"To Improve Is To Change": Central Mississippi Health Services, Inc. and the Patient-Centered Medical Home

A report on the progress of the Central Mississippi Health Services, Inc. Southwest Clinic’s implementation of and compliance with Patient Centered Medical Home standards as dictated by the National Committee for Quality Improvement, accompanied by recommendations for further progress toward Level Three NCQA Patient-Centered Medical Home recognition by October 31, 2014.

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Introduction

At the onset of the Primary Care Leadership Program, the GE Foundation tasked the scholars with eliminating waste in order to improve quality in our nation's Community Health Centers. In the opening webinars, we were challenged to immerse ourselves in our site communities, to observe with a keen and impartial eye and to identify those areas that are ripe for improvement. Once we identified a need, it was our task to invest ourselves in improvements that would have long-term implications for our Community Health Center. With this goal in mind, helping to develop and implement the Patient-Centered Medical Home model at Central Mississippi Health Services was a natural project choice.

When I arrived at the CMHS Southwest Clinic at the beginning of June I set about investigating what programs my site already had in motion. It was not long before I found myself in the office of Dr. Frank McCune, who proceeded to drop a massive binder labeled “NCQA Patient-Centered Medical Home Handbook” on the desk in front of me. According to Dr. McCune, our clinic had a goal of Level III NCQA Patient-Centered Medical Home recognition and only a few months to get it done. Here was a project that would allow me to study health policy, help design an implementation plan for this new delivery model, and to write protocols and procedures that would be incorporated into the clinic’s daily operation for years to come. There was also a great deal of room for me to research and analyze the clinic and its patients’ readiness for integration of modern delivery tools, especially text messaging and the patient portal. This project would require me to build relationships with clinic staff on all levels –
administrators, finance officers, IT staff, receptionists, nursing staff, and providers – and to truly immerse myself in this health care community.

**Background**

The Patient-Centered Medical Home is a more than forty-year-old concept that has found new life amidst the challenges of modern health care delivery. The language of the “medical home” was first introduced in 1967, in a publication of the American Academy of Pediatricians (APP) entitled *Standards of Child Health Care*. The book, written by the AAP’s Council on Pediatric Practice (COPP), defines the medical home as “a central source of a child’s pediatric records”. Those involved in the inception of the Patient-Centered Medical Home recognized the distinct need for coordination of care and enhanced communication amongst health care professionals, and its inherent benefit for the patients being serviced.

As the language of the medical home began to gain traction within the American pediatric community, the concept began to morph from simply a centralized source of a patient’s medical information, to a means of providing care from a grassroots, community standpoint that takes into account the entire patient and their family. In the decades since *Standards of Child Health Care* more and more of the medical community has endorsed and embraced the idea of the medical home. In 1978, at the International Conference on Primary Health Care, the World Health Organization laid down some of the quintessential elements of the Patient Centered Medical Home as well as recognized the importance of primary care to the health and well being of all individuals. More than twenty years later, in 2002, The Future of Family Medicine Project produced a report entitled “The Future of Family Medicine: A Collaborative project of the Family Medicine Community” which made the sweeping recommendation that every American be provided a “medical home”. Today, the Patient-Centered Medical Home has grown to encompass the entire field of primary care, and has become synonymous amongst its supporters with high-quality care that is integrated, coordinated, accessible, and - most important - patient oriented.

The Patient-Centered Medical Home has taken center stage in the most recent of health care debates in the United States, particularly because of its strong ties to the Patient Privacy and Affordable Care Act. According to a 2011 article published by *Journal of General Internal Medicine*, “The
Affordable Care Act encourages the widespread adoption of PCMHs by offering states the option to increase reimbursement to primary care sites designated as “health homes” for Medicaid patients with chronic conditions. Health homes are similar to medical homes, but tend to emphasize the integration with public health and the potential lead role of advanced practice nurses.” The article, entitled “How the Affordable Care Act Will Strengthen the Nation's Primary Care Foundation”, gives a window into the vision of the Patient-Centered Medical Home as it exists w/in the Affordable Care Act. With physicians, nurse practitioners, and physician assistants at the helm, health professionals providing primary care will be organized into teams. These teams will provide comprehensive care that is coordinated, managed, technologically up-to-date, and that engages the patient and their family as the center of the care team. This includes, but is not limited to, managing care transitions, coordinating referrals, and linking the patient with community-based resources and support.

In the state of Mississippi, the medical home model is still very much in its infancy. Although the State defined the patient centered medical home in its own legislation, House Bill 1192 in 2010, Mississippi has not produced legislation mandating forward movement in terms of implementing the model. In addition, the bill simply acknowledges the efforts of the National Committee for Quality Assurance to develop a designation program for medical practices, and mentions the Federal Tax Relief and HealthCare Act medical home demonstration project. The bill also advises that the State Board of Health “incorporate the principles of the patient-centered medical home”.

One of the specific strides the state is making toward implementing the medical home model is the Mississippi Coordination Access Network (MississippiCAN) program. This program is the one with which Central Mississippi Health Services, Inc. is most involved. MississippiCAN involves collaboration between Coordinated Care Organizations, providers and beneficiaries to provide improved access, improved quality of care, and improved cost effectiveness and efficiency. Beneficiaries are connected with a medical home that will coordinate management of disease states, utilization of preventive care services, and increase the patient’s responsibility and role in their own care. This program is financed by Medicaid via Magnolia Health, an insurance provider for Mississippi’s Medicaid population, as well as...
United Health care, an insurance provider that covers much of Mississippi’s blue collar working population. The primary challenge or limitation for MississippiCAN is the decision of the State to not accept the 2014 Medicaid Expansion. Thus, as Mississippi falls behind much of the nation in its Medicaid spending, the State is limited in its ability to extend the umbrella of care to more of its medically underserved citizens.

Central Mississippi Health Services, Inc. Southwest Clinic has been a part of the Federal Tax Relief and HealthCare Act medical home demonstration project since 2011, which gave select practices in eight states three years to achieve NCQA Patient-Centered Medical Home recognition. In 2011, the NCQA dictated six standards that define the patient-centered medical home. They are:

PCMH 1: Enhance Access and Continuity
PCMH 2: Identify and Manage Patient Populations
PCMH 3: Plan and Manage Care
PCMH 4: Provide Self-Care and Community Support
PCMH 5: Track and Coordinate Care
PCMH 6: Measure and Improve performance

According to the NCQA, “Six must-pass elements are considered essential to the patient-centered medical home, and are required for practices at all recognition levels. Practices must achieve a score of 50% or higher on must-pass elements . . . Practices must achieve a score of 80% or higher for level three recognition.” These must pass elements are:

1. PCMH 1, Element A: Access During Office Hours
2. PCMH 2, Element D: Use Data for Population Management
3. PCMH 3, Element C: Care Management
4. PCMH 4, Element A: Support Self-Care Process
5. PCMH 5, Element B: Track Referrals and Follow-Up
6. PCMH 6, Element C: Implement Continuous Quality Improvement

*A full summary of NCQA PCMH 2011 Standards is included in Appendix 1.*
Methodology

The goal for my project was to assist the late Dr. Frank McCune with implementing the Patient-Centered Medical Home model at the Southwest Clinic site of Central Mississippi Health Services, Inc. The primary goal for my time in Jackson was to write a body of protocols and procedures that would incorporate the medical home model into the day-to-day operation of the clinic. These protocols were to cover six must-have features of the medical home as defined by the National Committee for Quality Assurance. Dr. Janice Bacon-West, a second physician charged with implementing the patient-centered medical home at CMHS, provided me templates for PCMH protocol writing that were used by the G.A. Carmichael Family Health Center to reach level three NCQA PCMH recognition.

The first week of my project was spent simply shadowing providers, getting to know the patient population, and conducting interviews with both patients and providers on all levels to find out how exactly the clinic works and where improvement was most needed. Once I had convened with Dr. McCune and researched the patient-centered medical home model, the next two weeks were spent in intense observation. I shadowed Dr. McCune and his medical assistant Ms. Shannon Ivory daily. During each patient encounter, provider meeting, and board meeting, I cross-referenced the NCQA must have elements with the events taking place in the clinic. The goal of this exercise was for Dr. McCune and I to identify which of the patient-centered medical home practices were already in effect and being carried out to their full extent by the staff and providers at CMHS. Those already in effect were the first and simplest to be put into written protocol. An example of such a protocol pertained to PCMH 1, Element A: Access During Office Hours, specifically the provision of clinical advice by telephone. Those calls being received early in the day, especially those received before the lunch-hour, were being returned and the medical issue resolved on the same business day. Those calls received later in the day were returned on a rolling basis until the end of the business day or early the next morning. Practices like these were easily translated to protocol.
The second tier of the project was to identify those must-have practices that are not currently being carried out but could be easily implemented in the clinic. For these elements, such as the “huddle” team meeting, the task was twofold. Dr. McCune and I had to implement the practice and study how it is received and incorporated into the culture of the clinic, and then write the corresponding protocol. For instance, Dr. McCune and I started instituting “the huddle”, particularly for patients with complicated cases involving management of multiple disease states. In “the huddle”, all parties involved in the patient’s care are present for the initial appointment. At CMHS, these teams would be lead by a physician or nurse practitioner, and the meetings would involve all nursing or clinical support staff, billing staff, social or case workers, family members and care givers that contribute to the care of the patient. The team, with the patient situated at the center, would assess all disease states and medications as well as formulate a plan and assign tasks for the next stages of the patient’s care. At the end, the patient and their family were to be furnished with a written summary of the visit and a written copy of their plan of care. After executing about ten of these huddles, protocols for this element were also handily composed and revised.

The last tier of the methodology consisted of teasing out those activities related to must-have elements that the clinic is not currently practicing and will face significant challenges with implementing by the October 31, 2014 deadline. For these, no protocols were written. Instead, Dr. McCune and I researched and investigated methods of moving the clinic forward. Our main focus was the integration of text messaging into the clinical practice at CMHS. To examine the readiness of the practice for such a drastic advancement, Dr. McCune and I conducted a patient survey that assessed tech savvy among a representative sample of our patient population. The questions in the survey were not drawn from any particular source; they were personally written by Dr. McCune and I in order to ensure maximal participation by the patients. A copy of the survey is attached in Appendix 2. We also conducted a careful observation of physicians and nurse practitioners in the practice and recorded how many were observed using cell phones to text message other providers, patients or families in the process of care coordination.
Results

Through the process of writing all of these protocols, my preceptor and I were able to tease out those elements that represent glaring weaknesses in the implementation of the patient-centered medical home model at Central Mississippi Health Services, Inc. Southwest Clinic. After about four weeks of careful observation, implementation and research, it became clear to us that the clinic is extremely weak in all areas of care delivery involving computer technology, particularly proper use of the electronic medical record and electronic communication with the patient population and among providers. Under each of the six must-have elements, there are bulleted requirements pertaining to technology use in the delivery of care, and it is in these areas that the clinic suffers. For PCMH 1, Element A: Access During Office Hours, the NCQA mandates that the practice provide timely electronic clinical advice during office hours. The practice does not have a patient portal, or any other secure electronic communication with patients currently in operation or even in development. For PCMH 2, Element D: Use Data for Population Management, the practice falls short in its ability to draw from patient registries maintained by the electronic health record. Currently, the practice may only procure patient information by hemoglobin A1c reading, and by body mass index (BMI) calculation. PCMH 3, Element C: Care Management, requires that the clinic follow up with patients when they have missed appointments. During an interview with the clinic’s three reception staff members, they informed me that they also double as billing staff, and are in staunch opposition to any expansion of their current job description. PCMH 4, Element A: Support for Self-Care calls on the practice utilize the electronic health record to connect patients with community based resources for self-management of their health. The current EHR system in place at CMHS does not offer this feature, and to be in compliance with this must-have element providers would have to manually input and save preferred patient resources in multiple cluttered drop-down menus. The clinic’s inability to electronically exchange clinical information with outside providers during the referral process violates PCMH 5, Element B: Referral Tracking and Follow Up. The final must-have element, PCMH 6, Element C: Implement Continuous Quality Improvement, will require the greatest effort on the part of the clinic, because none of the framework is in place for achieving any of the NCQA mandates. The clinic has
neither a documented process in place for patient and family feedback, nor are there any real performance
evaluation measures for staff. The practice is not gathering data on any scale for the purposes of quality
improvement.

Recommendations

After identifying electronic communication as the greatest weakness of Central Mississippi
Health Services, Inc. Southwest Clinic, it is my recommendation that the clinic adopt and implement a
means of HIPPA-compliant text messaging. The results of my survey, indicated the following:

Of the forty-seven patients surveyed, thirty-one patients reported owning or using a smartphone
with internet access. Thirty-six patients reported owning or using a personal computer regularly. Of the
eleven patients that reported not owning a smart phone or personal computer, eight of them reported
having a tech savvy individual in their household that could teach them to communicate with providers
and access their health information electronically. Those same eight patients also reported that they would
attend clinic based computer training in order to be able to communicate with their providers and access
their electronic health information. Also, seven of the eleven physicians and nurse practitioners employed by the clinic were observed using their personal cell phones to administer clinical advice, to communicate with other providers, as well as communicate with patients about appointments, prescriptions and other advice. These statistically significant results gathered over the course of three weeks indicate that the patient population is receptive to modern methods of care delivery, and are eager to participate in the transition.

I also recommend establishment of mandated training for all employees of the clinic that utilize the electronic health record. One of the cornerstones of the patient-centered medical home model is the meaningful use of technology in the delivery of care, especially the accurate and consistent use of the electronic health record. The clinic is scheduled to implement an upgraded EHR system that will include a patient portal system. In keeping with the PCMH model, every provider at Central Mississippi Health Services, Inc. and clinical support staff should be able to utilize the record and perform the activities listed within the must have elements. Ideally, each new staff member would be given at least three to five work days to train with the system; their patient load would be increased as proficiency with the EHR increases. Also, it would greatly benefit the clinic to develop a policy that requires annual or bi-annual education and assessment of staff performance with the EHR.

Most of all, I would recommend that the entire clinic undergo required hours of patient-centered medical home education and training. In order for the medical home to be a success, all clinic employees must demonstrate commitment and proficiency with the standards of care delivery as dictated by the NCQA. The essential elements needed for a functioning patient-centered medical home are present at CMHS, however the clinic needs desperately to re-organize its staff and redefine its mission around the PCMH standards for primary care delivery.

Discussion

The results of my investigations this summer indicate that the Central Mississippi Health Services, Inc. Southwest Clinic is well on its way to NCQA Level Three Recognition in October of 2014.
The National Committee for Quality Assurance requires that any practice seeking recognition have their care delivery protocols documented, so that performance against these protocols can be measured and improved on a continual basis. Of the almost forty practice standards listed under the six must-pass elements, more than twenty were already in affect in the clinic, being carried out as a part of this community health center’s pre-existing delivery model. Nearly half of those standards not already in place were easily implemented this summer, and also written into protocol. The remaining standards, numbering less than ten, will require the clinic to start from scratch and adopt some truly new ideas and research. These standards, nearly all of which pertain to electronic health delivery can all be drastically improved with the implementation of HIPAA compliant text messaging. If providers could securely communicate with patients and other staff, they could comply with PCMH 1 by providing clinical advice electronically, PCMH 2 by texting reminders to registries of patients about preventive and chronic care measures, PCMH 3 by texting patients to remind them of important appointments and to follow up on missed appointments, and PCMH 4 by allowing patients such as those with uncontrolled diabetes or uncontrolled hypertension to log blood sugars and blood pressure readings and report them to their provider via text messaging. Compliance with PCMH 5 would be improved because providers would be able to quickly and efficiently communicate with specialists and other health professionals involved in a patient’s care team. Compliance with PCMH 6 could be improved by using text messaging for patient feedback and data gathering. These are just a few examples of the ways in which one upgrade in the delivery model at Central Mississippi Health Services, Inc. Southwest Clinic could quickly move the practice toward fulfillment of the patient-centered medical home model and its goal of NCQA recognition.

Conclusion

Central Mississippi Health Services, Inc. is already a medical home for most of its patients. Many of the providers have personal relationships with those under their care, and their involvement in the community extends far beyond the walls of the clinic. Now that the comprehensive medical home has
become the national standard for primary care, all CMHS needs is to reorganize around the patient-centered medical home requirements so that they may be recognized and compensated for the great work they are already doing. If the PCMH measures and protocols that have been drafted are adopted and implemented, and the identified weaknesses addressed, CMHS Southwest Clinic will be on track to reaching the October 31, 2014 deadline for Level III PCMH Certification. It is my belief that if the CMHS community fully engages with the PCMH model, and in becoming a driving force in the future of community health care delivery, there will be a tangible difference in patient outcome and experience.
References


Table 1: Summary of NCQA PCMH 2011 Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Content Summary</th>
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<tbody>
<tr>
<td>Enhance Access/Continuity</td>
<td>• Patients have access to culturally and linguistically appropriate routine/urgent care and clinical advice during and after office hours</td>
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<td>• The practice provides electronic access</td>
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<td>• Patients may select a clinician</td>
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<td></td>
<td>• The focus is on team-based care with trained staff</td>
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<tr>
<td>Identify/Manage Patient Populations</td>
<td>• The practice collects demographic and clinical data for population management</td>
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<td></td>
<td>• The practice assesses and documents patient risk factors</td>
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<td>• The practice identifies patients for proactive and point-of-care reminders</td>
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<td>Plan/Manage Care</td>
<td>• The practice identifies patients with specific conditions, including high-risk or complex care needs and conditions related to health behaviors, mental health or substance abuse problems</td>
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<td>• Care management emphasizes:</td>
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<td></td>
<td>-- Pre-visit planning</td>
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<td>-- Assessing patient progress toward treatment goals</td>
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<td>-- Addressing patient barriers to treatment goals</td>
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<td>• The practice reconciles patient medications at visits and post-hospitalization</td>
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<td>• The practice uses e-prescribing</td>
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<tr>
<td>Provide Self-Care Support/Community Resources</td>
<td>• The practice assesses patient/family self-management abilities</td>
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<td>• The practice works with patient/family to develop a self-care plan and provide tools and resources, including community resources</td>
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<td>• Practice clinicians counsel patients on healthy behaviors</td>
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<td>• The practice assesses and provides or arranges for mental health/substance abuse treatment</td>
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<tr>
<td>Track/Coordinate Care</td>
<td>• The practice tracks, follows-up on and coordinates tests, referrals and care at other facilities (e.g., hospitals)</td>
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<td>• The practice follows up with discharged patients</td>
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<tr>
<td>Measure/Improve Performance</td>
<td>• The practice uses performance and patient experience data to continuously improve</td>
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<td>• The practice tracks utilization measures such as rates of hospitalizations and ER visits</td>
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<td>• The practice identifies vulnerable patient populations</td>
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<td>• The practice demonstrates improved performance</td>
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## APPENDIX 2: HIPPA COMPLIANT TEXT MESSAGING, PATIENT READINESS SURVEY

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
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| Do you currently have working smart phone or cell phone with internet access? | o Yes, I do  
o No, I do not.                                           |
| Do you currently have a working personal computer, laptop, or tablet with internet access? | o Yes, I do  
o No, I do not.                                           |
| Choose the answer that best explains your comfort level with text messaging. | o I do not know how to send or receive text messages using a cell phone.  
o I know how receive text messages, but not how to send them on my cell phone.  
o I am somewhat comfortable with sending and receiving text messages.  
o I am very comfortable with sending and receiving text messages. |
| Choose the answer that best explains your comfort level with e-mail       | o I do not know how to use a computer at all.                           
o I know how to use a computer, but I do not send or receive e-mails.    
o I am somewhat comfortable sending and receiving e-mails.               
o I use e-mail as a major form of communication.                         |
| Do you have current e-mail address that you check?                      | o Yes, I have an e-mail that I check very often.                         
o Yes, I have an e-mail address that I check sometimes.                   
o Yes, I have an e-mail address but I don’t check it.                     
o No, I do not have an e-mail address.                                    |
| Is there someone in your family/household that could teach or help you access your medical information from a computer or smart phone? | o Yes, there is.                                                        
o No, there is not.                                                       |
| Would you attend a class teaching you how to access your medical information electronically? | o I would definitely attend.                                            
o I might attend.                                                         
o I would not attend, because I already know how to access my medical information on a computer or smart phone. |
| Please indicate your age.                                               | o 18-35                                                                 
o 36-50                                                                  
o 51-65                                                                  
o 65+                                                                     |