times. Seventeen patients (29.3%) screened positive for fall risk on the TUG test. Most patients (65.5%) remained

functionally independent, though 31% were dependent in at least one instrumental activity of daily living and two patients were dependent in both ADLs and IADLs.

Table 3: Summary of Patient Needs Assessment (n=58)

		Frequency	Percent
General	**Overall Visit Result**		
	1 or more positive findings	52	89.7
	No positive findings	6	10.3
Cognition	**Subjective**		
	Reports forgetfulness	20	34.5
	Denies forgetfulness	38	65.5
	Cognitive Screening (n=57)		
	Positive	16	27.6
	Borderline	12	20.7
	Normal	29	50.0
Fall Risk	**Falls in Past Year**		
	None	40	69.0
	1-3	14	24.1
	4 or more	4	6.9
	Timed Up and Go Test Result (n=57)		
	Positive (prolonged)	17	29.8
	Normal	40	70.2
Functional Status	**Dependence in Activities of Daily Living**		
	Dependence in both ADLs and IADLs	2	3.4
	Dependence in IADLs only	18	31.0
	Completely Independent	38	65.5
Preventive Healthcare	**Screenings (missing one or more)** *DEXA (14), Screening A1c (9), Mammogram (3), Colorectal (2)*	24	41.4
	Vaccinations (missing one or more) *Tdap (32), Zoster (30), PNA (18)*	41	70.7

Chi-square analyses of health risk assessment results by age, ethnicity, and gender were largely insignificant; however, there was a statistically significant association ($p<0.05$) between age and TUG result, such that older adults were more likely to screen positive for fall risk, and

between gender and functional status, such that women were more likely to note dependence in an ADL or IADL.

It is worth noting, however, that additional trends were visible that might still be of clinical significance. For example, older adults appeared to be more likely to have fallen in the past year (41.7% of adults over 75 years of age, versus 28% of those aged 65-70 or 70-75). Hispanic patients appeared more likely to be dependent in ADLS or IADLs than non-Hispanic patients (37.8% versus 21%) and more likely to screen positive for cognitive loss on the MiniCog (31.8% of Hispanic patients versus 15.4% of non-Hispanic patients) or to report subjective forgetfulness (37.8% versus 23.1%). Interestingly, a higher percentage Hispanic patients screened positive on the TUG test (35.6% versus 7.7%), but Hispanic patients were less likely to have fallen in the past year (28.9% versus 38.5%). Neither of these associations reached statistical significance.

Of note, there was no association (statistical or apparent) between length of time since previous visit and likelihood of being up to date on screenings and vaccinations. Complete tables for statistical analyses are included in Appendix F.

FQHC Provider Survey

In the final sample, 15 individuals completed the survey including seven physicians, two physician's assistants, three advanced-degree nurses, and 3 non-clinical respondents. The non-clinical respondents were excluded from analysis. Of the 12 clinical respondents, eight (66.7%) stated that they typically saw more than one older patient per day.

In self-assessment, providers were most confident in identifying patients at risk for falls and polypharmacy, with 91.7% identifying themselves as "mostly confident" or "very confident" in these two areas. Self-assessed confidence in identifying patients at risk for cognitive loss (50%

of providers very- or mostly confident) or nutritional deficits (41.7% of providers very- or mostly confident) was markedly lower.

Confidence in managing health risks was more consistent across conditions. For fall risk and nutritional deficits, 75% of providers rated themselves as either very- or mostly confident, compared to 67% of providers for polypharmacy and 50% of providers for cognitive loss. Potentially of note, all three nursing providers rated themselves as only "somewhat confident" in managing cognitive loss, and two of three assigned this self-rating for management of fall risk and polypharmacy.

Regarding their knowledge of community resources, most providers (58%) agreed or strongly agreed that their knowledge was adequate, while 25% did not feel their knowledge was adequate. Of the 12 clinical respondents, five had performed a Medicare AWV.

Ratings of self-assessed confidence in recognizing and managing health conditions are illustrated in Figure 1. Complete survey results are summarized in Appendix G.

Figure 1: FQHC Provider Confidence in Recognizing and Managing Risks in Older Adults

Figure 1a. "How confident are you in your ability to RECOGNIZE older patients at risk for each of the following?"

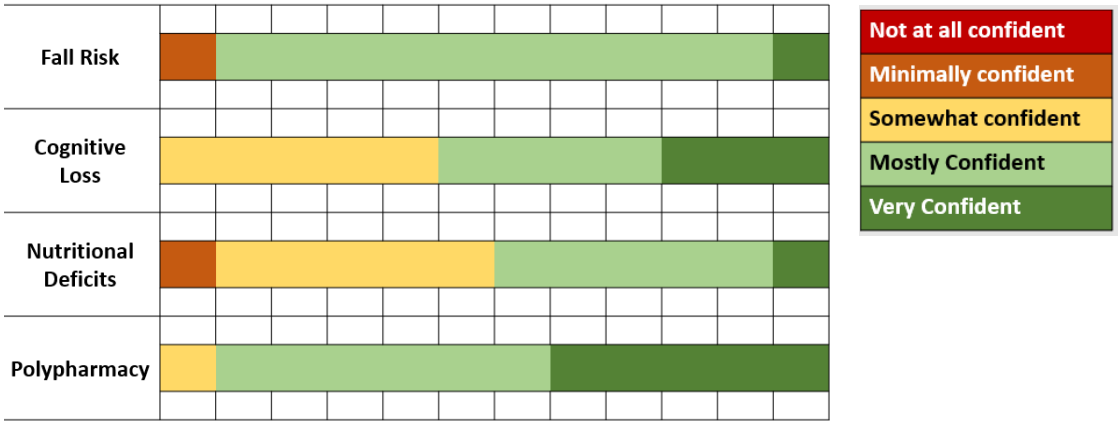
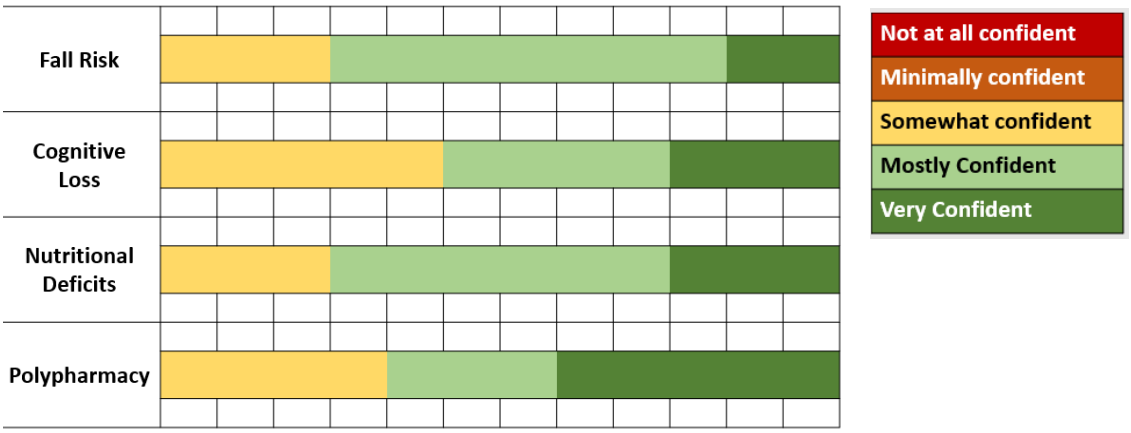


Figure 1, continued

Figure 1b: "How confident are you in your ability to MANAGE each of the following in older patients?"



Discussion and Recommendations

The purpose of this project was to identify opportunities for quality improvement in the care of geriatric patients at OneWorld and in other FQHCs. Specifically, it examined implementation of the Medicare Annual Wellness Visit (AWV) and sought to better characterize the needs of OneWorld's patients.

Insights on Health Risk Assessment

This pilot implementation represents one potential approach to use of the Medicare AWV in a FQHC. To the author's knowledge, there are currently no published case studies of the Medicare AWV in this setting. Insights from PDSA cycles and semi-structured interviews with clinic staff may help other health centers to anticipate challenges in implementing these visits, and may offer possible solutions.

Utility of implementation

Use of the AWV allowed for health risk assessment of 71 patients from May to December 2017. We chose to create a template that went above and beyond the minimum requirements of the Medicare AWV, by including brief tests of cognition and fall risk as well as assessments for nutritional deficits and frailty. The vast majority of these visits identified needs that the provider had not previously addressed. Regarding this point, it is important to emphasize that OneWorld is an extremely high-performing health center with excellent scores in clinical quality measures; it would be reasonable to expect that similar screenings in another FQHC would identify even higher rates of undiscovered or untreated health risks.

In semi-structured interviews, team members identified other positive aspects of these visits in addition to these improvements in clinical quality, such as strengthening of the provider/patient relationship and increased resources for the clinic due to generous reimbursement. While the provider survey had low response, it is worthwhile to note that most clinical respondents endorsed seeing an average of more than one patient aged 65 or older per day. This speaks to the growing presence of older adult patients in FQHCs and the importance of adequately preparing providers to care for this population.

Overall, there is strong evidence that implementation of these visits is worthwhile.

Implementation factors

However, this study also revealed potential pitfalls in implementation. The Medicare AWV has multiple requirements, including visit criteria specific to FQHCs. Providers working in this care setting must note that they are required to have a face-to-face interaction with the patient during an AWV.

Ensuring that all team members understood the visit elements and were comfortable in their roles was one of the most difficult challenges in PDSA cycles. One particularly useful factor was use of the EHR, with the caveat that implementing an electronic template creates additional training requirements (e.g., in this case patients needed to be scheduled and checked in through a particular process for the visit template to appear). However, the EHR proved useful not only as a template but as a resource for notifying providers that patients were eligible for visits. We utilized the EHR to program a clinical reminder that alerted providers when patients were due for an AWV. In other settings, use of electronic records or other existing workflows is likely to streamline implementation.

Another useful point regarding AWV implementation is that multiple visit structures are acceptable. Patients may complete the health screenings with their provider or with another team member as long as the provider discusses the care plan with the patient afterwards. They also may complete screenings on or before the day of the billed AWV or combine the AWV with a concurrently-billed problem-based visit. This creates an opportunity for individual clinics to develop visit structures that work best for them, with the caveat that creating too many separate workflows may cause confusion. In this case, we discovered that completing the AWV questionnaire and the additional screenings included for quality took 10-15 minutes on top of the regular check-in activities (vitals, medication reconciliation, review of family history and problem list).

Another implementation factor in this case study was the creation of resources for providers and clinic staff. These included algorithm-style workflows for the clinic, as well as a toolkit that providers could reference in making care plans for patients. The toolkit consisted of brief summaries of best practices recommendations for key geriatric health issues, as well as a list of

high-quality community resources for older adults. It is worthwhile to note that in the provider survey, most respondents had never completed an AWV. Respondents also had variable levels of confidence in recognizing and managing health risks, and 25% denied adequate familiarity with community resources for older adults. With this in mind, resources similar to those used in this implementation process would likely be helpful in streamlining implementation in other FQHCs, as well.

Patient factors

The AWV addresses health needs in older adults, a growing patient demographic. In semi-structured interviews, one respondent noted the importance of being sympathetic to the expectations and values of this group. She noted that they tend to expect to see their personal provider, and that they tend to have complex problems that require support from their families and/or communities. In implementation, we also discovered the importance of explaining the reasons for this visit to the patient; phone recruitment of patients was much less successful than arranging for visits in clinic based on the provider's recommendation.

Based on this study's EHR review, it appears that certain individual factors may also affect health risk. For example, women were more significantly likely than men to endorse dependence in an ADL or IADL. It is unclear whether this reflects true functional dependence or the level of support that the individual receives from the family. A similar but weaker trend ($p>0.05$) appeared among Hispanic participants, though in this case language may also have interfered with independence in IADLs. Language may also have been a factor in cognitive screening, as Hispanic patients appeared more likely to have positive screens on the MiniCog. While this test is designed for patients with low literacy, it may be that increased use of digital clocks will make

it progressively more difficult in coming years. Finally, this ethnic group also showed weak trends toward increased fall risk based on the TUG test, but with decreased incidence of falls in the past year. Again, it may be that stronger family support or some other factor mitigates risk among otherwise fall-prone elders.

Overall, this study demonstrated that among OneWorld's older patients (even those with more favorable status in terms of insurance) tended to have unidentified health risks and stood to benefit from additional health risk assessment. While it is important to note that this sample consisted primarily of insured patients and therefore did not reflect the clinic's aging population as a whole, the workflows put in place for screening will be available to benefit uninsured patients. In addition, as several team members noted, reimbursements for billed AWVs can also be used to support care for the uninsured.

Recommendations and Policy Analysis

In demonstrating the utility of the AWV, this project provides support for ongoing funding of this benefit. Tests of different pilot workflows suggested that incorporation of the AWV into a provider visit was the most feasible option for patients. As workflow becomes more streamlined, ongoing case studies could further examine the use of the AWV at OneWorld, as well as the treatment outcomes of those patients whose needs were identified through this visit.

Another opportunity for further research concerns the application of COPC. This project was a pilot program in an FQHC. Rather than soliciting input from all members of the community, it relied on core team members' knowledge and longstanding relationships with their patient population to create a tool that could meet the community's needs using the resources available. One definition of COPC emphasizes "progressive participation of the community" (Gofin and

Gofin, 2011). Now that an initial workflow for the AWV is in place, there is an opportunity to solicit community input and add in supports that will improve providers' capacity to address identified health needs – for example, by identifying community partners that support elders and their families. Future projects could also examine attitudes towards aging in OneWorld's service area, and use that data to inform clinic providers' approaches to care of older adults.

Conclusions

This study provides evidence supporting the utility of the Medicare AWV for geriatric health risk assessment in FQHCs. Even though the sample consisted of individuals who were arguably less vulnerable than OneWorld's average patient in terms of insurance status, and even though the pilot took place in a particularly high-performing health center, these visits still identified a significant number of health risks that had previously gone unaddressed. Individual patient factors including age, ethnicity, and gender appeared to have little impact on screening outcomes, further suggesting that these visits have broad utility.

The project also provides insights for implementation of the Medicare AWV in other FQHCs, a topic currently underrepresented in the literature. It applies a health risk assessment with broad support and utility in a healthcare model that serves communities nationwide, and the items addressed are of particular relevance due to the growth of the geriatric population. Future research could expand upon this project at or beyond the local level, either by following the progressive quality improvement in geriatric care at OneWorld or by expanding implementation efforts to other FQHCs.

References

Administration on Aging. (2016). Aging statistics. Retrieved from https://aoa.acl.gov/Aging_Statistics/index.aspx

Alzheimer's Association. (2016). Alzheimer's disease facts and figures. Alzheimer's and Dementia, 12(4):405–509.

American Geriatrics Society. (2016). Policy priorities. Retrieved from http://www.americangeriatrics.org/files/documents/PP_Priorities_2016.pdf

Bardach, S. H., & Rowles, G. D. (2012). Geriatric education in the health professions: Are we making progress? The Gerontologist, 52(5), 607-618. doi:10.1093/geront/gns006

Beran, M. S., & Craft, C. (2015). Medicare annual wellness visits. Understanding the patient and physician perspective. Minnesota Medicine, 98(3), 38-41.

Bluestein, D., Diduk-Smith, R., Jordan, L., Persaud, K., & Hughes, T. (2017). Medicare annual wellness visits: How to get patients and physicians on board. Family Practice Management, 24(2), 12-16. doi:d13015

Borson, S., Scanlan, J., Brush, M., Vitaliano, P., Dokmak, A. (2000). The mini-cog: A cognitive 'vital signs' measure for dementia screening in the elderly. International Journal of Geriatric Psychiatry, 15(11):1021-7.

Bureau of Primary Health Care. (2017). Uniform data system (UDS) mapper tool. Retrieved from https://www.udsmapper.org/index.cfm?

Centers for Disease Control and Prevention (2017). Older adult falls. Retrieved from https://www.cdc.gov/homeandrecreationalsafety/falls/index.html

Centers for Medicare and Medicaid Services. (2016). Specific payment codes for the federally qualified health center prospective payment system (FQHC PPS). Retrieved from https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/FQHCPPS/Downloads/FQHC-PPS-Specific-Payment-Codes.pdf

Centers for Medicare and Medicaid Services. (2017). The ABCs of the Annual Wellness Visit. Medicare Learning Network. Retrieved from https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/AWV_Chart_ICN905706 .pdf

Chang, C. H., Lewis, V. A., Meara, E., Lurie, J. D., & Bynum, J. P. (2016). Characteristics and service use of Medicare beneficiaries using federally qualified health centers. Medical Care, 54(8), 804-809. doi:10.1097/MLR.0000000000000564

Cuenca, A. E. (2012). Making Medicare annual wellness visits work in practice. Family Practice Management, 19(5), 11-16. doi:d10363

Epstein, A. J. (2001). The role of public clinics in preventable hospitalizations among vulnerable populations. Health Services Research, 36(2), 405-420.

Falik, M., Needleman, J., Wells, B. L., & Korb, J. (2001). Ambulatory care sensitive hospitalizations and emergency visits: Experiences of Medicaid patients using federally qualified health centers. Medical Care, 39(6), 551-561.

Folstein, M.F., Folstein, S.E.; McHugh, P.R. (1975). ""Mini-mental status". A practical method for grading the cognitive state of patients for the clinician". Journal of Psychiatric Research, 12(3): 189–98. doi:10.1016/0022-3956(75)90026-6

Ganguli, I., Souza, J., McWilliams, J. M., & Mehrotra, A. (2017). Trends in use of the US Medicare annual wellness visit, 2011-2014. Jama, doi:10.1001/jama.2017.4342

Gofin, J., & Gofin, R. (2011). Essentials of global community health. Sudbury, MA: Jones and Bartlett.

Goldman, L. E., Chu, P. W., Tran, H., Romano, M. J., & Stafford, R. S. (2012). Federally qualified health centers and private practice performance on ambulatory care measures. American Journal of Preventive Medicine, 43(2), 142-149. doi:10.1016/j.amepre.2012.02.033

Health Resources and Services Administration. (2017). 2016 Health Center Profile: OneWorld Community Health Centers. Retrieved from https://bphc.hrsa.gov/uds/datacenter.aspx?q=d&bid= 076290&state=NE

Hebert, L.E., Weuve, J., Scherr, P.A., & Evans, D.A. Alzheimer's disease in the United States (2010–2050) estimated using the 2010 Census. Neurology,75:786–791.

Lavoie, K. L., Rash, J. A., & Campbell, T. S. (2017). Changing provider behavior in the context of chronic disease management: Focus on clinical inertia. Annual Review of Pharmacology and Toxicology, 57, 263-283. doi:10.1146/annurev-pharmtox-010716-104952

Lopez-Class, M., Luta, G., Noone, A. M., Canar, J., Selksy, C., Huerta, E., & Mandelblatt, J. (2012). Patient and provider factors associated with colorectal cancer screening in safety net clinics serving low-income, urban immigrant Latinos. Journal of Health Care for the Poor and Underserved, 23(3), 1011-1019. doi:10.1353/hpu.2012.0109

Martinson, K., & O'Brien, C. (2015). Conducting case studies. In K. E. Newcomer, H. P. Hatry & J. S. Wholey (Eds.), Handbook of practical program evaluation (Fourth ed., pp. 177-196). Hoboken, NJ: Jossey-Bass.

Mullan, F., & Epstein, L. (2002). Community-Oriented Primary Care: New Relevance in a Changing World. *American Journal of Public Health*, *92*(11), 1748–1755.

Nagykaldi, Z. J., Dave, A., Kristof, C. J., Watts, T. N., Utpala, S., & Wickersham, E. (2017). Improving patient-clinician conversations during annual wellness visits. Journal of the American Board of Family Medicine: JABFM, 30(2), 161-169. doi:10.3122/jabfm.2017.02.160229

National Center for Health Statistics (2016). Deaths: Final data for 2013. National Vital Statistics Reports, 64(2). Retrieved from: https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf

Office of Disease Prevention and Health Promotion. (2017). Healthy people 2020 topics and objectives. Retrieved from https://www.healthypeople.gov/2020/topics-objectives

Podsiadlo, D., and Richardson, S. (1991). The timed "up and go": a test of basic functional mobility for frail elderly persons. Journal of the American Geriatrics Society, 14(2)142-148.

Probst, J. C., Laditka, J. N., & Laditka, S. B. (2009). Association between community health center and rural health clinic presence and county-level hospitalization rates for ambulatory care sensitive conditions: An analysis across eight US states. BMC Health Services Research, 9, 134-6963-9-134. doi:10.1186/1472-6963-9-134

Professional Research Consultants. (2015). 2015 Community Health Needs Assessment: Douglas, Sarpy, and Cass counties, Nebraska; Pottawattamie County, Iowa. Retrieved from http://www.douglascohealth.org/content/sites/douglas/2015_PRC_CHNA_Report_-_Omaha_Metro_Area_Douglas_Sarpy_Cass__Pottawattamie_Counties.pdf

Reed, M. E., Graetz, I., Fung, V., Newhouse, J. P., & Hsu, J. (2012). In consumer-directed health plans, a majority of patients were unaware of free or low-cost preventive care. Health Affairs (Project Hope), 31(12), 2641-2648. doi:10.1377/hlthaff.2012.0059

Rust, G., Baltrus, P., Ye, J., Daniels, E., Quarshie, A., Boumbulian, P., & Strothers, H. (2009). Presence of a community health center and uninsured emergency department visit rates in rural counties. The Journal of Rural Health: Official Journal of the American Rural Health Association and the National Rural Health Care Association, 25(1), 8-16. doi:10.1111/j.1748-0361.2009.00193.x

Saint Louis University (2016). Rapid Geriatric Assessment. Retrieved from: https://www.slu.edu/medicine/internal-medicine/geriatric-medicine/aging-sucessfully/pdfs/rapid-geriatric-assessment.pdf

Samra, R., Griffiths, A., Cox, T., Conroy, S., Gordon, A., & Gladman, J. R. (2015). Medical students' and doctors' attitudes towards older patients and their care in hospital settings: A conceptualisation. Age and Ageing, 44(5), 776-783. doi:10.1093/ageing/afv082

Stuck, A. E., Moser, A., Morf, U., Wirz, U., Wyser, J., Gillmann, G., . . . Egger, M. (2015). Effect of health risk assessment and counselling on health behaviour and survival in older people: A pragmatic randomised trial. PLoS Medicine, 12(10), e1001889. doi:10.1371/journal.pmed.1001889

Timbie, J. W., Hussey, P. S., Setodji, C. M., Kress, A., Malsberger, R., Lavelle, T. A., . . . Kahn, K. L. (2017). Association between patient-centered medical home capabilities and outcomes for Medicare beneficiaries seeking care from federally qualified health centers. Journal of General Internal Medicine, doi:10.1007/s11606-017-4078-y

United States Census Bureau. (2017). American fact finder. Retrieved from https://www.census.gov/

Wright, B., Potter, A. J., & Trivedi, A. (2015). Federally qualified health center use among dual eligibles: Rates of hospitalizations and emergency department visits. Health Affairs (Project Hope), 34(7), 1147-1155. doi:10.1377/hlthaff.2014.0823

Wright, B., Potter, A. J., & Trivedi, A. N. (2017). Use of federally qualified health centers and potentially preventable hospital utilization among older Medicare Medicaid enrollees. The Journal of Ambulatory Care Management, 40(2), 139-149. doi:10.1097/JAC.0000000000000158

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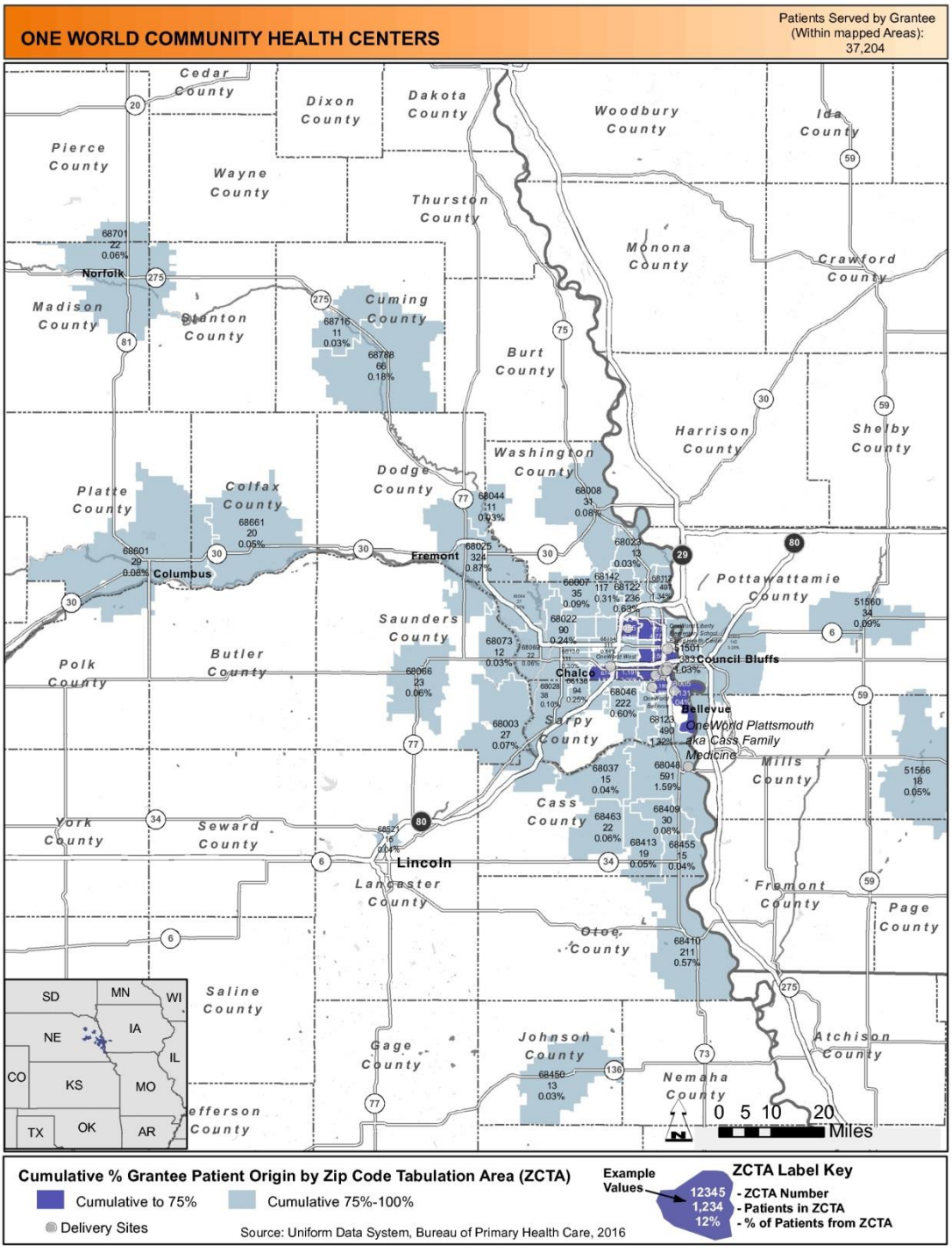
Appendices

Appendix A: OneWorld Community Health Centers, 75% and 100% Service Areas



Appendix B: Provider Survey

Confidential

Geriatrics Self-Assessment for FQHC Providers

The purpose of this survey is to assess FQHC provider comfort levels and education needs in the area of geriatric care. Data will be analyzed and presented by Nora Kovar, MD/MPH candidate at the University of Nebraska Medical Center in conjunction with an academic capstone experience and utilized by the Health Center Association of Nebraska for the purposes of quality improvement.

Please complete the survey below.

Thank you!

1) What is your qualification?
- ◯ MD/DO
- ◯ Physician's Assistant
- ◯ Advanced Nursing (e.g., NP, APRN)
- ◯ Other

2) In an average week, how many patients do you see who are aged 65 and older?
- ◯ None
- ◯ Less than one per day
- ◯ About one per day
- ◯ More than one per day

How confident are you in your ability to RECOGNIZE older patients at risk for each of the following?

		Not at all	Minimally	Somewhat	Mostly	Very
3)	Falls	◯	◯	◯	◯	◯
4)	Memory loss/cognitive decline	◯	◯	◯	◯	◯
5)	Nutritional deficits	◯	◯	◯	◯	◯
6)	Polypharmacy	◯	◯	◯	◯	◯

How confident are you in your ability to MANAGE each of the following in older patients?

		Not at all	Minimally	Somewhat	Mostly	Very
7)	Falls	◯	◯	◯	◯	◯
8)	Memory loss/cognitive decline	◯	◯	◯	◯	◯
9)	Nutritional deficits	◯	◯	◯	◯	◯
10)	Polypharmacy	◯	◯	◯	◯	◯

11) I have adequate knowledge of community resources for older adults.
◯ Strongly disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly agree

12) Please select the option that best reflects your level of familiarity with Medicare's Annual Wellness Visit benefit.
- ◯ I am unfamiliar with this benefit
- ◯ I am familiar with this benefit but have not been able to apply it in my practice
- ◯ I have utilized this benefit with an older patient ◯ Using this benefit is a regular part of my practice with older patients

13) Additional comments, questions, or suggestions regarding care for older patients in Federally Qualified Health Centers
_____

Appendix C: Quick Reference Sheet for Nursing, side 1

Medicare Annual Wellness Visits – Clinic Workflow

Before you room the patient…

Confirm with provider:
Complete the optional geriatric assessment and MiniCog reminders?

Confirm in EHR:
In top left corner, check visit type set to "Medicare Wellness Visit"

This is the most important step!

It ensures you are using the right questionnaire and brings up the reminders.

In passing the patient…

Take Vitals
Please include a standing BP

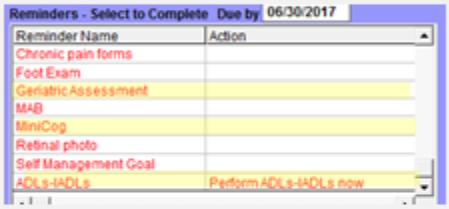
Review Full Questionnaire
Please do this IN PERSON
(certain answers will trigger drop-downs)

Annual Wellness Visit Reminders

ADLs-IADLS	**REQUIRED**
MiniCog	Optional
Geriatric Assessment	Optional

Review Family History and Medications

Check Screenings and Vaccinations



See "quick reference" sheet for :

- *Reminder of screenings and vaccinations*
- *Instructions for MiniCog*
- *Instructions for Get up and Go Test*
  (part of the Geriatric Assessment reminder item)

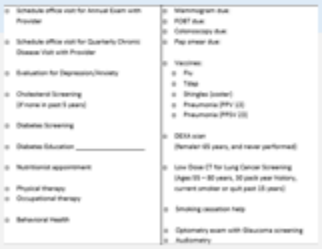
Handoff to Provider

Visit Wrap-Up

Make sure patient has arrangements with support staff (e.g., behavioral health, patient support, pharmacy)

Get care plan from provider

Give care plan to patient



Care Plan Checklist

Appendix C (continued): Quick Reference Sheet for Nursing, side 2

Medicare Annual Wellness Visits – Quick References

Screenings and Immunizations

Cancer Screenings

Mammogram	Every 2 years, women over 50 years old
Colon Cancer	Colonoscopy every 10 years (preferred) OR FOBT cards every year until 76 years old
Pap Smear	Every 3 years until age 65, ONE TIME after age 65 only if NEVER before then
Lung Cancer	Chest CT if aged 55-80 with 30-pack year history AND quit within last 15 years

Other Screenings

Diabetes	Non-diabetic: A1c every 3 years Diabetic: Retinal photo and microalbumin annually
Osteoporosis	DEXA scan, one time for women 10 years after menopause
Weight Management	BMI goal <25 for patients <65 years BMI goal <30 for patients >65 years
Cholesterol	Every 5 years

Immunizations

Influenza	Annually
Tdap	Tetanus shot every 10 years. At least once this should be a Tdap
Zoster	One time, >60 years. (Insurance coverage is different for this vaccine. Check with insurance about a copay or deductible before you provide it.

Pneumonia	
Lower-Risk Patient	Give PCV13 if > 65 Give PPSV23 one year later
Higher-Risk Patient: • **CHF** • **Diabetes** • **COPD or Asthma** • **Smoker** • **Immunocompromised**	PCV13: if >65 or immunocompromised PPSV23: at diagnosis, then booster at 5 years

Mini-Cog (Note: This appears as a SEPARATE to-do item)

I am going to say three words. Please repeat them and remember them for later. Apple, sunrise, chair.
(Patient repeats words)

Now draw a clock. Start with the circle and put on the numbers.
(Patient draws)
Put the time at 11:10
(Patient draws)

Do you remember the three words?

Fill out the reminder item. The EHR will score the task.
If patient has difficulty due to literacy, fill out the score sheet as best you can.
BH can always see the patient for more detailed screening if needed.

Timed Up and Go Test (Note: Record in last question of the Geriatric Assessment reminder)

Start with patient seated in a chair.
Time them as they stand, walk 10 feet, return to chair, sit down again.
>12s indicates increased fall risk

Appendix D1: Process Map of AWV (visit originally scheduled as AWV)

	Scheduling	Screening (nurse/HA)	Provider sees Patient	Care plan and referrals	Patient care at home	Follow up visit
Potential Pitfalls	Not a patient priority Providers unaware who is due	Need clearer algorithm Clinic may get behind	Not enough time to address all needs after screening	Providers may be unsure of next steps for some needs	Patients might not follow through Need for family support	Might not be scheduled Patient might no-show
Potential Solutions	Clinical reminders in EHR Ability to generate report of eligible patients Provider asks patient to schedule and explains importance	Reference sheet created for staff Provider and staff review schedule in AM Schedule nursing/HA time ahead of provider visit	Schedule follow up visit to review needs identified by AWV screening	Reference sheet created for providers Updates to care plan template in EHR	Calls to complex patients Review care plan at follow up Interdisciplinary support (e.g., behavioral health, social work, pharmacy)	Schedule before departure from AWV Reminder call with offer of transportation

Appendix D2: Process Map of AWV (visit originally scheduled for other reason)

	Screening	Provider sees patient		*Care plan and referrals*	*Patient care at home*	*Follow up visit*
Potential Pitfalls	Clinic may get behind Patient more likely to be frustrated with length of screening if not anticipated	**On that day** Provider may have moved on to another patient	**At future date** Patient may miss follow-up Patient or provider may forget purpose of follow-up	*Later stages identical to other workflow – see D1*		
Potential Solutions	Coordinate shared responsibilities with other clinic staff Option to schedule for a later date	Option to complete screening one day and care plan/provider visit on another	Reminder calls to patients Visits clearly labelled in schedule			

Appendix E: AWV Patient Demographics

	Frequency	Percent
Age (*mean = 71.4)*		
65-69	28	48.3
70-75	18	31.0
>75	12	20.7
Gender		
Male	23	39.7
Female	35	60.3
Race/Ethnicity		
Non-Hispanic White	12	20.7
African American	1	1.7
Hispanic	45	77.6
Preferred Language		
English	14	24.1
Spanish	44	75.9
Insurance		
Medicare Only	35	60.3
Medicare and Medicaid	16	27.6
Medicaid Only	5	8.6
Uninsured	2	3.4
Days Since Last Visit *(91.9)*		
0-29	17	29.3
30-90	21	36.2
>90	20	34.5

Appendix F: Statistical Tables for AWV Findings

Visit Outcomes by Age

		65-69 (n=28)	70-74 (n = 18)	75 or older (n=12)
General	At least one positive finding	25 (89.3)	16 (88.9)	11 (91.7)
Cognition	Report subjective forgetfulness	8 (28.6)	6 (33.3)	6 (50.0)
	Positive cognitive screening	7 (25.0)	4 (22.2)	5 (41.7)
Fall Risk	Falls in Past Year	8 (28.6)	5 (27.8)	5 (41.7)
	TUG Prolonged*	3 (10.7)	7 (38.9)	7 (58.3)
Function	Dependence in ADLs or IADLs	9 (32.1)	7 (38.9)	4 (33.3)
USPSTF Compliance	Screenings (missing one or more)	11 (39.3)	8 (44.4)	5 (41.7)
	Vaccinations (missing one or more)	21 (75.0)	11 (61.1)	9 (75.0)

*p = 0.027 for Age X TUG Result

Visit Outcomes by Ethnicity

		Hispanic/Latino (n=45)	Not Hispanic/Latino (n=13)
General	At least one positive finding	40 (88.9)	12 (92.3)
Cognition	Subjective forgetfulness	17 (37.8)	3 (23.1)
	Positive cognitive screening	14 (31.8)	2 (15.4)
Fall Risk	Falls in Past Year	13 (28.9)	5 (38.5)
	TUG Prolonged	16 (35.6)	1 (7.7)
Function	Dependence in ADLs or IADLs	17 (37.8)	3 (28.1)
USPSTF Compliance	Screenings (missing one or more)	16 (35.6)	8 (61.5)
	Vaccinations (missing one or more)	30 (66.7)	11 (84.6)

Appendix F (continued)

Visit Outcomes by Gender

		Male (n=23)	**Female (n=35)**
General	At least one positive finding	21 (91.3)	31 (88.6)
Cognition	Subjective forgetfulness	9 (39.1)	11 (31.4)
	Positive cognitive screening	6 (26.1)	10 (29.4)
Fall Risk	Falls in Past Year	7 (30)	11 (31.4)
	TUG Prolonged	5 (21.7)	12 (34.3)
Function	Dependence in ADLs or IADLs*	3 (13.0)	17 (48.6)
USPSTF Compliance	Screenings (missing one or more)	8 (34.8)	16 (45.7)
	Vaccinations (missing one or more)	18 (78.3)	23 (65.7)

* p = 0.019 for Gender X Functional Status

Visit Outcomes by Days Since Last Visit

		Less than 90 days (n=38)	**Over 90 days (n=20)**
USPSTF Compliance	Screenings (missing one or more)	14 (36.8)	10 (50.0)
	Vaccinations (missing one or more)	26 (68.4)	15 (75.0)

Appendix G: FQHC Provider Survey Findings

Respondent Qualification

	Frequency	Percent
MD/DO	7	47.7
PA	2	13.3
Advanced Nursing	3	20.0
Other	3	20.0

Number of Older Patients Seen Per Day (n=12)

	Frequency	Percent
More than one	8	66.7
About one	3	25.0
Less than one	1	8.3
None	0	0.0

Self-assessed Confidence in Recognizing Health Risks, frequencies and percentages (n = 12)

	Not at All	Minimally	Somewhat	Mostly	Very
Falls	-	1 (8.3)	-	10 (83.3)	1 (8.3)
Cognitive Loss	-	1 (8.3)	3 (25)	4 (33.3)	4 (33.3)
Nutritional Deficits	-	1 (8.3)	5 (41.2)	5 (41.2)	1 (8.3)
Polypharmacy	-	-	1 (8.3)	6 (50)	5 (41.2)

Self-assessed Confidence in Managing Health Risks, frequencies and percentages (n=12)

	Not at All	Minimally	Somewhat	Mostly	Very
Falls	-	-	3 (25)	7 (58.3)	2 (16.7)
Cognitive Loss	-	-	5 (41.2)	4 (33.3)	3 (25)
Nutritional Deficits	-	-	3 (25)	6 (50)	3 (25)
Polypharmacy	-	-	4 (33.3)	3 (25)	5 (41.2)

Appendix G (continued): FQHC Provider Survey Findings

"I have adequate knowledge of community resources for older adults" (n =12)

	Frequency	Percent
Strongly agree	-	-
Agree	4	33.3
Wrote in "yes"	3	25.0
Neutral	1	8.3
Wrote in "somewhat"	1	8.3
Disagree	3	25.0
Strongly disagree	-	-

Familiarity with Medicare AWV (n=12)

	Frequency	Percent
Use regularly	1	8.3
Have used	4	33.3
Wrote in "moderate"	1	8.3
Familiar but have not used	3	25.0
Unfamiliar	-	-
Wrote in "no"	1	8.3
No response	2	16.7