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Aileen Teresa Twomey
aileen.twomey@student.shu.edu

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Aileen Twomey
aileen.twomey@student.shu.edu

Aileen Teresa Twomey DNP
Seton Hall University, a30three@gmail.com

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THE APN AND PATIENT CENTERED MEDICAL HOME

THE ADVANCED PRACTICE NURSE AND PATIENT-CENTERED MEDICAL HOME: MAINTAINING PATIENT FOCUS, MEETING THE INSTITUTE FOR HEALTHCARE IMPROVEMENT TRIPLE AIM THROUGH THE ELECTRONIC HEALTH RECORD.

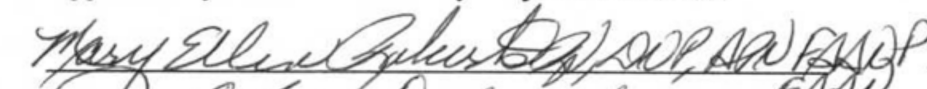
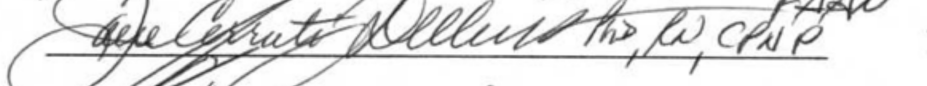

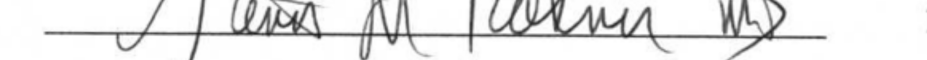
BY

AILEEN TERESA TWOMEY

DNP Scholarly Project Committee

Mary Ellen Roberts, DNP, APN, FAANP, FAAN, Chair
Dr. Jane Dellert, PhD, APN
Dr. Edward J. Gold, MD, MBA
Dr. Steven Rosner, MD, FACR

Approved by the DNP Scholarly Project Committee:

	Date <u>10/2/13</u>
	Date <u>10/2/13</u>
	Date <u>10/2/13</u>
	Date <u>10/2/13</u>

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By

Aileen Teresa Twomey

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ABSTRACT

The Federal Government enacted the Health Information Technology for Economic and Clinical Health Act (HITECH) in 2009, which incentivized providers to use electronic health records (EHR) for meaningful use (MU); the Patient-Centered Medical Home (PCMH) stems from the Act. Research by the National Council on Quality Assurance (NCQA) shows that primary care practices have a positive influence on the health of patients, families and communities. These positive influences are related to their ability to deliver first-contact access, and to develop long-term therapeutic relationships that focus on the person rather than the disease, improving patient health outcomes and reducing health care cost.

The project focuses on developing a standardized template to guide the primary care provider (PCP) to efficiently document in the EHR and according to the NCQA recommendations. The template includes specific recommendations to focus on during a primary care visit, which are in line with the PCMH model. Using the existing EHR software, a template was developed highlighting the elements identified by the NCQA to guide the provider to accurately document care plans he or she develops with the patient; to document identified patient barriers for those who have not met treatment goals; to make appropriate referrals and identify self-referrals; and to reconcile discrepancies in treatment when a patient transitions throughout the health care system, such as after hospitalization.

INTRODUCTION

Clinicians across the country are transitioning to the Patient Centered Medical Home model (PCMH); research has shown it to improve patient health, to address the crisis in primary care, and to seize evolving payment opportunities. National Council for Quality Assurance (NCQA) recognition as a PCMH increases the likelihood of reimbursement for the pioneering PCMH which is currently undercompensated. New reimbursement methods become more of an obtainable goal as more studies discuss the positive results of the PCMH (Green, et al., 2012).

Advanced practice nurses (APNs) are the critical element to the success of the objectives set forth in the Affordable Care Act (ACA) of 2010, the provision of comprehensive primary care (IOM, 2010; Schram, 2012; Sroczynski, 2012). The Federal Government enacted the Health Information Technology for Economic and Clinical Health Act (HITECH) in 2009, which incentivized providers to use the EHR, and laid out standards for, meaningful use (MU). In order to encourage coordinated care, the Center for Medicare and Medicaid Services (CMS) developed incentive programs to use electronic health records (EHR); the Patient-Centered Medical Home (PCMH) stems from the Act. The Medicare Shared Savings program is an incentive: when patients get the right care at the right time and cost is reduced, the PCMH would share in the savings. Under the HITECH Act, health care professionals and hospitals can qualify for incentive payments by adopting MU certified EHRs (Summers, 2012).

The NCQA is a not-for-profit organization dedicated to improving the quality of health care and has established guidelines for establishing and sustaining a Medical Home (Marshall, 2011, Schram, 2012). The NCQA has identified elements for Primary Care Providers (PCP) to focus on during a primary care visit, which improve patient outcomes in line with the PCMH model. The PCMH model influenced this author to develop a template in the EHR, guided by the NCQA recommendations, to assist fellow primary care providers with accurate, efficient, and timely documentation to be accomplished during the patient encounter. All aspects of the NCQA recommendations needed to be represented in the template. The template is set up in such a way that data can be accessed and accounted for. For example, using the Practice Analytics component, a chart audit and report can be run on how often a specific provider or all providers counsel regarding tobacco use.

Documenting with the template should also improve the accuracy of Evaluation and Management (E&M) coding for billing purposes. One study cited by Heidelbaugh (2008) that compared family physician coding with expert coders revealed that the physician under codes one third of established patient visits. Lost revenue can add up to \$8,393 in the course of a year when the provider undercodes just one level four visit per day (Heidelbaugh, 2008). Documentation practices must meet specific guidelines in order for the provider to be paid; templates are developed in an effort to improve charting efficiency but must contribute to accurate documentation of what was done and not done, including the rationale for those decisions. Templates are not to be used to chart information that is unnecessary to the

patient visit and has not contributed to the medical decision making of that particular patient encounter. According to only one database of liability claims, medical record documentation problems contributed to 6,702 physician professional liability or medical malpractice cases from 1985 to 2005 with indemnity payments of \$383 million (Jones, 2008).

REVIEW OF THE LITERATURE

The U.S. Healthcare System

In the late 1800s and early 1900s there were several proposals for a national health insurance program in the U.S. The American Medical Association (AMA) had concerns that any national health insurance plan would impact the financial security of their providers; the AMA convinced the government to support private insurance companies instead (Niles, 2011). The AMA also endorsed voluntary health insurance plans to only include hospital care (Shi, 2012). The AMA formed in 1847 but gained strength in the early 1900s when it was organized into county and state medical societies; as part of this reform the AMA concentrated on medical education (Shi, 2011). The AMA often stressed the importance of raising the quality of care for patients and protecting the consumer from “quacks” and “charlatans”, but like other professional associations, its principal focus was to advance the professionalization, prestige, and financial well-being of its members (Shi 2011). Over time the AMA influenced policy makers to include wording exclusive to physicians, laws that limit nurse practitioners from practicing within their full, legally defined scope of practice (Bauer, 2010). The AMA now represents only 17% of the physicians in the United States, and is no longer the powerful organization it used to be (Shi, 2011).

The progression of medical technology in the latter part of the 19th century led to the development of advanced equipment that became centered in hospitals. Devices were developed which aided in the discovery and treatment of diseases, x-ray for diagnostic images; anesthesia; advanced surgical techniques; and the development of

the germ theory of disease which led to antiseptic and sterilization techniques (Shi, 2011). The introduction of sulfa drugs and penicillin in the mid-20th century led to the need for physicians to receive their training and to practice medicine in hospitals, thus hospitals transformed from charitable institutions into ones that could generate a profit. In the early 20th century hospital administration became a discipline; efficiency was an important element in the management of hospitals (Shi, 2011). This early emphasis on efficiency eventually led to pressure for hospitals to act like businesses, focusing on supply and demand. With greater pressure to contain costs, hospitals began to limit care to the acute episodes of the disease rather than the full course of the illness (Shi, 2011). This practice contributed to the increase in spending of healthcare dollars as readmissions were frequent, costing the system more than it would have if the patient had stayed in the hospital another night or two.

In 2001 the Institute of Medicine (IOM) landmark report, *Crossing the Quality Chasm*, called for an extensive overhaul and redesign of the health care system. The PCMH is a model that focuses on preventive care and addresses many primary care concerns (Crabtree, 2010).

Despite the history of obstacles to national health insurance, on March 21, 2010, the Democratic House in Congress passed the Patient Privacy and Affordable Care Act by a 219 to 212 vote; President Obama signed it two days later without a single Republican vote in favor of the legislation (Shi, 2012). The AMA pledged support for the legislation, a reversal of its historic stance regarding national health insurance (Shi, 2012).

As stated in Shi (2012), the United States doesn't really have a health care *system*. Most developed countries have a national health insurance program run by the government in which all citizens are entitled to receive health care services. In the U.S. there is a fragmented system with different people obtaining health care by different means. The delivery system has undergone many periodic changes in response to concerns regarding cost, access and quality (Shi, 2012). Because there is little standardization in the system, there is duplication and waste, leading to inefficiency and increased cost. The passage of the Patient Protection and Affordable Care Act (PPACA) of 2010 puts the U.S. health care system in a more public domain; it is the most significant commitment of federal and state tax dollars since the creation of Medicare and Medicaid in 1965 (Shi, 2012).

Delivery of Primary Care

The research demonstrates that primary care practices influence the health of patients, families and communities (Council, 2012). The positive influences are related to the primary care providers' ability to deliver first-contact access, and to develop long-term therapeutic relationships that focus on the person rather than the disease (Council, 2012). The PCMH model endorsed by the American College of Physicians (ACP), American Association of Family Physicians (AAFP), and American Academy of Pediatrics (AAP) is physician-led (AANP, 2007). The core features are coordinated care, enhanced access, payment reform, personal clinician, physician-led team, quality and safety, and whole person orientation (Arar, 2011). The PCMH is a team-based approach to the delivery of primary care; it encompasses

health information technology (HIT) that is comprehensive, coordinated and connected (Marshall, 2011). The team consists of physicians, nurses, care coordinators, technicians, office staff and community services to improve quality of care, reduce the use of unnecessary or duplicate services, control the inflationary cost of medicine, and increase access (Marshall, 2011).

As stated by Haas (2011) the four value-driving elements of ACOs and PCMHs are:

1. Better care coordination: transfer and exchange of information and accountability, which works best for patients with chronic conditions and a relatively high risk for poor outcomes. The care coordinator assesses the patients' needs, develops and updates a proactive care plan, facilitates transitions, emphasizes communication, links the patient with community resources and aligns resources with the population.
2. Better access to care: off hour coverage, same day or next day appointments, appointments with a personal clinician, the ability to have clinical questions answered by phone and access for vulnerable populations.
3. Better technology: patient portals, on-line access to clinicians, electronic access to providers and services.
4. Better payment models designed to achieve high quality, accountable, patient-centered care.

Advanced Practice Nurses (APN)

In response to the need to assess and transform the nursing profession, the Robert Wood Johnson Foundation (RWJF) and the IOM launched a two-year initiative with the purpose of producing a report that would make recommendations for an action-oriented blueprint for the future of nursing. On October 5, 2010 the IOM released a consensus report titled *The Future of Nursing: Leading Change, Advancing Health* that contained four key messages. 1) Nurses should practice to the full extent of their education and training. 2) Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression. 3) Nurses should be full partners, with physicians and other healthcare professionals, in redesigning health care in the United States. 4) Effective workforce planning and policy making require better data collection and information infrastructure.

The PCMH stems from the changes in the health care system and the incentive programs developed to improve patient health outcomes. The PCMH is a concept adapted from the original model developed in 1967 used to care for chronically ill pediatric patients (Marshall, 2011; Schram, 2010; AANP, 2007). The IOM recognizes the importance of access to primary care and recommends maximizing the full potential of nurses by removing barriers; “care teams need to make the best use of each member’s education, skill, and expertise, and health professionals need to practice to the full extent of their license and education” (www.nap.edu/catalog/12956.html).

Patient self-management is one focus in the literature regarding the PCMH (Arar, 2011; Haas, 2011, 2008; Hudon, 2012; Marshall, 2011). Lack of coordination and communication are two of the barriers to effective primary care (Schram, 2010). Nurse practitioners are experts in the coordination of patient care and direct care to improve the patient's overall well-being, have excellent communication skills, and educate and guide the patient in self-management skills. Therefore, they are highly qualified effective providers of health care and have the skills to transform the health care system and meet the demand for safe, quality and affordable care. Many states have legal barriers that prohibit APNs from practicing to the full extent of their education and training, which in essence translates to a barrier for patients to access affordable healthcare (IOM, 2010; Bauer, 2010). According to the medical economist and health futurist Jeffrey Bauer, PhD (2010) economic and clinical gains can be realized by allowing APNs to be independent caregivers and delivery team leaders. The cost of healthcare in the U.S. would be reduced immediately by changing regulations and policies that only reimburse higher cost health professionals for services that the literature has shown can be done at least as well by nurse practitioners (Bauer, 2010).

Electronic Health Records (EHR)

The medical record is an important part of the office visit. Its purpose is to remind the provider of what was done at the visit, what the thinking was at the time the patient was seen, what was ordered, and the rationale for it. It is also for the benefit of other providers to know what has happened to the patient in the past, what

was ordered and what the patient was supposed to do since the last visit. Over time it has become a method of protecting oneself from litigation, and of justifying billing practices. In some cases documentation is more about the coding to justify billing and less about documenting what was done during the office visit, making the actual chart note useless to other providers.

The Federal Government enacted the HITECH in 2009, which incentivized providers to use electronic health records (EHR), and laid out standards for meaningful use (MU). One of the first requirements for certification of the EHR and MU was the use of E-Prescribing for Medicare patients. In order to encourage coordinated care, CMS has developed these incentive programs. Accountable Care Organizations (ACOs) are groups of physicians, hospitals and other health care providers, who come together voluntarily to provide high quality cost effective care to their Medicare patients (www.CMS.gov, 2013). The Medicare Shared Savings program is an incentive: when patients get the right care, at the right time, and at reduced cost to Medicare, the ACO would share in the savings. The American Recovery and Reinvestment Act (AARA) 2009, commonly referred to as the stimulus package, called for transparency in government spending; anyone receiving recovery funds needs to report on the funds use quarterly (www.Recovery.gov). Under the HITECH, part of the AARA, health care professionals and hospitals can qualify for incentive payments by adopting MU certified EHRs (Summers, 2012).

Information Technology (IT) can support care coordination with reminders for appointments or routine testing, referral and care transition management, electronic

health records, management of diagnostic results, holistic care coordination, case/condition management, adherence to care plan and medication, and shared decision support tools (Haas, 2011). The EHR is also a tool to assist providers in adhering to evidence-based guidelines.

Documentation styles and practice such as SOAP and PIE

An initial review of the literature searched for recommendations and suggestions of content to be used when developing templates in the electronic medical records. No documentation was found that fulfilled that criteria. There were varied resources regarding generalized documentation in the patient health record; these were incorporated into the clinical documentation templates, including the ability to document via SOAP (subjective, objective, assessment, plan) and problem-oriented documentation such as PIE (problem, intervention, evaluation) (Levine, 2012).

Economic Impact

The United States is run on the free market economy, health care included. The health care market is actually an imperfect market or quasi-market because it does not behave the same as the free market. In the free market people have information on the prices and quality of goods, and get to choose; when it comes to health and emergencies, choice is not always an option and shopping around for the best price, if possible, would delay delivery of care, usually with ill effects. When the health care market is manipulated, as is traditionally done based on supply and

demand, we do not get the same predicted results as in other sectors of the market (Shi, 2012).

In the U.S. we spend 17.4 % of our GDP on health care (Folland, 2013). A comparison with other countries' 2009 data shows the Netherlands GDP below the US at 12% of GDP as health expenditures; Canada is at 11.4%; the United Kingdom 9.8 % of the GDP; and the lowest is Turkey at 6.2%. For many countries health care expenditure grew rapidly from 1960 to 1980, but then became more modest; the US expenditure continued to grow after 1980 (Folland, 2013). In 1960 consumers spent 5.0% of their income on medical care; 25% of spending was on food, and housing was 15%. In 2009 consumers spent 17.9% of their budget on health care, 13.8 % on food and 18.8 % on housing. At this rate it is predicted that by 2020 the U.S. will be spending 20% of GDP on healthcare (Folland, 2013).

To optimize health systems the Institute for Healthcare Improvement (IHI) recommends the Triple Aim approach: 1. improving the patient experience of care (including quality and satisfaction), 2. improving the health of populations and, 3. reducing the per capita cost of health care; the three are to be worked on simultaneously (Berwick, et al., 2012).

Government Incentives.

There are many areas of the United States government with goals and functions related to the future health of the U.S. population such as The Triple Aim recommendations of the Institute for Healthcare Improvement (IHI) and the Center for Disease Control (CDC), which focuses on epidemiology and population health.

The CDC has 4 health goals: healthy people in healthy places, preparing people for emerging health threats, positive international health, and healthy people at all stages of their life (Nile, 2011). For these goals to be achieved the CDC focuses on six areas: health impact, the customer, public health research, leadership, globalization, and accountability (Niles, 2011). The CDC works to protect America from health, safety and security threats, both foreign and in the U.S. (www.cdc.gov). The agency's mission has an epidemiologic and global focus and is therefore separate from the development of private medical practices, which are focused on business. Three parties are involved in providing health care: the provider, the patient, and the fiscal intermediary, such as the government or health insurance company (Niles, 2011). The AMA historically supported private health insurance, and the majority of health expenditure has been borne by private insurance programs; premium increases have been large for the past several years in response to the changing climate of health care. Approximately 47 million Americans are uninsured; of the 84% of Americans with health insurance approximately 60% have health insurance through their employers, 9% purchase their own and the remaining are insured through government programs: Medicare, Medicaid, or Military (HealthPAOnline). The PPACA is an attempt to provide more affordable options for health care that will guarantee that more Americans are covered by health insurance.

The Medicare Improvement and Extension Act of 2006 initiated the Medicare Medical Home Demonstration Project to reward primary care providers (PCPs) for coordinating care of complex patients with multiple chronic conditions. The

definition of PCP in the original language of the act was exclusive to include only physicians; due to the work of multiple nursing organizations, including the American Academy of Nurse Practitioners, American College of Nurse Practitioners, and the American Nurses Association, on July 9, 2008, language that included nurse practitioners and other non-physician providers (NPP) was read into the Congressional Record in the extension of the Medical Home Demonstration Expansion (Shram, 2010).

Research demonstrates that primary care practices influence the health of patients, families and communities (Council, 2012). The positive influences are related to the ability to deliver first-contact access, and to develop long-term therapeutic relationships that focus on the person rather than the disease (Council, 2012). The National Committee for Quality Assurance (NCQA) is a not-for-profit organization that is dedicated to improving the quality of health care and has established patient care guidelines for establishing and sustaining a Medical Home (Marshall, 2011). Documentation in the patient chart that these recommendations were followed is measured during the application process for PCMH recognition. The documentation is not specific to the EHR; however, utilizing the EHR can make the documentation process less cumbersome.

PROJECT METHODOLOGY

Nurses receive a broad-based education and are well equipped to adapt to all aspects of patient care. Historically nurses have cared for people in underserved areas, focusing on health, their ability to perform activities of daily living, counseling the patient to change unhealthy behaviors, and giving feedback and guidance which empowers the patient and the family. Loretta Ford, a public health nurse in Colorado, recognized that the needs of underserved children were able to be met by nurses and that nurses would be able to make basic decisions on their own with specialized training (Landau, 2011). The solution was educating the nurse for advanced practice. In 1965, due to the collaborative efforts of Loretta Ford, RN, and pediatrician Dr. Henry Silver, the University of Colorado instituted the first pediatric nurse practitioner program. Similar needs have been recognized in the adult population. The PCMH model originated from a model designed to provide comprehensive care to special needs children and is now being applied to adults.

This author's initial impression of the new PCMH model was that it is a nursing model, new to some aspects of primary care medicine, but certainly not new to nursing. From 1854 when Florence Nightingale made rounds at night and provided emotional comfort to the soldiers of the Crimean War, and 1971 when Dorothea Orem pursued the development of a theoretical structure that would serve as an organizing framework for nursing knowledge, to the present, nursing has been patient centered (Alligood, 2010). Patient-centered care is not the focus in which the physician has been traditionally trained.

The author's undergraduate-nursing program at Seton Hall University used nursing theorist Dorothea Orem's theory of Self Care to guide the program. The PCMH model of patient centeredness is very similar and therefore familiar to nursing, as it incorporates much of Dorothea Orem's Self Care Theory. Specifically Orem's theory proposes that a person should be self-reliant and responsible for his or her own care. That self-care requisites are an important component of primary prevention and ill health (Alligood, 2010). The registered nurse (RN) has the working knowledge of this approach to patient care. The additional education and experience of the advanced practice nurse (APN) makes the APN an ideal member of the healthcare team to assist in guiding all primary care providers in this approach to patient care and development of the patient-centered medical home.

Purpose

This author's nursing experiences have made her a staunch patient advocate. The experiences in each area revealed situations in which patients were exposed to varied levels of risk for adverse events; reporting on these observations with the expectation a change would occur often met with resistance. Advocating for appropriate patient care and promoting accurate and meaningful documentation became the focus of attention. The author's experiences acquired as a registered nurse included time as a certified school nurse and pediatric nurse practitioner in a school for special-needs children where many had seizures. The need for usable, meaningful retrievable, and accurate documentation regarding this student population's seizure history and other health concerns led the author to develop a computerized health

record, which took the school from documenting in a marble notebook to a Windows© based computer program where the last seizure or event was easily retrieved.

Accurate clinical documentation is an important aspect of patient care; the note should provide the reader with any needed information in the absence of the documenting clinician. The advanced nursing skills acquired over time contributes to improving the patient care delivered and assisting other registered nurses and APNs to hone their skills. The documentation has also become a method of data collection in regard to documentation in the EHR. Meaningful data can be obtained by using the EHR as intended; over time the new data can provide information that reveals new evidence which may contribute to the alteration of recommendations for current clinical practice.

There are many features of the existing EHR that prompts clinicians to free type, which eliminates that information from data collection. Development of a new template is an effort to facilitate the collection of data related to patient care, which may have statistical significance, and guide patient care in the future. Developing a template that incorporates the required components of today's patient health record in an efficient and effective way is a challenge professionally. Paralleling Orem's theory are the standards listed in the NCQA PCMH November 21, 2011, which include assessing the patient/family self-management capabilities, working with the patient/family to develop a self-care plan, assessing the patient's progress toward treatment goals, and identifying patient barriers to treatment goals. Using the current

EHR software, a template was developed that includes the elements identified by the NCQA for PCMH recognition, and guides the provider to address those qualities during the patient encounter. The new template was introduced and used by the providers. The template guides the provider to document care plans that were developed with the patient; to identify self-referrals; to share patient information with others in the health care system in order to reduce errors; and to reconcile discrepancies in treatment when a patient transitions throughout the health care system, such as after hospitalization. The template is a tool to improve patient health outcomes and reduce future health care cost, which currently accounts for 17% of the nation's GDP and is projected to reach 20% by 2020 (Folland, 2013).

The template guides the provider to address specific areas in the patient assessment that have been identified by the NCQA as significant to improving patient health outcomes: but the template design also attempts to choose items that are less generalized and therefore, when chosen, are counted by the E&M calculator, giving credit for the items addressed when applicable. The reason for the updated template is threefold: 1. to assist providers to include important elements during the patient encounter. 2. To promote accurate coding of patient encounter by identifying reasons the EHR did not recognize certain items in the encounter for E&M coding, and 3. To reduce the time it takes the primary care provider (PCP) to accurately document what was covered during the encounter. Meeting these aims can reduce wait time for the next patient, improve office work flow, increase patient satisfaction with the practice, and improve job satisfaction for the providers and staff of the practice.

Description of the Project

As previously stated, documentation is an important part of the delivery of patient care. It is utilized by different aspects of the healthcare system, not solely related to the delivery of healthcare but also to justify reimbursement of services, and to defend care rendered in situations of litigation. Electronic health records are able to collect data that can support clinical practice and be used to develop evidence-based guidelines for patient care, but only to the extent they are used appropriately. Areas of the template were developed to assist the providers with the clinical documentation of a patient's primary care/ routine office visit.

The author had identified the current method of documentation as cumbersome. A lot of time can be put into documenting useful information so it will accurately reflect that patient encounter. The primary care providers have developed their own method of documentation in the EHR, oftentimes using the free typing feature. Free typing into the document may seem more efficient at times, but when free typing is used the data cannot be captured, and therefore cannot be easily included in data collection for evaluating health outcomes and the effectiveness of evidence based practice. The use of electronic health records to collect data is promoted by meaningful use programs such as set out by the Center for Medicare and Medicaid Services. Free typing into the EHR impedes confirmation of meaningful use and therefore obtaining deserved monetary incentive for the practice. In an effort to improve documentation and guide the clinicians in this primary care practice, a template was compiled to be used for clinical documentation of a patient's primary

care office visit. Utilizing the basics of history taking and physical examination described in *Physical Examination and Health Assessment* by Carolyn Jarvis (1996) and *Bates' Guide to Physical Assessment and History Taking* by Lynn S. Bickley (1999), an expanded patient focus included a biopsychosocial approach to patient care, and included those areas identified by the NCQA as barriers to effective health outcomes.

The development and implementation of a new template in the current electronic health record was identified by the author as an area of need and focused on assisting other primary care providers in documenting varying levels of patient care that also reflected the PCMH philosophy. The new template can also be used to guide the provider to include items in the history taking and assessment, covering the areas identified by the NCQA that may not normally be the focus of the patient encounter.

In order to develop the template the author needed to know how to use the “Form Designer” and other features of the EHR. In addition to the training modules provided on the EHR Company’s website, one-on-one training with the EHR company trainer was arranged. Through some trial and error a preliminary template was put together utilizing the MEDCIN ID codes provided in the system (Figure 1). All information in the template started with “parent” information that was attached to a MEDCIN ID code (Figure 2). More specific information could be built into the template using the “children” of that parent information. Then if free texting was

utilized in the template only a minimal amount of information would not be captured (Figure 3).

It is not realistic to have every word of the patient note linked to a numerical identifier, but wherever a numerical identifier was available in the system, it was utilized. The desired information was put into the template; it was then tested on a patient chart, for accuracy. A fictitious patient named PCMH Tester was created to test the actual template that was created to be used by the primary care providers (Figure 4). The process was tedious, cumbersome and time consuming, going back and forth between the “Form Designer” and the template in its usable state. After about three months of initiating templates, and then abandoning them, the newly developed preliminary template was ready to be introduced to the primary care providers.

The content of the new template included items recommended by the NCQA. Because a lot of information is included on the template, items pertaining to NCQA recommendations are in red print, with the majority in black. The red items highlight some important areas to be covered during the visit, such as medication reconciliation, reviewing the patient’s problem list, smoking history and willingness to quit. The PCMH model is based on the NCQA research findings, which indicate that model is effective in improving patient outcomes and lowering health care costs. In an effort to enhance the current EHR capabilities, the template includes standard history taking and physical assessment and incorporates items identified by the NCQA Standards and Guidelines for the PCMH, and also supports the federal

program (CMS Meaningful Use Requirement), which promotes the use of health information technology to improve patient health outcomes.

Six PCMH standards are recommended by the NCQA. Elements of the standards were incorporated into the template in order to guide the provider in this method of documentation and clinical thinking. The provider is expected to be aware of the patient's needs and to enlist the patient as a member of the health care team; this holistic approach is expected to provide better patient health outcomes.

Physicians' training is in medicine, which has as its focus the alleviation and cure of disease (Chism, 2010). Nursing education focuses on health promotion and disease prevention, and care of the ill, disabled and dying. It is autonomous and collaborative care of people of all ages, family structures, groups and communities, sick or well and in all settings (Chism, 2010). The template is intended to improve communication, reduce errors, reduce cost and improve health outcomes by facilitating the physician's and non-physician provider's (NPP) attention to these aspects of whole patient care.

The federal government promotes the use of electronic health records for meaningful use to improve quality. The new template developed in the EHR for clinical documentation provides a method of guiding the clinician to include in the health assessment the important elements of a patient visit as identified in the NCQA standard, assisting in accurate and timely comprehensive documentation and improved patient outcomes. When used as intended, it will assist the provider to accurately calculate evaluation and management (E&M) codes for reimbursement.

The primary care template was designed to accurately identify and assess the patient, incorporating the NCQA PCMH 2011 Standards. The following standards were used to guide the template:

- Standard 1: Enhance Access and Continuity: The focus is on team-based care with trained staff. Provide same day appointments, timely clinical advice over the phone or electronically during and after office hours. The documentation of clinical advice is in the medical record.
- Standard 2: Identify and Manage Patient Populations: The Practice identifies patient risk factors and provides proactive reminders for care.
- Standard 3: Plan and Manage Care: Identify patients with specific conditions, including high-risk complex needs and conditions related to health behaviors, mental health or substance abuse problems. Care management emphasizes pre-visit planning, assessment of patient progress toward goals, and assessment of barriers to achieving the goals.
- Standard 4: Provide Self-Care Support and Community resources: Assess patient and family self-management capabilities, develop a care plan and provide resources for the patient. Patient care summaries will be handed to the patient at checkout that will reinforce what was covered during the office visit.
- Standard 5: Track and Coordinate Care: Follow up on testing and referrals at other facilities and manage care transitions.

- Standard 6: Measure and Improve performance: The practice uses patient experience data to continuously improve. The practice identifies vulnerable populations and demonstrates improved performance.

Risks and Benefits to the Recipient.

According to the PCMH model, by instituting the recommendations laid out by the NCQA and improving the focus of the provider to the main points of the clinical documentation requirements, patient outcomes should improve. The goal is for providers to facilitate patient care that meets the gold standard of evidence-based practice. The comprehensive and holistic approach will improve the hemoglobin A1C of the patient with Type 2 Diabetes; improve the blood pressure of the hypertensive patient; reduce the use of tobacco products and support a healthier lifestyle. There is no risk of harm to the patient. There is not additional financial commitment by the practice, except in the time needed to build the template. The practice had already invested in the EHR which includes training and additional technical support. The benefits to the practice could include improved provider satisfaction in the primary care role. There will also be financial benefits from CMS for satisfying meaningful use requirements of the EHR and pay-for-performance incentives.

Implementation

Development and implementation of the template for the project were approved at the practice setting. Education meetings were held; one-on-one attention was given to each provider as needed. The practice is a multispecialty and primary care office, but the focus of this project is on the primary care providers and patients. The practice

site committee member is a physician who also holds an MBA, has been involved with the electronic health records the practice uses for more than 10 years; and was instrumental in obtaining level 3 PCMH recognition from the NCQA.

Intermingled with developing the template and the education acquired to build the template were meetings with the consultant to review requirements for recertification as a recognized Level 3 PCMH; additional meetings were held with the practice site committee members to exchange information as needed. Many hours were spent on the incorporation of NCQA guidelines, the basics of nursing science, and the necessary components of history taking and physical examination pertinent for documenting the excellent patient care provided by the practice.

This is a unique practice. The work environment is consistently positive and supportive, and the entire staff is focused on the patient and goes beyond the normal effort to provide patients with what they need. With some ongoing staff education in areas identified as needing improvement, clarification or reinforcement, the practice will continue to excel in the delivery of patient care, to the benefit of this patient population.

Using the existing EHR software, a template was developed that includes the elements identified by the NCQA for PCMH recognition, the template guides the provider to address those elements during the patient encounter. The premise is that gathering information and addressing these qualities can reduce wait time for the next patient, improve office flow, increase patient satisfaction with the practice, and improve job satisfaction for the providers and staff of the practice.

The initial steps in the change process occurred simultaneous to the template development. The author wanted primary care staff to be aware of the documentation that the NCQA would be looking for, and of the new template that was to be developed in order to guide the provider. A brief lunch time meeting was held and a handout was given to each provider that outlined the NCQA workbook objectives, the physician and clinical staff responsibilities, with examples (Appendix A). For the next several weeks the author offered assistance to the providers to review the recommendations while beginning to develop the template.

Challenges

Part of the PCMH recognition process includes the workbook audit which reviews 48 patient charts. During the initial screening audit of the EHR, promoting patient education, providing additional resources, and offering tools to assist in self-management were not being utilized well. Patient education materials were incorporated into an “order”. The provider can print an “order” for patient education material, and websites for additional information are identified in the printed “order”. Separate logs for blood pressure monitoring and for blood glucose monitoring can be printed for the patient to take home and fill in the necessary information. Recommendations for the DASH diet and patient education on tobacco cessation were also included as separate orders. When the “order” is printed, the “information that was handed to the patient is incorporated into the permanent patient record and is easily identified in the documents list if needed for future reference (Figure 5).

There have been added requirements to the original certification of a level 3 PCMH; the addition of these items to the template should serve to assist in meeting the expanded requirements of recertification. Once the template was complete it was introduced to the providers at a meeting to specifically discuss the template. It is to be the main, if not only, template to be utilized (Figure 6). After approximately four months and just prior to implementation, the nurse practitioner author conducted in-service meetings with the primary care providers (PCPs), which covered the purpose of the template and how to use it as intended. The nurse practitioner supplied a handout that included the recommendations for clinical documentation determined through findings by the NCQA (Appendix B). The nurse practitioner discussed with the providers that information, if recorded by someone other than the provider, will need to be reviewed for clarification, and commented on if necessary in the patient encounter.

Kurt Lewin's Change Theory of unfreezing-change-refreeze model can be applied, as the process required the providers to reject prior learning to be replaced by a new behavior. The providers have been open to the change and have not given much resistance to using the template; it continues to be a work in progress, and it is anticipated there will be additions and deletions as new recommendations are incorporated into the template as indicated (Shirey, 2013).

In addition to the development and implementation of the template there were many quirks to the system that needed to be worked around, such as erroneous phrases were noted in the patient's chart note that were associated with a MEDCIN

ID numerical value which did not accurately transfer the linked information .

Additions to the template were reviewed with the medical assistants, some of the changes affected the receptionist's workflow.

Successful implementation of the project begins with an appropriate template. There have been recent upgrades to the EHR, which introduced new features. Learning the features of the EHR and developing the template were the greatest challenge and were time consuming

During one of the initial training sessions the author had for the EHR, a transition of care document, which is sent to another provider or facility; and patient summary, which is given to the patient at the end of the visit were developed, they are key elements to the PCMH model. The transition of care document was linked to any referral to another specialist. It prints when the referral request is printed, and the patient brings the document to the specialist appointment, or it can be faxed. At that same training session prescription writing was linked with a diagnosis, and therefore cannot be completed without matching a diagnosis with the prescription (Figure 7). In addition, all new medications prescribed for the patient will automatically prompt the EHR to print a medication handout. One problem, is that any prescription being printed must be printed on the Rx paper and therefore the person inputting the order must uncheck the "Print Patient Education" box. When the box is left checked the patient education will also print on the Rx paper, which is costly. (Figure 8)

The EHR did not recognize elements of the history of present illness (HPI) as data when calculating the evaluation and management (E&M) code for the patient

encounter; a newly designed HPI tab (Figure 9) was incorporated into the template. The template guides the provider to address specific areas in the patient assessment that have been identified by the NCQA as significant to improving patient health outcomes.

The NCQA requires that two chronic conditions and one unhealthy condition be identified by the practice and those conditions are concentrated on for this recertification. The individual practice chooses the conditions and the unhealthy behavior that will be used for the workbook audit when recertifying. A separate template section for each of the conditions was developed according to current evidence-based guidelines. Meeting the metrics of the workbook audit would suggest that these template additions worked as intended.

The chronic conditions for this practice are Type 2 diabetes and hypertension. The template was designed to include guidelines according to evidence-based recommendations for each of these chronic conditions. The American Diabetes Association (ADA) guidelines were used in the diabetes template (Figure 10); JNC7 guidelines are incorporated into the hypertension template (Figure 11). Tobacco use is the unhealthy behavior identified by this practice. The 5 A's Ask, Advise, Assess, Assist and Arrange are outlined for use on those patient identified as tobacco users (Hung, 2009, The 5 As) (Figure 12). Pertinent aspects of these resources were incorporated with those that are related to providing routine primary care.

The NCQA content includes psychosocial elements that can affect the patient's ability to follow through on the recommendations of therapy. Barriers to

care addressed are preferred language, living situation, financial state, lifestyle, risky behaviors, and patient involvement in setting goals, community resources for the patient, and provider's hesitation to allow the evidence to guide patient care. These items are intended to assist the provider to document the challenges associated with the individual patient and illustrate to the reader, in a recognizable way, the complexity of the patient that has contributed to the medical decision making of this encounter.

As previously mentioned, some features of the current EHR system were activated as they were developed; these changes were verbally conveyed to the staff affected, their use is a requirement as described by the NCQA. Some correspondence documents are also required: a patient visit summary is to be given to the patient at the end of each pertinent visit and upon request (Appendix C). A similar document, the Transition of Care document, prints at the checkout desk and is to accompany all referrals made (Appendix D). The summary document includes pertinent patient information for the provider to which the patient is referred; the patient will be responsible to bring the document to the specialist visit. New prescriptions given to a patient must include a drug information handout; for each new prescription ordered for a patient the system will automatically print the needed document, which is picked up at check out. The team members at checkout were instructed to give these documents to the patient, and a method and routine is currently being established to ensure the patient consistently receives the printed documents at checkout.

A formal meeting was held during the lunch hour to introduce the new template. The laptop computer was attached to a projector and, utilizing PCMH Tester, the new template was explained to the providers tab by tab. Over the next month adjustments were made according to provider preferences, and some items were changed to make sense in the final note. Some challenges were met as the final note did not read as was intended, which may be a software issue. Items in the template did not transfer to the final encounter note in the way that they were put in. There was a period of adjustments, and providers were advised to carefully read their note before signing. There is an “Auto Neg” feature of the EHR. Some items in the final note are written as abnormal rather than normal, the opposite of what was intended.

The template has been arranged in a logical and useful layout that incorporates the patient in a self-management role. In addition since it gives the provider the ability to give the patient a summary of the visit at the time of checkout, the patient visit summary reinforces what was covered at the visit. The planned outcome of the project was to have a time-efficient method of documentation, which is accurate and useful, with minimal time needed after the patient visit to finish the note. Providers should not need to spend a large portion of the day on documentation.

The template was in place for approximately 10 weeks prior to the recertification audit. Continued assistance from the author nurse practitioner was offered during that timeframe. A review of the documentation revealed that many of the items that were included in the previous handouts were missing from the

documentation. The previous document was given to the providers again, this time via e-mail, and included additional narrative to assist the provider (Appendix E). In an effort to facilitate improvement of patient care and include the requested documentation for a five day period the author reviewed the charts of all patients in the PCP's schedule for the upcoming day. The individual provider was advised of the findings via e-mail. These items were to be addressed with the patient at that scheduled patient encounter. This effort did yield good results and reinforces the benefit of reviewing the patients the day before the visit. The review of patients' records prior to the visit will continue, and workflow issues will be worked on to determine which method works best to accomplish this goal.

SUSTAINABILITY OF THE PROJECT

Ongoing Implementation Process

The literature cites the elements laid out in the PCMH to have value and to improve patient outcomes. Information gathered to use on the templates included health assessment and physical examination components taken from Bickley and Jarvis, guidance from the NCQA workbook and ACP website and Evaluation and Management coding materials from CMS and E&M University.

The history is the basis of a comprehensive examination. The past medical history and surgical history are usually documented in the chart along with prescribed medications and any allergies to medication. What has been lacking in patient charts is the family history and social history. The NCQA has focused on elements of the social history that may identify why the patient is not successful in achieving the desired goal of the treatment plan prescribed by the health care provider. Some identified barriers are financial and a lack of understanding which may prevent the patient from following through with treatment. The Patient Visit Summary, when handed to the patient at the end of each visit, gives the patient written instructions to review at a later time. It can also be reviewed by family who may be able to assist the patient to correctly carry out the stated plan. Barriers such as lack of health insurance or adequate prescription coverage may prevent the patient from filling a prescription or taking the medication on a daily basis. It is recommended by the NCQA to have a specific conversation that addresses potential barriers to care and is related to the significance of adequately controlling the disease to prevent complications in the

future. One feature of the EHR that is promoted by the NCQA is that patient education material be printed for all new prescriptions. The EHR recognizes that the prescription has not been previously issued to the patient and information is printed, the patient will be handed the printed prescription information when checking out with Reception. The system does not keep a record that the information was printed/given to the patient so a specific area of the template was constructed and denotes that the patient received the document. All areas of the template are linked through LOINC codes and MEDCIN ID codes; anything built into the system has to be searched and constructed one item at a time. The linking of items to codes facilitates data collection; the ability of the system to collect data if items were populated correctly was kept in mind while constructing the template.

The information outlined in the NCQA's Patient Centered Medical Home 2011 Overview described clear and specific criteria for organizing care around the patient, while working in teams, and coordinating and tracking care over time. Primary care providers refer patients to specialists, and communication among providers is very important and often challenging. The Transition of Care Document was compiled and linked to referral requests; this document prints automatically when a referral is ordered. The document can be printed before the note is signed. It is recommended that the provider preview and edit the Transition of Care Document to include whatever the provider would like to convey to the specialist. The patient's problems list, allergies, current medication, today's diagnosis, discussion, recommendations, and follow up are included in the document which is then either

faxed with the referral or handed to the patient to bring to the specialist visit. Handing the document to the patient gives the patient an opportunity to review what has been recorded in the chart and to clarify any discrepancies.

Patient centeredness in the PCMH program is achieved through a strong focus on the integration of behavioral healthcare and care management. The PCMH program promotes the discussion of risky or self-damaging behavior, and the template provides the clinician with a method to quickly document the discussion, in addition to some free texting specific to the information exchanged with the patient. A screening tool for depression has been added for patients to complete when they are seen as new patients or for an annual physical examination. The results of the screening tool are documented in each patient chart through the template. An area specific to documenting counseling that promotes behavior changes, such as tobacco cessation or alcohol or drug use, is included in the template. When adding free text of what was discussed and checking off the box related to counseling for the specific topic, the billing code is populated in the orders and charges section, reminding the provider to bill for that service, a lost revenue in the past.

Referring to community resources is another focus of assisting the patients with self-management; links and web addresses are included in an area of the template to assist the provider. Documenting the patient's and/or families' understanding of the instructions is also included in the template. The provider can furnish the patient with printed resources from the site during the visit, or refer the patient to the site as a resource for a later time.

Specific areas of the template were developed to highlight the two specific chronic care conditions the practice chose and the one behavior to be included in the PCMH recertification process. Links to evidence-based guidelines are included on the tab in the template that pertains to the specific condition, reinforcing the treatment goals for each condition. Tobacco cessation is the focus for the behavior change, and links to resources and guidance assisting the provider to assess the patient and plan appropriate follow up are included.

The patient care coordinator (PCC) is a registered nurse who assists the providers by interviewing those patients identified as needing more attention. An area in the template indicates the referral to the PCC, with the free text box utilized to give a synopsis of the patients' needs. A referral form has been added to the system and can be generated by the provider at any time. The referral form to the PCC prompts the PCC to review the patient's chart to determine what needs the provider has identified. The PCC contacts the patient for follow up. The PCC also contacts hospitalized patients on discharge for the recommended follow up appointment to be made, and kept.

Post hospitalization office visits include the process of medication reconciliation, a comprehensive review of the patient's medications and dosages. Often patients do not include over-the-counter medication and herbal remedies they may be taking, and therefore the interviewer must ask about these medications specifically. Medication reconciliation and queries regarding over-the-counter and

herbal or alternative therapies are included in the template used by the primary care providers.

Standards and Guidelines for NCQA's PCMH

Standards and Guidelines for NCQA's Patient-Centered Medical Home (2011), were reviewed. Clinical items that could be incorporated into the template were as follows: **PCMH 1: Enhance Access and Continuity, *Element A, Factor 4:*** Document clinical advice in the medical record; **PCMH 3: Plan and Manage Care, *Element A:*** Implement Evidence Based Guidelines; separate tabs for hypertension, Type 2 Diabetes and Tobacco use/cessation counseling, were included in the template; **PCMH 3: *Element C, Factor 2:*** Collaborate with the patient/family to develop an individual care plan, include treatment goals that are reviewed and updated at each relevant visit; **PCMH 3: *Element C, Factor 3:*** Give patient/family a written care plan, accomplished by utilizing the Patient Visit Summary document that was developed; **PCMH 3: *Element C, Factor 4:*** Assess and address barriers when the patient has not met treatment goals. A check box was inserted with the label "assess and address barriers", the provider is to use "Free Text" to document the barriers and outline how they were addressed. (Figure 13); **PCMH 3: *Element C, Factor 5:*** Give patient a clinical summary at each relevant visit. **PCMH 3 *Element C, Factor 6:*** Identify patients/families who might benefit from additional care management support- referral to patient care coordinator. (Figure 14); **PCMH 3: *Element D, Factor 1:*** Medication reconciliation. *Factor 3:* Provides information about new prescriptions to more than 80 percent of patients and families. *Factor 4:*

Assess patient and family understanding of medications for more than 50% of patients with dates of assessment. *Factor 5:* Assess patient response to medications and barriers to adherence for more than 50% of patients with date of assessment, *Factor 6:* Document over-the-counter medications, herbal therapies and supplements for more than 50% of patients and families, with the dates of updates. (Figure 15); **PCMH 4, Element A, Factor 1:** Provide educational resources or refer to educational resources to assist in self-management. *Factor 2:* Use EHR to identify patient specific education resources. *Factor 3:* Develop and document self-management plans and goals. *Factor 4:* Document self-management abilities for patient and families. *Factor 5:* Provide self-management tools; Logs for documenting blood sugars, encourage patient to document blood pressures from at home, keep food diaries and bring in to be reviewed (Figure 16), these logs are copied and scanned into a specific area of the chart labeled “Logs” (Figure 17). *Factor 6:* Counsel patient to adopt healthy behaviors (Figure 18); **PCMH 4, Element B, Factor 1:** Maintain a current resource list of five topics or key community service areas of importance to the patient population (Figure 19). *Factor 3:* Arrange and provide treatment from mental health and substance abuse disorders; that would be documented by printing appropriate referral. **PCMH 5, Element B, Factor 1:** Give the consultant or specialist the clinical reason for the referral and pertinent clinical information. *Factor 5:* Ask families about self referrals and request reports from clinicians (Figure 20).

The template contains a lot of information, and some of it is redundant and can be eliminated. Providers are encouraged to use the template to document only the

items pertinent to the current visit. All aspects of the PCMH recommendations cannot be incorporated at every patient visit, and developing methods to stagger the assessments are recommended.

PLANS FOR THE FUTURE

The PCMH model is a reaction to the current status of the health care system in the United States; it plans to recognize providers that provide comprehensive primary care. It is not new thinking or a new approach to patient care; it is pointing out the deficiencies in care in the past and, through a financial incentive, encouraging these areas to be addressed now and in the future. The focus on patient-centered care is based on standards of preventive, evidence-based, collaborative care that are already in line with the philosophy of nurses' practice (Harrington, 2012). The NCQA workbook objectives are also in line with nursing:

- Collaborate with patient to develop an *individualized care plan*.
- Assess and address barriers *when the patient has not met treatment goals*.
- Identify patients who might benefit from *additional care management*.
- Provide the patient with information on *new prescriptions*.
- Assess *patient understanding* of medication and document the date of assessment. Inquire specifically, in addition to prescription medication, the documentation of *over-the-counter medications, herbal treatments and supplements*.
- Provide educational resources or refers to resources to assist the patient in *self-management*.
- Counsel patients to *adopt healthy behaviors/lifestyle*.

The nurse practitioner has excellent history taking skills. Historically the APN addresses these areas on a routine basis, educating the patient to care for themselves and promoting health is at the core of advanced practice nursing.

The nurse practitioner's unique ability to view the patient from a biopsychosocial approach will continue to be an asset to identify, implement and contribute to the evolving approach to patient care. Electronic health record software will continue to make transformations that assist the health care provider to efficiently care for patients. The template that is developed today will need to be adjusted as time goes by. This author intends to incorporate quality assurance and education with direct patient care and assist seasoned and new healthcare providers to utilize the EHR to meet their style while adapting to the recommendations of quality assurance agencies such as the NCQA in the future.

Electronic health records can be an asset but can be cumbersome to learn to use to their full potential. This author plans to use the skills acquired during this project and continue to develop them over time. It is essential to be aware of the changes in the health care system, and when parts of the PPACA are being implemented, to be aware of what is currently occurring in healthcare politically and from a business sense. This author hopes to improve patient care by incorporating new methods or ways of thinking into the workflow for all providers and ancillary staff; to update the EHR health reminders feature according to evidence based care as the new evidence is introduced; to link recommendations for primary and secondary prevention to the appropriate diagnosis for all patients, in order to weed out waste of

healthcare dollars where it exists; to train ancillary staff to keep accurate records and to assist in developing workflow that improves efficiency and patient care.

The template is not something that is meant to be set in stone. The goal was to develop a template that included the aspects of patient care that were pertinent to providing good patient care with healthier patients in the future. The project is ongoing and will continue to identify areas in the practice that may benefit from receiving specialized attention. Monthly clinical staff meetings will continue to identify and develop educational components and present them to the staff at regular intervals. The author plans to become increasingly knowledgeable about the changes and financial incentives and opportunities available to primary care providers; to continue to guide providers to focus on areas identified as deficient in the care of this patient population; and to improve the quality of documentation that will be accurate and meaningful to the reader. This can be accomplished by the author's use of Practice Analytics to identify patients who are not meeting standards by running a variety of reports that will identify the needs of the patient population on a regular basis; identify patients who would benefit from intensive disease management; identify for referral or in-house programs, patients who could benefit from learning self- management in a group environment.

Educational materials and forms have also been incorporated into the EHR to be utilized by the clinician/provider to improve workflow. Schuman (2013) states EHR can be a double-edged sword which compromises workflow. Individualizing

EHR to provider preferences and assessing workflow options, reworking them where possible, can improve provider satisfaction.

There is a lot to know, to learn and to do so the EHR can be an effective tool over time. Areas for providers to improve care, such as offering appropriate vaccinations at appropriate times, can be identified by running reports through Practice Analytics. A similar report can be generated according to patients who meet the criteria for the vaccination but do not have documentation that it was received. Areas of patient care can be analyzed according to a particular diagnosis or lab value, and trends from past months can be viewed at any interval. Improving or worsening statistics can identify areas for the practice to improve or maintain the standard of care. Practice Analytics has the capability to measure individual provider performance in many areas of clinical care and to measure the patient population who reach a certain goal. Practice Analytics is being used to identify those patients with Hemoglobin A1C greater than 7.9, and the list is then evaluated by a staff member who was trained to review the record. The patient must have an appointment that is already scheduled at an appropriate interval in the future, and if not, a recall is put in the system to send the patient a letter to make an appointment. The list is printed out on a monthly basis in order to identify as many patients as possible.

It is anticipated by the nurse practitioner author that her functions will expand to include a hybrid of quality assurance/improvement, clinical and administrative/management/teaching responsibilities. There will be a need to continue to become familiar with the many functions of the EHR and working of the U.S.

healthcare system. Future versions of the software will help practices to efficiently collect the data to be submitted to the NCQA or other entities, reducing the cumbersome nature and the expense of the certification/recognition process.

The author had the opportunity to review patient charts with an auditor and is becoming more familiar with that aspect of evaluating documentation, reinforcing the author's plans to further education in this area by training to be a certified professional coder. The training would add knowledge to assist the author in guiding providers to streamline their documentation and accurately code, improving revenue. Many aspects of coding are underutilized, and it is a project the author would like to work on with the practice.

In addition to continuing to assist providers with documentation and .to educate providers on proper use of the coding guidelines, this author will guide the providers to be increasingly aware of the barriers the patient may face in order to implement the recommended care. By continuing to provide primary care services to patients the author will be using the EMR tools that have been put in place and therefore will be able to evaluate their effective use while caring for patients. By becoming more familiar with the abilities of the EMR the author will be able to build a stronger foundation for the future as more data are expected to be analyzed in respect to patient care, practice improvement projects, provider services and patient health outcomes in the future.

The documentation will have evidence-based practice incorporated into the templates where appropriate. The EHR template will be updated to reflect new

guidelines as they arise. Health Management links the patient's demographics to recommendations for primary care screenings and immunizations; when the problem list is populated that information triggers reminders to perform chronic care measures. These areas of the EHR will need to be updated and linked to many of the recommendations that are currently available.

Understanding the practice is a business and therefore must make a profit, the author will continue to strive to incorporate advanced practice nursing knowledge into the patient centered medical home; to improve the delivery of patient care; to maintain quality of care; to improve outcomes and to develop programs that will promote patient involvement in their own care, and be cost effective.

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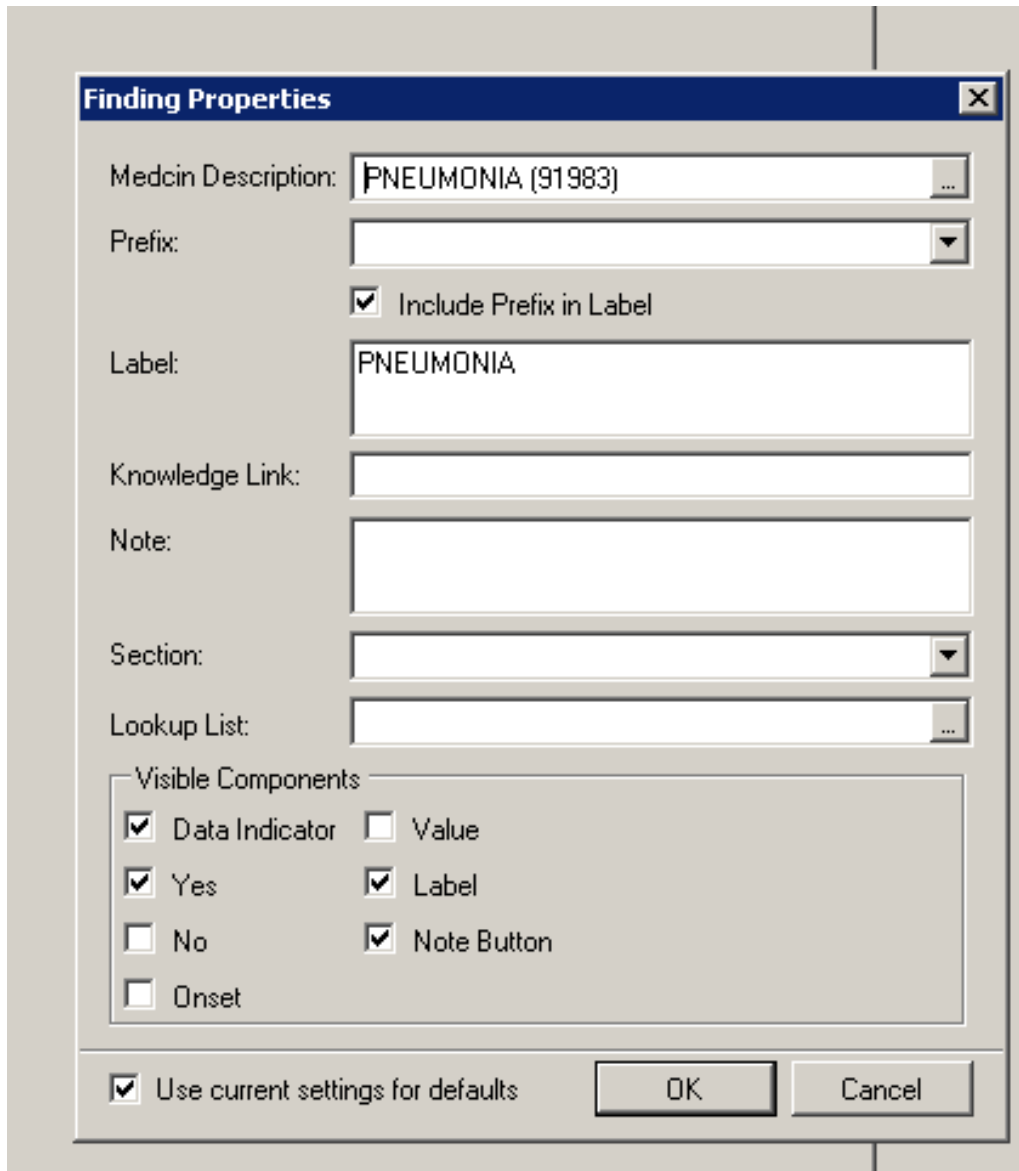


Figure 1. Medcin Description

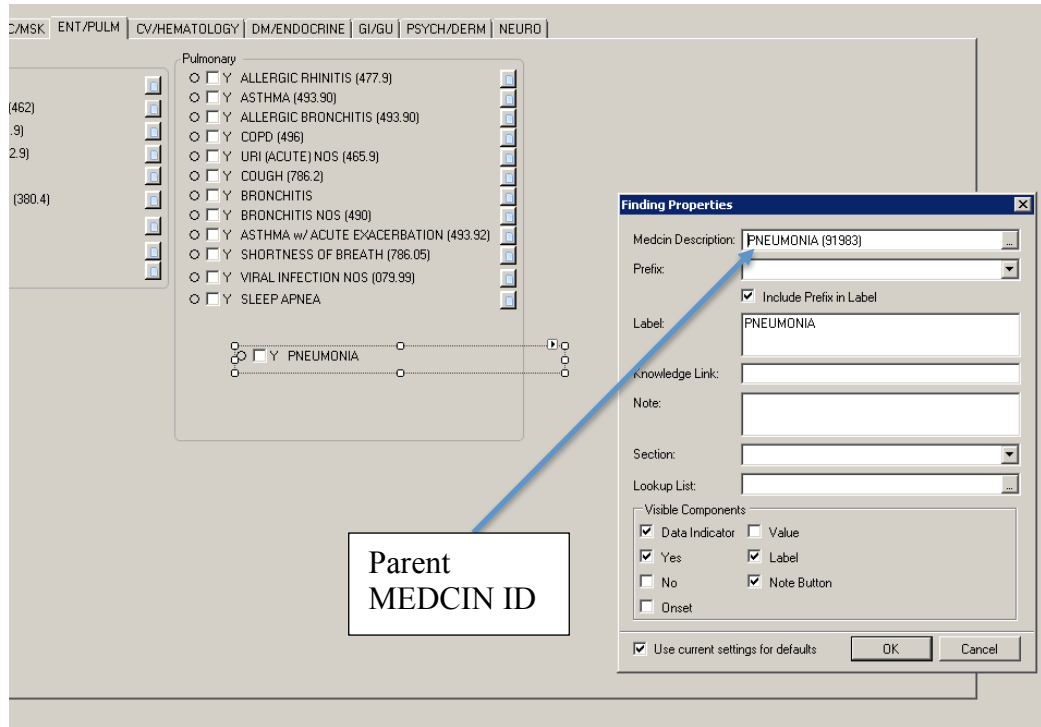


Figure 2. MEDCIN ID Parent

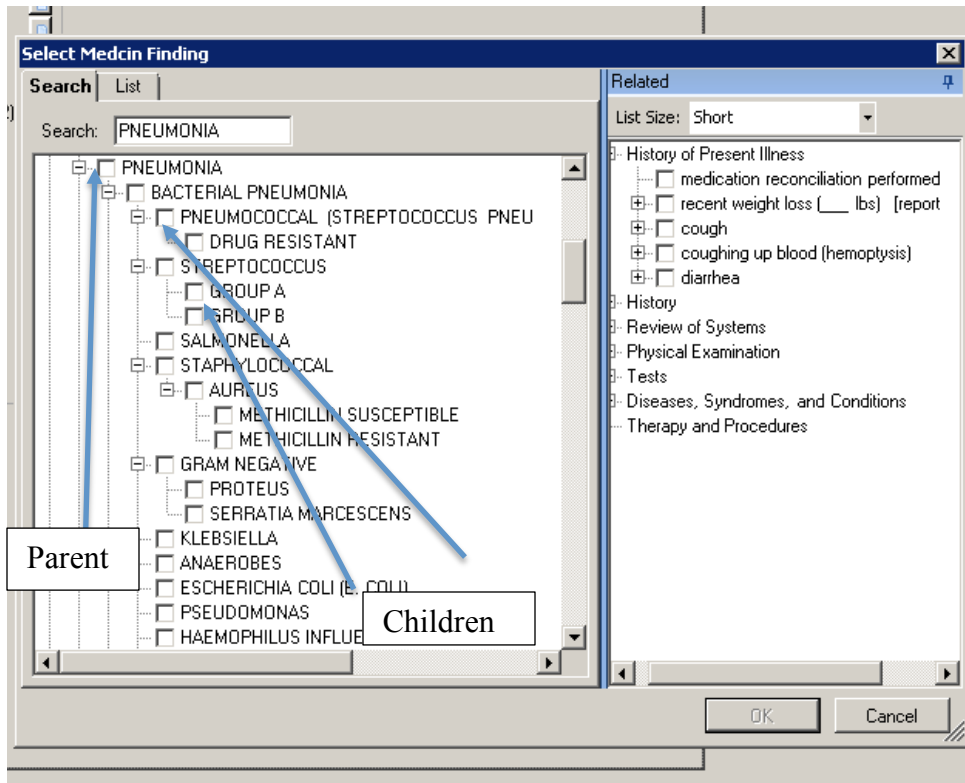


Figure 3. MEDCIN ID with children

Tester, PCMH
04/11/1967 - 54y F
SSN: xxx-xx-4568
Allergies -
No Known Allergies

Medications

- Aspirin-81 81 MG TBEC 09/11/2013 26 days left
- Accupril 20 MG TABS 09/06/2013 21 days left
- Coumadin 3 MG TABS 09/06/2013 21 days left
- Lipitor 20 MG TABS 09/06/2013 21 days left
- Norvasc 10 MG TABS 09/06/2013 21 days left
- Zetia 10 MG TABS 09/06/2013 21 days left
- CoQ-10 100 MG CPCR 09/04/2013 Reported
- MetFORMIN HCl 1000 MG TABS 09/04/2013 - 09/06/2013 Discontinued
- Atenolol 25 MG TABS 08/16/2013 - 09/05/2013 Discontinued
- duac gel GEL 08/16/2013 30 days left
- BenzaClin 1-5 % GEL 08/15/2013 29 days left
- duac gel GEL 08/15/2013 - 08/16/2013 Discontinued
- Norvasc 10 MG TABS 07/16/2013 - 09/06/2013 Discontinued
- Accupril 20 MG TABS 07/16/2013 - 09/06/2013 Discontinued
- Coumadin 3 MG TABS 07/16/2013 - 09/06/2013 Discontinued
- Lipitor 20 MG TABS 07/16/2013 - 09/06/2013 Discontinued
- MetFORMIN HCl 500 MG TABS 07/16/2013 - 09/04/2013 Discontinued

Problems

- Atrial Fibrillation
- Diabetes Mellitus-Type II, Uncontrolled
- Htz:hypertension-Benign
- HYPERLIPIDEMIA NEC/NOS

Recent Notes

- Office Visit - Andrews, Aurora
- Office Visit - Granas, Andrew MD
- Office Visit - Granas, Andrew MD
- Office Visit - Granas, Andrew MD
- Office Visit - Granas, Andrew MD

Recent Images

No images since last appointment

Clinical History

- Smoking status
- Marital history
- Family history of alcoholism
- Currently married
- No recent change in medical history

Medications

- Aspirin-81 81 MG TBEC
- Accupril 20 MG TABS
- Coumadin 3 MG TABS
- Lipitor 20 MG TABS
- Norvasc 10 MG TABS
- Zetia 10 MG TABS
- CoQ-10 100 MG CPCR
- duac gel GEL
- BenzaClin 1-5 % GEL

Recent Lab Results

No lab results since last appointment

Orders

- Appt - 6 Weeks - 14 to POD 1 RECEIPT
- Appt - 4 Months - 14 to POD 1 RECEIPT
- BENIGN BIOPSY LETTER - 14 to POD 1 RECEIPT
- BENIGN BIOPSY LETTER - 14 to POD 1 RECEIPT
- MRA BRAIN - 1 to 499

Figure 4. PCM Home Screen

<ul style="list-style-type: none"> Labs Immun. Health Clin Hx Tasks 	[Patient Encounter] Andreescu, Aurora 09/05/2013 In Progress	<ul style="list-style-type: none"> HEMATOLOGIC DISORDERS INJURY METABOLIC DISORDERS MOST COMMON DIAGNOSES UROLOGIC SYMPTOMS V CODES VASCULAR DISORDERS 	Selected Diagnoses and Orders 250.00 - DIABETES MELLITUS (From Encounter Note)
	[Patient Encounter] Twomey, Aileen MSN RN APN 09/05/2013 In Progress		HANDOUTS - Diabetes Glucose Log Due: 09/15/13, Pri: 2, Diabetes Glucose Log
	Blood Pressure Monit... Twomey, Aileen MSN RN APN 09/05/2013 Archived		HANDOUTS - DASH Diet Handout Due: 09/15/13, Pri: 2, DASH Diet Patient Handout
	DASH Diet Twomey, Aileen MSN RN APN 09/05/2013 Archived		HANDOUTS - Blood Pressure Log Due: 09/15/13, Pri: 2, Blood pressure Log
	Diabetic Glucos Log Twomey, Aileen MSN RN APN 09/05/2013 Archived		
	Office Visit Granas, Andrew MD 09/05/2013 Archived		

Selected Diagnoses and Orders

- 250.00 - DIABETES MELLITUS (From Encounter Note)**
 - HANDOUTS - Diabetes Glucose Log Due: 09/15/13, Pri: 2,
 Diabetes Glucose Log
 - HANDOUTS - DASH Diet Handout Due: 09/15/13, Pri: 2,
 DASH Diet Patient Handout
 - HANDOUTS - Blood Pressure Log Due: 09/15/13, Pri: 2,
 Blood pressure Log

<ul style="list-style-type: none"> Immun. Health Clin Hx 	Twomey, Aileen MSN RN APN Blood Pressure Monit... 09/05/2013 Twomey, Aileen MSN RN APN Archived
	DASH Diet 09/05/2013 Twomey, Aileen MSN RN APN Archived
	Diabetic Glucos Log 09/05/2013 Twomey, Aileen MSN RN APN Archived
	Office Visit 09/05/2013 Granas, Andrew MD Archived

Figure 5. Screen shot of documents with education material printed

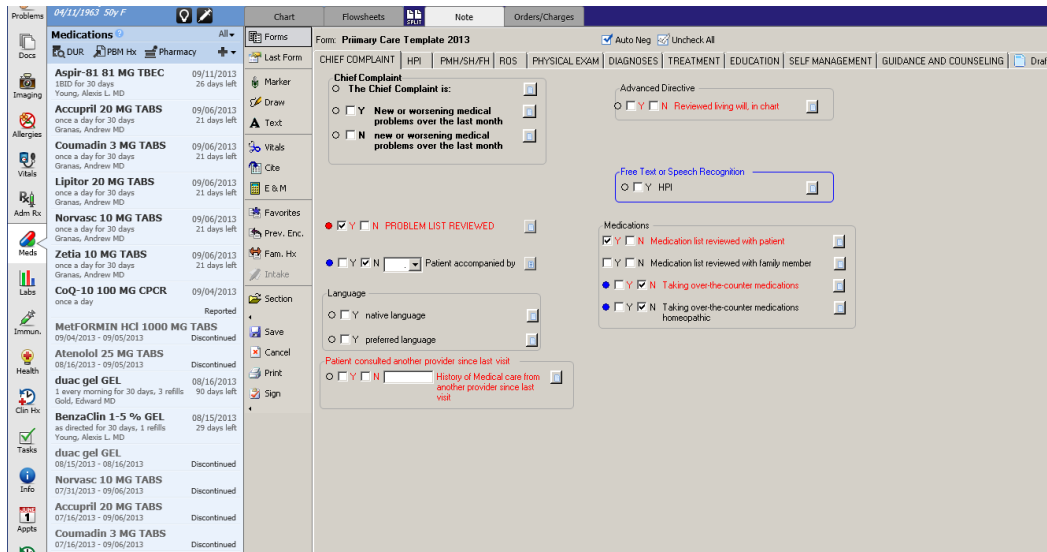


Figure 6. Template view in Forms

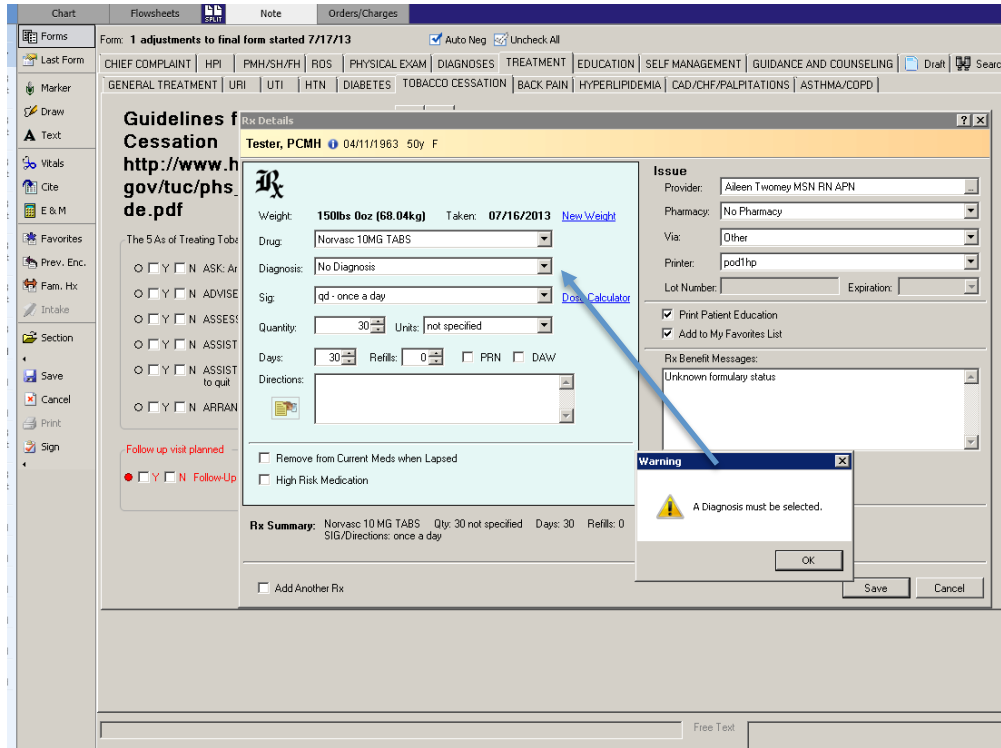


Figure 7. Prescription illustrating the diagnosis default

Rx Details [?] [X]

Tester, PCMH ⓘ 04/11/1963 50y F

Rx

Weight: **150lbs 0oz (68.04kg)** Taken: **07/16/2013** [New Weight](#)

Drug: **Norvasc 10MG TABS**

Diagnosis: **401.1 - Htn:hypertension:Benign**

Sig: **qd - once a day** [Dose Calculator](#)

Quantity: **30** Units: **not specified**

Days: **30** Refills: **0** PRN DAW

Directions:

Remove from Current Meds when Lapsed
 High Risk Medication

Rx Summary: Norvasc 10 MG TABS Qty: 30 not specified Days: 30 Refills: 0
 SIG/Directions: once a day

Issue

Provider: **Aileen Twomey MSN RN APN**

Pharmacy: **No Pharmacy**

Via: **Other**

Printer: **pod1hp**

Lot Number: Expiration:

Print Patient Education
 Add to My Favorites List

Rx Benefit Messages:
 Unknown formulary status

Print Patient Education

Add Another Rx

Save Cancel

Figure 8. Default print patient education for new medications

CHIEF COMPLAINT | HPI | PMH/SH/FH | ROS | PHYSICAL EXAM | DIAGNOSES | GUIDANCE AND COUNSELING | EDUCATION | SELF MANAGEMENT | TREATMENT

Location; Quality; Severity; Duration; Timing; Context; Modifying Factors; Associated Signs and Symptoms

History of Present Illness

Onset of symptoms Cardiovascular Neurological

exposure to a person with similar complaints Pulmonary Psychological

Systemic Gastrointestinal Endocrine

Skin Genitourinary Hematologic Symptoms

Head-related Female Genital Allergic / Immunologic

Eye Male Genital Pain Level (0-10)

Otolaryngeal Sexual Compla... Pain quality

Neck Musculoskeletal recently hospitalized

Breast Anticoagulants Warfarin Sodium (Coumadin)

Medication

Compliant with medications Unable to manage one's own medications Medication intolerance Recently stopped medication Use of alternate medical therapy Refusing treatment

Fall Risk Assessment

Discussion of Future Fall Risk Document. No Fall in the Past Year 2+ Falls In Past Year Discussion of Risk of Future Fall, Risk Documented

Free Text or Speech Recognition

HPI History Unobtainable due to: (use free text)

Figure 9. History of Present Illness (HPI) Tab

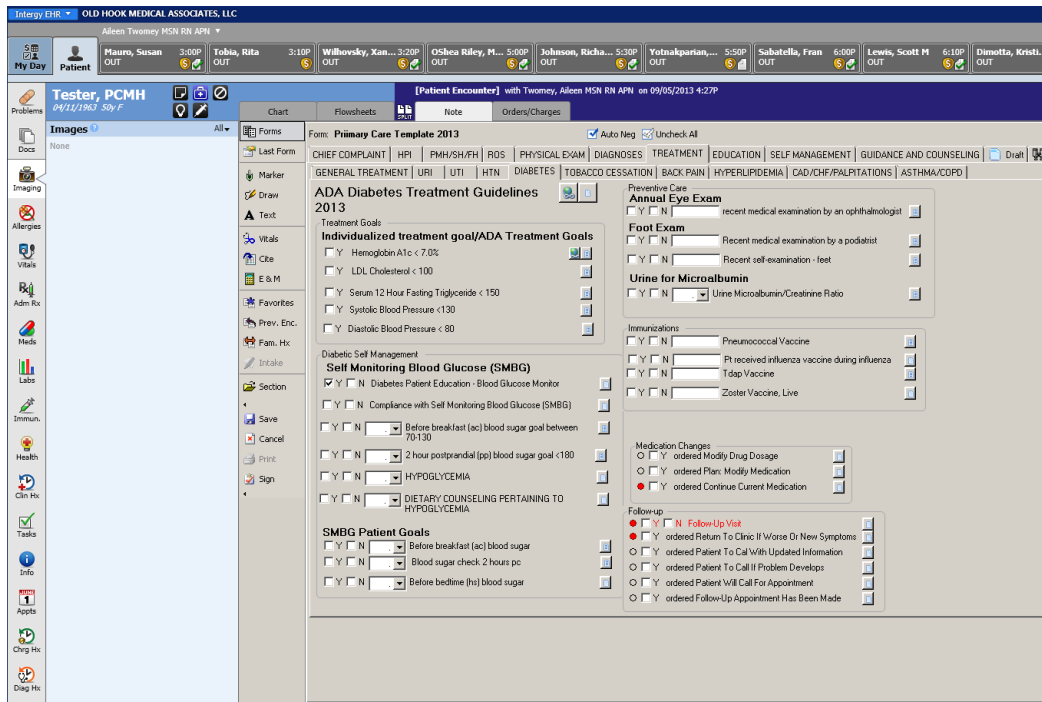


Figure 10. Diabetes Tab

[Patient Encounter] with Twomey, Aileen MSN RN APN on 09/05/2013 4:27P

Chart | Flowsheets | **Form** | Note | Orders/Charges

Forms | Form: **Primary Care Template 2013** | Auto Neg | Uncheck All

CHIEF COMPLAINT | HPI | PMH/SH/FH | ROS | PHYSICAL EXAM | DIAGNOSES | TREATMENT | EDUCATION | SELF MANAGEMENT | GUIDANCE AND COUNSELING | D

GENERAL TREATMENT | URI | UTI | HTN | DIABETES | TOBACCO CESSATION | BACK PAIN | HYPERLIPIDEMIA | CAD/CHF/PALPITATIONS | ASTHMA/COPD

Treatment of Hypertension: JNC7 Guidelines

Classification of Blood Pressure

- Y N ACP Staging Of Hypertension
- Y N ACP Staging Prehypertension: 120-139 / 80-89
- Y N ACP Staging Stage 1 Hypertension: 140-159 / 90-99
- Y N ACP Staging Stage 2 Hypertension: Greater Than Or = 160/100

Evaluation

- Y N pt tolerating blood pressure medication(s) well
- Y N Patient Reported Home Blood Pressure Check
- Y N Preventive Med Test Results Document/Review Blood Pressure

Medication Changes

- Y N ordered Modify Drug Dosage
- Y N ordered Plan: Modify Medication
- Y N ordered Continue Current Medication

Lifestyle Modification Recommendations

- Y N Lifestyle Change
- Y N Lose Weight
- Y N Increase aerobic activity
- Y N Low Sodium Diet
- Y N Maintain Healthy Diet
- Y N Diet As Appropriate
- Y N Recommend alcohol in moderation (2 drinks / day or fewer)

Follow-up

- Y N **Follow-Up Visit**
- Y N ordered Return To Clinic If Worse Or New Symptoms
- Y N ordered Patient To Call With Updated Information
- Y N ordered Patient To Call If Problem Develops
- Y N ordered Patient Will Call For Appointment
- Y N ordered Follow-Up Appointment Has Been Made

Marker | Draw | Text | Vitals | Cite | E & M | Favorites | Prev. Enc. | Fam. Hx | Intake | Section | Save | Cancel | Print | Sign

Figure 11. Hypertension Tab

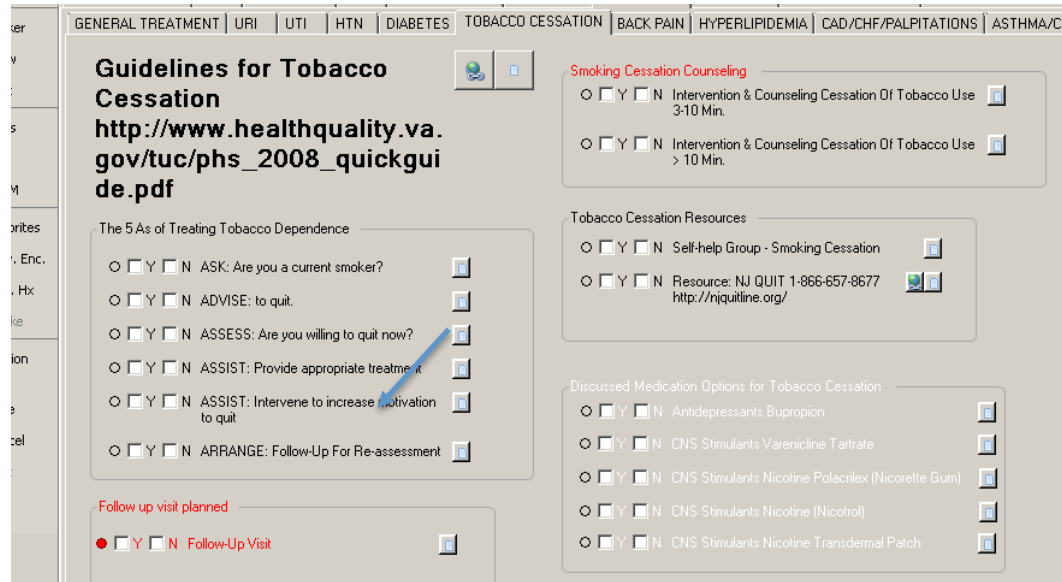


Figure 12. Tobacco screen shot with 5 A's

The screenshot displays a medical software interface with several assessment items. Each item has a checkbox, a 'Y' or 'N' indicator, and a blue 'i' icon. The items are:

- Y Risks / Benefits of new medication discussed patient acknowledges understanding
- Y Adverse Reactions
- Y Medication COMPLIANCE and BARRIERS ADDRESSED

Below these is a section titled "Care Plan" with the following items:

- Y Assessment & Intervention Care Plan Documented
- Y N Continue current treatment plan
- Y N Plan Of Care Reviewed And Agreed To
- Y N Counseling/Education On Self-Care
- Y N Community Resources discussed
- Y N Written instructions/education material provided

Figure 13. Assess and Address Barriers

No appointments for the selected doctor and date

[Patient Encounter] with Twomey, Aileen MSN RN APN on 09/05/2013 4:27P

Chart | Flowcharts | Note | Orders/Charges

Forms | Form: Primary Care Template 2013 Auto Neg Uncheck All

CHIEF COMPLAINT | HPI | PMH/SH/PH | ROS | PHYSICAL EXAM | DIAGNOSES | TREATMENT | EDUCATION | SELF MANAGEMENT | GUIDANCE AND COUNSELING | Draft | Search | Outline | Preview

GENERAL TREATMENT | URI | UTI | HTN | DIABETES | TOBACCO CESSATION | BACK PAIN | HYPERLIPIDEMIA | CAD/CHF/PALPITATIONS | ASTHMA/COPO

Diet and Nutrition

Maintain Healthy Diet Cholesterol-Reducing Diet High Fiber Diet Diabetic Diet Probiotics Low Sodium Diet Weight Loss Diet Gluten Free Diet Lactose Free Diet Bland Diet

Med Counseling

Continue Current Medication Modify Medication Stop Medication Medication Handout Provided Risks / Benefits of new medication discussed patient acknowledges understanding Adverse Reactions Medication COMPLIANCE and BARRIERS ADDRESSED

Duration of Encounter

Duration of Encounter: Consult & Care > 50% of time
 Duration of Encounter - Total Face To Face Time: ___ min

REVIEW OF RECORDS

Review New Lab Data (___min) Ordered On ___/___/___ (Use Onset Date)
 Imaging Studies-Previously ordered
 Obtain/Evaluate Previous Med Rec
 Review Old Recs. Hx From Other Than Pt. Discuss W/ Dth. ___

Surgical Clearance

NO APPARENT CONTRAINDICATIONS TO ANESTHESIA OR SURGERY

Transition of Care

Ordered Management Transition in Care. Clinical Summary Provided

Plan

Use of Orders / Charges is recommended.

Follow up visit: ___ week(s) ___ month(s)

Notification Parameters

- Patient To Call If Symptoms Worsen
- Return To Clinic If Worse Or New Symptoms
- Go To Emergency Room If Worse
- Follow-Up Contact: Case/Care Coordinator
- Follow-Up Visit

Care Plan

Assessment & Intervention Care Plan Documented Continue current treatment plan Plan Of Care Reviewed And Agreed To Counseling/Education On Self-Care Community Resources discussed Written instructions/education material provided

Free Text

DISCUSSION DISPOSITION PLAN NOTES

Figure 14. Check box for Patient Care Coordinator Referral

The screenshot displays a medical form with several sections:

- Enc.:** Y N **PROBLEM LIST REVIEWED**
- Hx:** Y N Patient accompanied by
- Language:**
 - Y native language
 - Y preferred language
- Medications:**
 - Y N Medication list reviewed with patient
 - Y N Medication list reviewed with family member
 - Y N Taking over-the-counter medications
 - Y N Taking over-the-counter medications homeopathic
- Patient consulted another provider since last visit:**
 - Y N History of Medical care from another provider since last visit

Figure 15. Over-the-counter and herbal medications

The screenshot displays the Intergy EHR interface for a patient named Tester, PCMH (DOB: 04/11/1963, 50y F). The patient is currently with Twomey, Aileen MSN RN APN. The interface shows a list of medical encounters on the left, including Office Visits, Patient Encounters, and Blood Pressure Monitors. The 'Documents' section is expanded to show a list of medical encounters, with the selected diagnosis being '250.00 - DIABETES MELLITUS'. The 'Selected Diagnoses and Orders' section is also expanded, showing a list of related diagnoses and orders, including 'DASH Diet Handout' and 'Blood Pressure Log'.

Document Type	Date	Provider	Status
Office Visit	09/11/2013	Andrescu, Aurora	In Progress
Office Visit	09/11/2013	Granas, Andrew MD	In Progress
Office Visit	09/10/2013	Granas, Andrew MD	Archived
Office Visit	09/10/2013	Granas, Andrew MD	Archived
Office Visit	09/09/2013	Granas, Andrew MD	Archived
[Patient Encounter]	09/06/2013	Goldstein, Richard	In Progress
Office Visit	09/06/2013	Granas, Andrew MD	In Progress
[Patient Encounter]	09/05/2013	Andrescu, Aurora	In Progress
[Patient Encounter]	09/05/2013	Andrescu, Aurora	In Progress
[Patient Encounter]	09/05/2013	Twomey, Aileen MSN RN APN	In Progress
Blood Pressure Monit...	09/05/2013	Twomey, Aileen MSN RN APN	Archived
DASH Diet	09/05/2013	Twomey, Aileen MSN RN APN	Archived
Diabetic Glucos Log	09/05/2013	Twomey, Aileen MSN RN APN	Archived
Office Visit	09/05/2013	Granas, Andrew MD	Archived
Office Visit	09/05/2013	Granas, Andrew MD	Archived
[Patient Encounter]	09/04/2013	Granas, Andrew MD	Archived
Office Visit	09/04/2013	Andrescu, Aurora	In Progress
Office Visit	09/04/2013	Granas, Andrew MD	In Progress
Office Visit	09/04/2013	Kelly, Mary APN	In Progress
RADIOLOGY ORDERS	09/04/2013	Granas, Andrew MD	Archived
[Patient Encounter]	08/21/2013	Twomey, Aileen MSN RN APN	In Progress
Blood Pressure Monit...	08/21/2013	Twomey, Aileen MSN RN APN	Archived
Blood Pressure Monit...	08/21/2013	Twomey, Aileen MSN RN APN	Archived
DASH Diet	08/21/2013	Twomey, Aileen MSN RN APN	Archived

Figure 16. DASH Diet Blood Pressure Logs

Intergy EHR - OLD HOOK MEDICAL ASSOCIATES, LLC
 Aileen Twomey MSN RN APN

My Day Patient Mauro, Susan 3:00P OUT Tobia, Rita 3:10P OUT Wilhovskyy, Xan... 3:20P OUT OShea Riley, M... 5:00P OUT Johnson, Richa... 5:30P OUT Yotnarpian,... 5:50P OUT Sabatel... OUT

Tester, PCMH 04/11/1963 50y F [Patient Encounter] with Twomey, Aileen MSN RN APN on 09/05/2013 4:27P

Images ? None

Section for Logs would be put into images when patient log is scanned into chart

Blood Pressure Monitoring Log Thursday, September 05, 2013
 Provider: Twomey, Aileen MSN RN APN Status: **Archived**

PATIENT HOME BLOOD PRESSURE MONITORING LOG Aileen Twomey MSN RN A

09/05/2013 **PCMH Tester**

Day of the month	Time of Day	What Activity were you doing?	What food did you eat?	Level of Stress?	Smoking Caffeine Alcohol	Exercise	Other
1							
2							
3							
4							

Figure 17. Screen shot of labelled section Logs (scanned into) shows up in documents

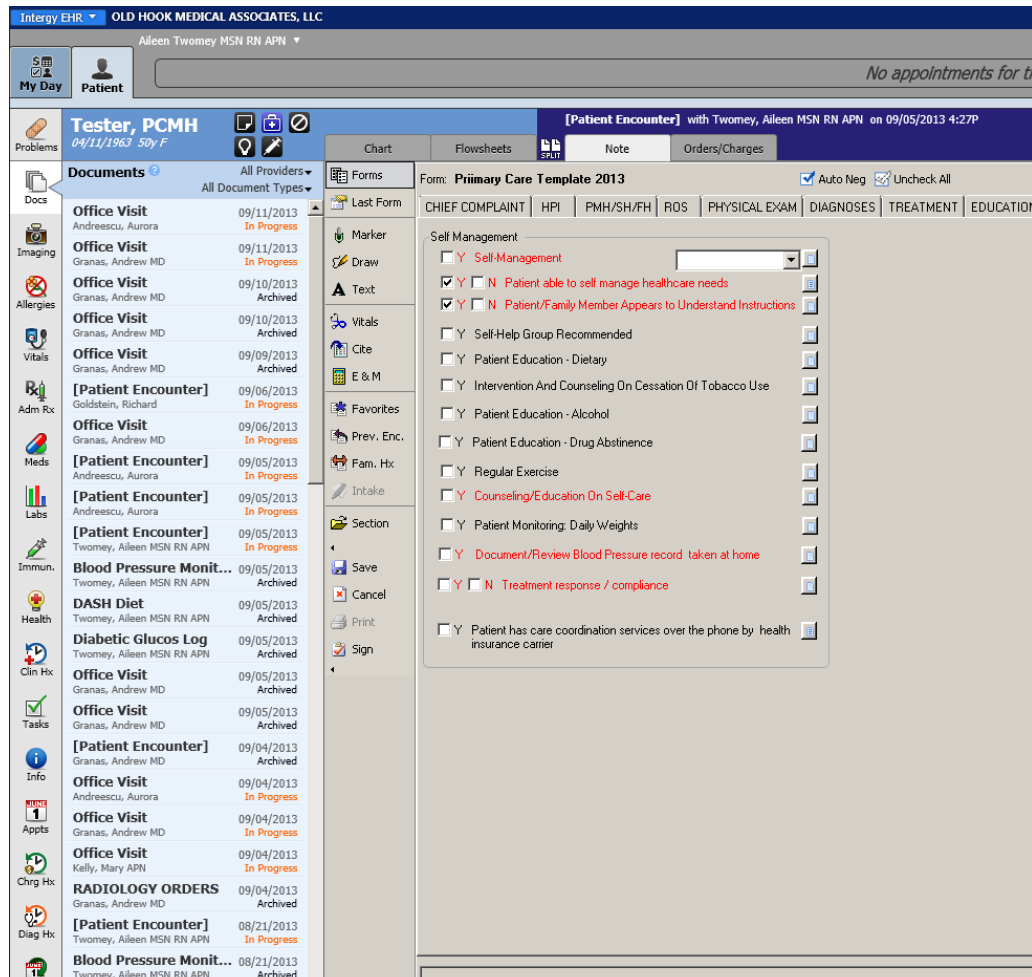


Figure 18. Screen shot, adopting healthy behaviors

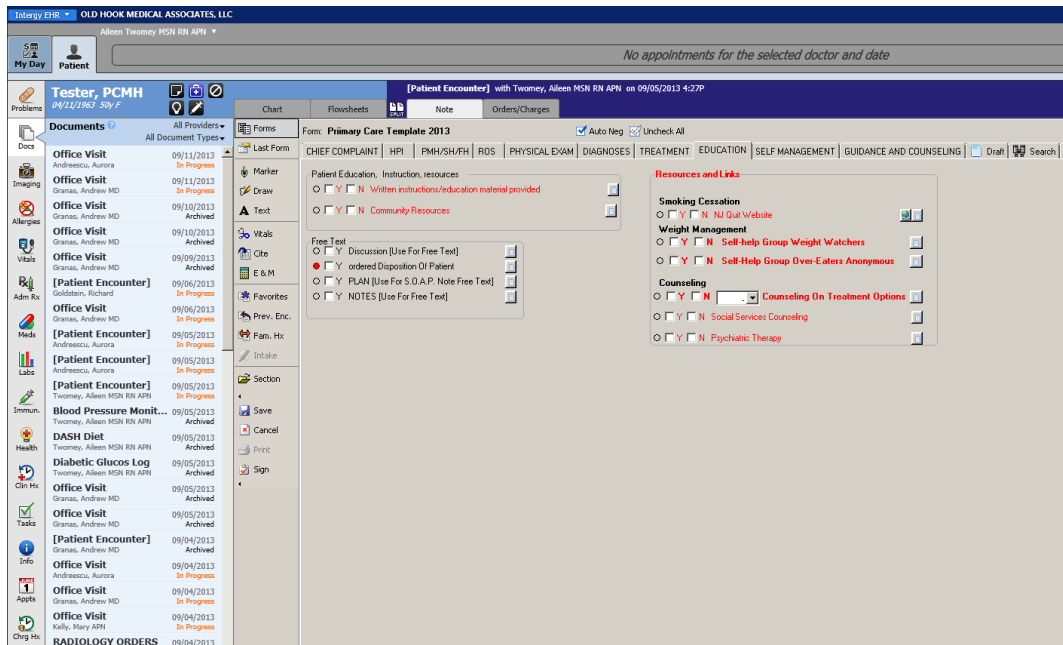


Figure 19. List of 5 community resources screen shot

Form: **PHYSICIAN FORM** | SOCIAL HISTORY | Screening Tests | Spirometry | PPD | EKG | COUMADIN | Allergy Shots | VISION TEST | Lab Procedures | Draft | Search | Outline | Preview

DOCUMENT IF PATIENT DECLINES TO PROVIDE THE INFORMATION TO THE QUESTION

Patient consulted another provider since last visit
 Y N History of Medical care from another provider since last visit

Advanced Directive
 Y N Reviewed living will in chart

Medications
 Y N Medication list reviewed with patient
 Y N Medication list reviewed with family member
 Y N Taking over-the-counter medications
 Y N Taking over-the-counter medications homeopathic

Depression Screening
 Y N PHQ9 score

Smoking History
 Y N smoking status
 Y N 07/2013 Quit
 Y N Exposure to secondhand cigarette smoke
 Y N Smoking cigarettes
 Y N cigars (___ a day)
 Y N smoking a pipe
 Y N using marijuana

Language
 Y N native language
 Y N preferred language

Alcohol History
 Y N alcohol use
 Y N never drank alcohol
 Y N stopped drinking alcohol
 Y N recovering alcoholic
 CAGE screening test for alcohol dependence (0-4)

Drug Abuse
 Y N drug use
 Y N never used drugs
 Y N using intravenous drugs
 Y N recovering from drug addiction
 Y N Taking prescription drug without prescription

Fall Risk Assessment
 Y N Discussion of Future Fall Risk Document: No Fall In the Past Year
 Y N 2+ Falls In Past Year
 Y N Discussion of Risk of Future Fall, Risk Documented

Ask about self referrals

Figure 20. Ask Families about Self- Referrals

APPENDIX A

Clinical Documentation Checklist		
Workbook objective	Physician/Clinical Staff	Examples
1 Conducts pre-visit preparations	Review patient charts prior to Huddle Meeting	Review any lab/imaging results or referrals
2 Collaborates with patient to develop an individual care plan → Treatment Goals		Patient's care needs & medical home and/or specialist's responsibilities
3 Provides patient with written plan of care		Care plan for patient's use at home. MU - PHI. To be printed at check out.
4 Assesses and addresses barriers when the patient has not met treatment goals		Reasons for limited progress towards treatment goals & barriers such as lack of understanding, motivation, finances, etc.
5 Gives patient a clinical summary at each relevant visit		Patients are to be given a clinical summary at each visit upon checkout.
6 Identifies patients who might benefit from additional care management		Resources: Disease management programs, case management programs, etc.
7 Follows up with patients who have not kept important appts	Done by clinical staff	Appointments for: Rechecks, preventative care, post-hospitalization, etc.
8 Reviews and reconciles medications in >50% of care transitions	Medication reconciliation done	All prescribed medications. Following specialist, ER visits and hospitalizations. Care transitions button.
9 Provides info about new Rx in >80% of patients		Provide comment about potential side effects, drug interactions, instructions, consequences of taking/not
10 Assesses patient understanding of meds for >50% of pts with date of assessment		General info about medication
11 Assesses patient response to meds and barriers to adherence for >50% of pts		Indicate any difficulties taking, side effects, or reasons for not taking meds (barriers)
12 Documents OTC meds, herbal Tx and supplements for >50% pts	Document OTC meds in Rx module	Review annually to prevent interference with prescribes meds or side effects
13 Provides education resources or refers to >50% of patients to education resources to assist in self-management		Info about a condition or patients role in managing condition. Check in education resources.
14 Uses EHR to identify pt-specific education resources and provides to >10% pts	Order/print specific resources	If education is needed to be given to patient, provider should indicate in orders to be printed at check out.
15 Develops and documents self-management plans and goals in collaboration with >50% pts		Address patient condition, include goals and a way to monitor self-care
16 Documents self-management abilities for at least 50% of pts		Self-assessment forms and/or questionnaires to determine abilities
17 Provides self-management tools to record self-care results for >50% of pts		Form or systematic method to collect information at home
18 Counsels >50% pts to adopt healthy behaviors		Coaching or Motivational Interviewing

APPENDIX B**CARE MANAGEMENT 3C**

1. Conduct pre-visit preparations:
2. Collaborates with patient/family to develop care plan, including treatment goals reviewed and updated at each relevant visit.
3. Gives the patient/family a written plan of care
4. Assesses and addresses barriers when the patient has not met treatment goals
5. Gives the patient/family a clinical summary at each relevant visit.
6. Identifies patients/families who might benefit from additional care management support.
7. Follows up with patients/families who have not kept important appointments.

MEDICATION MANAGEMENT 3D

1. Reviews and reconciles medication with patients and families
2. Provides information about new prescriptions to patients/families.
3. Assesses patient /family understanding of medications for patients with date of assessment.
4. Assesses patient response to medications and barriers to adherence for patients with date of assessment.
5. Documents over-the-counter medications herbal therapies and supplements for patients/families, with the date of updates.

SUPPORT SELF-CARE PROCESS 4A—

1. Provides educational resources and refers patients and families to educational resources to assist in self-management.
2. Uses an EHR to identify patient-specific education resources and provide them to patients if appropriate.
3. Develops and documents self-management plans and goals in collaboration with patients and families.
4. Documents self-management abilities for patients/families.
5. Tools to record self-care results for patients/families.
6. Counsels patients/families to adopt healthy behaviors.

APPENDIX C

Handout Type Italicized TO REINFORCE WHAT THE WORKBOOK IS LOOKING

FOR: GUIDELINE FOR PROVIDERS HANDED OUT AUGUST 8, 2013

CARE MANAGEMENT 3C

1. Conduct pre-visit preparations:

Review this sheet with the MA and correlate care according to the daily e-mail I will send you.

2. Collaborates with patient/family to develop care plan, including treatment goals reviewed and updated at each relevant visit.

Document in note a plan: specifically mentioning the treatment goals for the patient (i.e. BP parameters to meet—Use HTN tab in template, blood sugar goals – Which are laid out in the template that is specific for Diabetes, Tobacco cessation –use tab in template)

3. Gives the patient/family a written plan of care

*If patient is signed up in **secure messaging/ signed up on the portal** you do not need to give the patient a VISIT SUMMARY. If they are not, use correspondence and generate OHMA Patient Visit Summary (preview and edit before printing so it doesn't have anything in the summary that is contrary to what you want the patient to read. I would suggest putting in the summary instructions something patient can do for self re: dietary changes, exercise, how patient should take medications –does not need to be all of these things, just one that pertains to the patient.*

4. Assesses and addresses barriers when the patient has not met treatment goals

If BP above 140/90, A1c >7.0, LDL >100, pt still smoking; comment on why, which could be just that the patient won't adhere to dietary instructions, forgets or can't afford medication, I would suggest referring these patients to the nutritionist/diabetic educator and that would cover a few things in the audit.

5. Gives the patient/family a clinical summary at each relevant visit.

See #3 above

6. Identifies patients/families who might benefit from additional care management support.

*These patients can be referred to the Patient Care Coordinator (Gloria or Lauren), there is a box to check in the template and a referral can be printed—**which is meant to be given to Gloria or Lauren, not to the patient.** Follows up with patients/families who have not kept important appointments. **Karen Wilson is taking care of this part***

MEDICATION MANAGEMENT 3D**1. Reviews and reconciles medication with patients and families**

Move any lapsed medications to current.

2. Provides information about new prescriptions to patients/families.

Check the box

3. Assesses patient /family understanding of medications for patients with date of assessment.

Check the box, comment on instructions/understanding (succinctly)

4. Assesses patient response to medications and barriers to adherence for patients with date of assessment.

Check the box, briefly describe barrier and plan to address barrier.

5. Documents over-the-counter medications herbal therapies and supplements for patients/families, with the date of updates.

Update Medication List

SUPPORT SELF-CARE PROCESS 4A—the following need to be mentioned specifically when applicable to the patient.**1. Provides educational resources and refers patients and families to educational resources to assist in self-management.**

This is a big one to try to include in plan.

2. Uses an EHR to identify patient-specific education resources and provide them to patients if appropriate.

There is a link to NJ Quit in the template, referral to any applicable resource is good enough.

3. Develops and documents self-management plans and goals in collaboration with patients and families.

Covered by #3 above

4. Documents self-management abilities for patients/families.

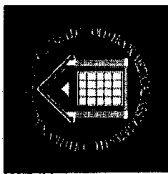
Check box in template, comment in note box any specific barrier

5. Provides self-management tools to record self-care results for patients/families.

Tools include reference to using a log to track/document blood sugar, blood pressure, dietary intake.

6. Counsels patients/families to adopt healthy behaviors.

Check box and comment on which healthy behavior is being addressed.



Transition of Care Document

Aileen Twomey MSN RN APN

452 Old Hook Road
Emerson, NJ 07630

201 666 3900 main ~ 201 666 3919 fax

Patient: PCMH Tester 04/11/1963

07/31/2013 Page 2 of 2

Please provide this document to the specialist during your first appointment.

Chief Complaint:

- Problem List:**
- Atrial Fibrillation
 - Diabetes Mellitus-Type II, Uncontrolled
 - Htn/hypertension-Benign
 - HYPERLIPIDEMIA,NEC/NOS

- Allergies:**
- No Known Allergies

Medication List:

- Accupril 20 MG TABS, once a day, 30 days, 0 refills
- Coumadin 3 MG TABS, once a day, 30 days, 0 refills
- Lipitor 20 MG TABS, once a day, 30 days, 0 refills
- MetFORMIN HCl 500 MG TABS, once a day, 30 days, 0 refills

Test Results:

hgbA1c 8.4
LDL 140

Vital signs:

Vitals taken 07/30/2013 09:09 am
 BP-Sitting R 144/80 mmHg
 BP-Cuff Size Large
 Pulse Rate-Sitting 100 bpm
 Pulse Rhythm Regular
 Height 65.25 in
 Weight 221 lbs
 Body Mass Index 36.5 Kg/m2
 Body Surface Area

Today's Diagnosis: Type 2 Diabetes, HTN, hyperlipidemia

Orders/Recommendations: see CDE re: meal planning

Discussion/Education: pt advised to reduce carbohydrates and to increase fiber, increase exercise

Self Management Plan:

check blood sugar once a day at varying times, before a meal or 2 hours after, or at bedtime

Follow-Up/Next Appointment: ov in 3 months

Appendix D

Aileen Twomey MSN RN APN
 452 Old Hook Road
 Emerson, NJ 07630
 (201) 666-3900 main ~ (201) 666-3919 fax

Patient Visit Summary

PCMH Tester
 DOS: 07/31/2013

Please note that this document contains your **protected healthcare information** and should be handled appropriately.

Chief Complaint:

Follow up appointment for HTN, DM, high cholesterol

Problem List:

- Atrial Fibrillation
- Diabetes Mellitus-Type II, Uncontrolled
- Hypertension-Benign
- HYPERLIPIDEMIA NEC/NOS

Allergies:

- No Known Allergies

Medication List:

- Accupril 20 MG TABS, once a day, 30 days, 0 refills
- Cozamide 3 MG TABS, once a day, 30 days, 0 refills
- Lipitor 20 MG TABS, once a day, 30 days, 0 refills
- MetFORMIN HCl 500 MG TABS, once a day, 30 days, 0 refills

Test Results:

Vital signs:

Vitals taken 07/30/2013 09:09 am
 BP-Sitting R 144/80 mmHg
 BP Cuff Size Large
 Pulse Rate-Sitting 100 bpm
 Pulse Rhythm Regular
 Height 65.25 in
 Weight 221 lbs
 Body Mass Index 36.5 kg/m2
 Body Surface Area

Today's Diagnosis:

Hypertension
 Hyperlipidemia
 Type 2 Diabetes

Orders/Recommendations: Chem/lipid, a1c

Discussion/Education: dietary changes, increase fiber, reduce carbohydrates, reduce fat intake, follow up with CDE.
 Start routine exercise

Self Management Plan: check blood sugar at home at least once per day at varying times, before a meal, or two hours after a meal, or at bedtime.

Follow-Up/Next Appointment: Follow with blood work results when available, ov with CDE recommended.
 OV in 3 months and prn

Appendix F



Aileen Twomey MSN RN APN
 452 Old Hook Road
 Emerson, NJ 07630
 201 666 3900 main ~ 201 666 3919 fax

REFERRAL REQUEST

Date: 07/31/2013
 Facility: OLD HOOK MEDICAL ASSOC. SHARON GUADAGNO
 452 OLD HOOK RD 452 OLD HOOK RD, 2ND FL
 Emerson, NJ 07630-1381 Emerson, NJ 07630

Patient: PCMH Tester
 452 Old Hook Road
 Emerson, NJ 07630
 (201) 666-3900

DOB: Primary 04/11/1963 Secondary

Insurance: ID Number: Guarantor: Tester, PCMH

Provider: Aileen Twomey MSN RN APN
 NPI: 1619073434

Diagnosis: Diabetes Mellitis-Non Insulin Dep 250.00

Tests Ordered: REFERRAL FOR DIABETIC EDUCATION

Notes/Instructions

Signature: Electronically signed by: Aileen Twomey MSN RN APN Date: 07/31/2013 - 9:50 PM
Aileen Twomey MSN RN APN
 Electronically signed by Aileen Twomey MSN
 RN APN

APPENDIX G

Clarification regarding the need for IRB approval

Judith A Lothian <Judith.Lothian@shu.edu>

RE: IRB application

Sun 6/2/2013 2:07 PM

I looked over the application. This isn't a research project, there is no research question, and there are no human subjects involved so it is definitely not an IRB issue. There isn't any need to put in an application. I will double check with Mary Ruzicka