AMELIA GENNARI, MD

Assistant Professor of Medicine, UPMC Senior Care—Shadyside, Pittsburgh, PA

KIM FEDOR, BSN, MBA

Administrative Clinical Manager, UPMC Senior Care—Benedum Geriatric Center, Pittsburgh, PA

ERIC BAKOW, MA, MPM, RRT

Senior Organizational Performance Consultant, UPMC Health Plan, Pittsburgh, PA

NEIL M. RESNICK, MD

Thomas Detre Professor and Chief, Division of Geriatric Medicine, University of Pittsburgh, and UPMC Senior Care—Benedum Geriatric Center, Pittsburgh, PA

A geriatric patient-centered medical home: How to obtain NCQA certification

ABSTRACT

The patient-centered medical home is a rapidly growing concept in reforming American health care. It has spread from its origins in primary care pediatrics to family practice and, more recently, into internal medicine. This review article describes how primary care geriatricians can obtain certification from the National Committee for Quality Assurance (NCQA) for a patient-centered medical home that includes some of the features unique to geriatrics.

KEY POINTS

The NCQA has six broad standards for patient-centered medical homes: practices must enhance access and continuity, identify and manage patient populations, plan and manage care, provide self-care support and community resources, track and coordinate care, and measure and improve performance.

Each standard has a number of elements, of which six are "must-pass." These deal with access, data for population management, care management, support for self-care, referral tracking and follow-up, and continuous quality improvement. All must be rigorously documented.

Practices must identify three important medical conditions for continuous quality improvement.

Applying for certification is hard work but, if accompanied by real changes to your practice, should improve the care you deliver.

The concept of the patient-centered medical home began as a solution for children with multiple chronic conditions. It has since been touted as a solution for all patients with chronic diseases, for problems with continuity of care, for restructuring primary care flow, for quality and safety, and for reining in cost. The key to the medical home concept is that the primary care provider helps to coordinate a patient's care across a variety of settings and specialists and that patients are active participants in their own care. The National Committee for Quality Assurance (NCQA) is a nonprofit organization that certifies a practice as a medical home.

Regardless of whether one accepts all of these potential wide-ranging benefits, the process of becoming a patient-centered medical home can help to transform your practice and provide benefits to patients and staff alike.^{4,5}

This review outlines the background of the patient-centered medical home and details some of the building blocks needed to get started on the NCQA certification process. It also describes the process of choosing the three required and clinically important conditions geared to an older patient population. We then describe the "must-pass" standards in detail, highlight specific geriatric issues, and outline the final submission process.

WHY EXTEND THE MEDICAL HOME CONCEPT TO GERIATRICS?

Although this concept began in pediatrics, it is also well suited for geriatrics. Its features in-

doi:10.3949/ccjm.79a.11103

clude many that have long been the mainstay of geriatric care: whole-person orientation; partnerships between providers, patients, and families; coordinated and integrated care; enhanced access; a focus on quality; and a focus on management of chronic diseases.²

Traditionally, the management of chronic disease has focused on diseases such as diabetes and congestive heart failure. These diseases have evidence-based interventions, available metrics, and known benefits for both cost and patient outcomes.

However, many of these measures of quality were derived from studies of middle-aged patients with few comorbidities, and they do not necessarily apply to the geriatric population. Moreover, these studies generally do not address functional status, the time frame for expected benefit vs projected life expectancy, the risk-benefit ratio related to managing these conditions, or the patient's own values and goals.

Therefore, "quality-care" interventions that work well for younger adults may actually harm frail elderly patients. An important aspect of building a geriatric medical home is making sure that the changes you implement in care and quality improvement will actually benefit your patients.

For complete information, go to www.ncqa.org

WHY WORK TOWARD CERTIFICATION?

In reviewing all the steps involved and the tremendous work required for a successful geriatric medical home, it is worth asking the question: Why work toward NCQA patient-centered medical home certification?

In the end, the goal of undertaking this project is to provide patient care in a way that is comprehensive and efficient. This is the same goal we have always strived for in geriatrics, but now we have an opportunity to measure it and to receive recognition for our work.

In the process of preparing for this application, the practice will have the opportunity to reexamine many of its processes of care, to discover deficits, and to address them. This is something that should be done continuously on some level in any good office practice on a regular basis; the patient-centered medical home application just intensifies the process.

Taking into account the needs of your

practice's geriatric population is a critical component of how one structures the patient-centered medical home. The need to take into account the frail elderly population with limited life expectancy and the lack of evidenced-based data in some areas changes how we manage many chronic illnesses. Geriatrics should take the lead in creating appropriate quality measures for this patient population. Incorporating these concepts into the medical home model is the right way to create a geriatric medical home and helps to lend validity to this concept to insurers and national organizations.

■ GETTING STARTED

Before getting started, it is important to have adequate support systems in place.

Go electronic. Although the NCQA provides chart-audit tools to facilitate the examination of patient subsets, it is extremely difficult to obtain medical home certification without an electronic health record system. You need to be able to collect and analyze data on your patients, their outcomes, their satisfaction, and other variables important to the practice's patient population. It is also critical to have personnel with good computer skills, to have administrative support, and to have adequate staffing to support the processes to be put in place.

Talk to major health insurance providers in your area to see if they are interested in supporting your practice. Insurers have a vested interest in their members' care, and they may have resources to assist with the medical home application.

Learn more. The NCQA provides seminars, online programs (www.ncqa.org/tabid/631/default.aspx), and full-length conferences. These courses provide real examples of documentation that demonstrated compliance with the standards as well as examples of documentation that failed. Learning how to create detailed documentation for the NCQA elements is important.

A good overall resource is the free user's guide that is available from NCQA. This publication contains step-by-step screen shots to assist in navigating the survey tool, linking documents, and submitting the final survey.

Several other organizations have online resources to assist with this process, including the American College of Physicians' Medical Home Builder (www.acponline.org/running practice/pcmh/help.htm).7

Gather your documents. The application can be ordered at www.ncga.org. You can also apply online, and users must purchase a license for the Web application. Final submission of an application involves the following items:

- A completed business associates agreement and the patient-centered medical home recognition program agreement
- A practice profile of all physicians
- The online application form
- The application fee, which ranges from \$500 to \$4,000, based on the number of physicians in the practice.

Get everyone on board. Most important at this juncture is getting "buy-in." Studies have shown that becoming a patient-centered medical home requires transformation of the entire practice, including physicians and staff. Shared leadership and protected group reflection time are also helpful.8

In embarking on this journey, the practice should set goals and a realistic time line with an understanding that this is a long and laborious process.

The reward of this major undertaking is the opportunity to examine every aspect of how your practice delivers care and to make meaningful improvements where needed. Practices should not make the mistake of just trying to meet the standards without actually improving quality.

CHOOSE THREE IMPORTANT CONDITIONS FOR QUALITY IMPROVEMENT

One of the most important first steps is to choose three "important" clinical conditions that will be the focus of quality improvement. According to the NCQA, important conditions include unhealthy behaviors, substance abuse, and mental health issues with evidencebased clinical guidelines that affect a large number of people or that consume a disproportionate amount of health care resources.9

The health care providers in your practice should all agree that the chosen conditions are important both to themselves and to their patients and that the proposed interventions will improve the quality of care. At the same time, the conditions and measures of quality need to be relatively easy to define and measure.

The 2011 standards require that at least one of the conditions be related to an unhealthy behavior (eg, obesity, smoking), a mental health issue (eg, depression, anxiety, Alzheimer disease), or substance abuse.

How can quality of care be measured in frail elderly patients?

A special consideration in geriatrics is the frailty of our patients and their limited life expectancy. Chronic care management has not been well studied in the frail elderly, and the benefits of controlling various markers of a chronic illness—for example, diabetes—all have differing time horizons that, depending on patient prognosis, may never be realized.

For some chronic diseases, the practice may need to develop new quality measures that are appropriate for its patient population. These measures must be evidence-based, or, where evidence is lacking, expert consensus must be attained. The American Geriatrics Society has several clinical practice guidelines, including the treatment of diabetes in It is very older persons, the prevention of falls, and difficult the pharmacologic management of persistent pain.10

Another option is to rely on the tradition- certification al Healthcare Effectiveness Data and Information Set quality measures for your chosen chronic condition, but to target appropriate an electronic patients for the interventions. One way to do health record this is to incorporate a prognostic indicator such as the Vulnerable Elders Survey¹¹ or gait **system** speed¹² into your office flow so that you can categorize patients into groups and then target interventions.

One more option is to choose a geriatric syndrome that is equally relevant to all your geriatric patients regardless of frailty. However, you must be able to measure aspects of the syndrome and have interventions that will improve specific outcomes.

SETTING PRIORITIES

At the outset, it is important to review the NCQA's standards for a patient-centered

to obtain without

medical home and to identify standards for which you have appropriate processes in place, standards in which you are deficient but which can be fixed, and standards that will be more difficult to address.

One way to do this is to complete the Webbased self-assessment survey, which provides a score by element. Each deficiency discovered is an opportunity to brainstorm solutions and to embark upon a rapid cycle of improvement ("plan, do, study, act").¹³ Deficiencies should be tackled over time, however, to avoid overwhelming the practice. It is particularly helpful to create small work-groups, to assign tasks with definite deadlines, and to meet regularly to review progress and assign new tasks.

The NCQA released new standards in 2011. A new requirement is that the practice's electronic health record system must incorporate Meaningful Use Criteria of the Centers for Medicare and Medicaid Services (CMS). These criteria show that the practice is using the electronic health record effectively. As a result, attaining medical home certification will ensure that the practice also meets CMS Meaningful Use Criteria.

Do not make the mistake of just trying to meet the standards without actually improving quality

Six standards for a patient-centered medical home

The NCQA has six standards for a patient-centered medical home, which align with the core components of primary care¹⁴:

- Standard 1: Enhance access and continuity
- Standard 2: Identify and manage patient populations
- Standard 3: Plan and manage care
- Standard 4: Provide self-care support and community resources
- Standard 5: Track and coordinate care
- Standard 6: Measure and improve performance

Each of these standards is broken down into elements, designated A, B, C, and so on—27 in all. Each element is scored on the basis of the number of "factors" the practice meets in each element. For example, element E in standard 1 has four factors, and the practice will receive 100% of the two possible points if all four factors are met, 50% of all points if the practice meets two factors, and no points if the practice meets none of the factors.

NCQA now designates a "critical factor"

for some elements. These are factors thought to be "central to the concept being assessed within particular elements," and they must be met to score any points for the element. In the same element as above, for example, having regular team meetings or a structured communication process is designated as a critical factor. A practice must meet this factor in order to achieve any of the four points assigned to the element.

■ SIX 'MUST-PASS' ELEMENTS

Of the 27 elements, six are considered essential, and the practice must get a score of at least 50% in all six of these to pass. Since they are the most critical elements, it is often useful to focus on them first to ensure that your practice puts into place policies and other building blocks necessary to make these important elements happen.

Policies must be in place for at least 3 months before submission. Most practices will discover many unwritten workflows as they review these processes.

What follows is a summary of the mustpass elements and their requirements. This is meant to be used only as an overview to better understand the scope of the medical home requirements; the actual requirements should be obtained from the NCQA Web site.

Standard 1, element A: Provide timely access during office hours

This element requires that your office have a policy or process in place for patient access. Same-day appointment availability is deemed a critical factor and must be met to receive any score on the whole element.

The practice needs to measure availability for several different appointment types—new, urgent, and routine—and show that same-day access is available. This can be done by completing at least a 5-day audit measuring the length of time from when a patient contacts the practice to request an appointment to the third next available appointment on his or her clinician's schedule. It is not enough to simply double-book patients in an already full schedule.

The remaining aspects of this element require being able to provide timely clinical

advice by telephone or by secure electronic messages, or both, during office hours, and to document it. The practice must have policies in place that define "timely." It also must audit phone calls to prove adherence to that policy. The audit should cover at least 5 days. The practice then needs to show at least three examples of clinical advice documented in patients' charts. We recommend not monitoring all the components during the same week, since the monitoring is laborious and would be overwhelming if attempted all at once.

Standard 2, element D: Use data for population management

This element requires that your practice be able to generate lists of patients and send out reminders of needed services; both are also CMS Meaningful Use Criteria.

Specifically, the NCQA requires that you be able to generate lists of patients' preventive care and chronic care services and be able to reach out to patients who have deficiencies. The practice must target at least three preventive care services and at least three chronic care services.

One can (and should) link this element to the three important conditions that have been chosen for the practice. For example, if osteoporosis is one of the important conditions, it also can be one of the three preventive care services; a possible quality improvement intervention could be to send reminders to patients to have bone density screening if they have not done so within a certain time frame.

In addition, the practice should have the ability to generate a list of patients who have not been seen at an appropriate interval, as well as a list of patients who are taking certain medications that require regular monitoring. To complete the audit, the practice must produce the four lists just described. Each must then be examined for the previous 12-month period, and documentation must be provided to show how patients with deficiencies were contacted.

Local insurance health plans may be able to help with this element, as these types of lists are often standard practice. Submitting the health plans' lists is acceptable as long as you can show that they account for at least 75% of the practice.

Standard 3, element C: Manage care for your three conditions

This element focuses on the three clinically important chronic conditions you have chosen. It demonstrates that your practice is following these patients' outcomes and targeting patients who require more attention to improve their outcomes. Doing so requires documenting pre-visit planning and individualized care plans and treatment goals.

The patient or the family, or both, should be given a written plan of care and a clinical summary at each visit. Barriers to progress need to be assessed, and patients should be contacted if they do not come to scheduled appointments. Patients who have significant barriers should be assessed for additional care management support. This is particularly important for a geriatric population, which may have significant psychosocial barriers such as financial problems, transportation issues, cognitive decline, and overall lack of support.

For each factor in this element, the office must create policies and protocols and assign tasks to appropriate members of the care team. For example, a nurse can make phone calls to targeted patients before their appointments to review goals of care using a standardized form. The form can be given to the physician at the **discovered is** time of the appointment for review and incorporation into the medical record.

Documentation for this element requires to improve that the practice evaluate the number of patients with each chronic condition (the denominator) and the number of patients in each group for whom the above standards have been completed (the numerator) over the previous 3 months. At least 75% compliance is required for each of the three conditions to achieve a passing score for this factor.

This element is very time-consuming, even with an electronic health record. The practice team members should work together to create the systems and tools, but, if possible, it is worth trying to acquire help from an intern or a student. Working on the medical home can be a wonderful educational experience.

Standard 4, element A: Support self-care

For this element, one must show that the practice has educational and self-monitoring tools that are given to all patients depending upon

Each deficiency an opportunity

their needs. Involving the patient or family or caregiver in managing the patient's health is an integral part of the patient-centered medical home.

This is particularly challenging in geriatrics, as many patients may be cognitively unable to participate, and it will be necessary to develop self-management tools that are meaningful for caregivers. When choosing the three clinically important conditions, one needs to keep this element in mind, as the practice must be able to create good educational and self-management tools that are relevant to the important conditions and applicable to the geriatric patient population.

To meet the specific requirements for this element, the practice must show that at least 50% of patients or families receive educational resources and have documented self-management plans, tools, and counseling, and an assessment of their self-management abilities. In addition, one can show that the electronic health record is used to identify patient-specific educational resources in at least 10% of patients. This last factor is also one of the CMS Meaningful Use Criteria.

To document that the practice is completing all the requirements for this element, one must look back 12 months (or at least 3 months if earlier data are unavailable) and use the list of patients with the three clinically important conditions. In addition, the practice needs to identify its high-risk or complex patients over the same time period. These two lists comprise the denominator. The numerator is the number of patients for which you can show documentation of each of the above items.

Because this audit is also time-consuming, it and standard 3, element C (care management) should be combined and performed simultaneously.

Standard 5, element B: Track referrals and follow-up

This is often the most difficult must-pass element to fulfill because it requires coordination with health care providers outside one's practice. To complete this element, the office must have a system in place to track referrals originating within the practice and to ensure that all relevant information is both sent to

and received back from the consultant. This tracking must include the reason for and the urgency of the referral, as well as relevant clinical information. One can also establish comanagement when needed for patients who are seen regularly by a specific specialist.

Making sure that the consultant's report gets back to the practice is, for most sites, the most difficult part. It is often not feasible to do this entirely through the electronic health record, as it is unlikely that all your consultants have the same electronic health record as your practice. Therefore, this often requires at least a partially paper-based system, creating a file that must be checked on a regular basis to ensure that the appointment with the consultant has been completed and that he or she has sent a note back. If the information is not all there, there must be documentation of a phone call that tried to obtain the necessary information or to document the patient's refusal to follow up.

Two factors in this element also meet CMS Meaningful Use Criteria: demonstrating the capability for electronic exchange of key clinical information between clinicians, and providing an electronic summary of the care record for more than 50% of referrals. To complete the documentation for this element, the practice must do an audit that reviews at least a week's worth of referrals.

Standard 6, element C: Implement continuous quality improvement

This element requires demonstration of continuous quality improvement activities in specific domains that are outlined in standard 6, elements A and B. Element A includes preventive care measures, chronic or acute care clinical measures, and measures that affect health care costs or help to assess disparities in vulnerable patients' care. Element B includes surveying access, communication, coordination, and self-management support or obtaining feedback from vulnerable patient groups or patients and their families.

Once again, there is the potential for considerable overlap in the work that your practice does with the clinically important conditions, and with standard 1 (access), standard 2 (population reminders for preventive services), standard 3 (care management), and stan-

Same-day appointments are not the same as double-booking dard 4 (self-management). This overlap provides the opportunity to go into more depth and to show significant quality outcomes for some of the chosen measures.

This element requires the practice to set goals and to act to improve at least three measures from element A and at least one measure from element B. Points are also awarded for addressing at least one disparity in care or service for vulnerable populations. In geriatrics, some examples of vulnerable populations include the very frail, patients and families with significant psychosocial issues, those at the end of life, or patients with significant financial burdens (especially related to health care costs). Finally, points are awarded for involving patients or families in quality improvement teams.

To document adherence to this element, the practice must demonstrate quality improvement reports for all the selected measures as well as actions taken in response to the data. The goal is to meet the desired level of achievement that is established by your practice. If patients or families are asked to join quality improvement teams, the practice must describe the process employed for inclusion and details of the frequency of meetings and agendas.

OTHER ELEMENTS

Besides the must-pass elements, there are 21 additional elements, each with its own specific requirements and documentation. Some of these overlap with the concepts in the mustpass elements, so it is important to create processes that work for all the factors in all the related elements.

It is also important to understand that one does not need to master all the other elements—the practice can choose ones that are most meaningful for its patient population. One can also elect to skip ones that require

REFERENCES

- 1. Sia C, Tonniges TF, Osterhus E, Taba S. Pediatrics. History of the medical home concept. Pediatrics 2004; 113(suppl 5):1473-1478
- 2. Robert Graham Center: Center for Policy Standards in Family Medicine and Primary Care. The patient centered medical home: history, seven core features, evidence and transformational change. November 2007. http://www.

particularly labor-intensive audits and that do not add much to the quality of geriatric patient care. The team should focus on making changes that help patient care and flow. All recognition levels require a minimum 50% score for the six must-pass elements, and the final recognition level is based on the following three criteria:

- Level 1: 35–59 points and all six must-pass elements
- Level 2: 60–84 points and all six must-pass
- Level 3: 85–100 points and all six mustpass elements.

FINAL SUBMISSION

Final submission involves completion of the application materials mentioned above, payment of the application fee, and attachment of files that have been linked to elements from the document library.

The process of uploading files for submission can be complex when multiple staff members are working on the documents. Files must be uploaded from shared drives, which should be set up when one begins the process of gathering documents. As a last step, the document Tracking library must be uploaded to the NCQA server. referrals It is best to do this in batches of files. The time needed to upload depends on the speed of the Internet service. The survey form will indicate the hardest if each file has been successfully uploaded to the NCQA server.

The submitted survey tool is assigned a **element** project number that can be used as a reference to fulfill for inquiries to the NCQA. It is best to keep a copy of the final submission information for future use. Before submitting, it is a good idea to ask someone not involved in your practice to review the documents for clarity and consistency. Remember, the survey tool is a "read-only" document after submission, so no changes can be made to it after final submission.

is often must-pass

- graham-center.org/online/graham/home/publications/ monographs-books/2007/rgcmo-medical-home.html. Accessed April 4, 2012.
- 3. Lee JG, Dayal G, Fontaine D. Starting a medical home: better health at lower cost. Healthcare Financial Management Association. June 2011. http://www.hfma.org/ Templates/InteriorMaster.aspx?id=27048. Accessed April 4, 2012.

GERIATRIC PATIENT-CENTERED MEDICAL HOME

- Grumbach K, Grundy P. Outcomes of implementing patient centered medical home interventions: a review of the evidence from prospective evaluation studies in the United States. Patient-Centered Primary Care Collaborative. November 2010. http://www.pcpcc.net/content/ patient-centered-medical-home. Accessed April 4, 2012.
- Reid RJ, Coleman K, Johnson EA, et al. The group health medical home at year two: cost savings, higher patient satisfaction, and less burnout for providers. Health Aff (Millwood) 2010; 29:835–843.
- Huang ES, Zhang Q, Gandra N, Chin MH, Meltzer DO. The
 effect of comorbid illness and functional status on the
 expected benefits of intensive glucose control in older
 patients with type 2 diabetes: a decision analysis. Ann
 Intern Med 2008; 149:11–19.
- American College of Physicians. Medical home builder. http://www.Medicalhomebuilder.org. Accessed April 4, 2012
- Nutting PA, Miller WL, Crabtree BF, Jaen CR, Stewart EE, Stange KC. Initial lessons from the first national demonstration project on practice transformation to a patient-centered medical home. Ann Fam Med 2009; 7:254–260.
- 9. National Committee for Quality Assurance (NCQA). Stan-

- dards and guidelines for NCQA's patient-centered medical home (PCMH). March 2011. www.chcact.org/images/customer-files//Appendix3_PCMH2011glossary.pdf. Accessed April 4, 2012.
- American Geriatrics Society. http://www.americangeriatrics.org/health_care_professionals/clinical_practice/clinical_guidelines_recommendations/. Accessed April 4, 2012.
- Min LC, Elliott MN, Wenger NS, Saliba D. Higher vulnerable elders survey scores predict death and functional decline in vulnerable older people. J Am Geriatr Soc 2006; 54:507–511.
- Studenski S, Perera S, Patel K, et al. Gait speed and survival in older adults. JAMA 2011; 305:50–58.
- Plan, do, check, act. In: Karlof B, Lovingsson F, editors. A to Z of Management Concepts & Models. London: Thorogood Publishing; 2005.
- National Committee for Quality Assurance (NCQA). NCQA 2011 Requirements. www.ncqa.org/tabid/1405/Default. aspx. Accessed April 4, 2012.

ADDRESS: Amelia Gennari, MD, UPMC Shadyside Hospital, Senior Care Institute, 5230 Centre Avenue, Suite 405, Pittsburgh, PA 15232; e-mail gennaria@upmc.edu.