Profile: Adapting Patient-Centered Medical Home Principles and Tools for an Oncology Practice

Background

The patient-centered medical home (PCMH) model of care has emerged as a possible answer to some of the challenges currently facing the health care delivery and payment system, including fragmentation of care and rising costs. Primary care practices have been adopting the model and, in some cases, have been compensated for improving care when they otherwise may have realized decreasing reimbursement. Some specialty practices have seen the benefits of this coordinated model of care and are customizing the PCMH model, which is focused around primary care, to fit the needs of specialty practices. Consultants in Medical Oncology and Hematology (CMOH), a community-based hematology-oncology practice in Drexel Hill, Pennsylvania, recognized that many of the gaps between the quality standards and care delivery standards found in the oncology setting could be addressed by the PCMH model. By applying the principles of PCMH to oncology, it has created a care team approach that encourages rational utilization of health care resources through the use of evidence-based guidelines; reduces hospitalization, emergency room (ER) visits and use of imaging services and increased engagement with patients regarding end-of-life care decisions. CMOH has labeled this model of care the Oncology Patient Centered Medical Home® (OPCMH).

Overview

Over the last five years, CMOH has implemented or enhanced several processes and tools to help it achieve the principles of the OPCMH. These tools include a nurse triage symptom algorithm system, improved documentation, coordination of care agreements with primary care practices and additional focus on patient engagement. To accommodate these changes, it needed to effectively use electronic health records (EHR) to track the progress of measurable goals and improve workflow to

- Maintain a patient-centric approach
- Minimize clinically irrelevant physician activity
- Improve accountability
- Address deficiencies of coordination, communication, access and engagements

Excerpted from Quality Profiles: Focus on Patient-Centered Medical Home: Consultants in Medical Oncology and Hematology adapted PCMH principles and is pursuing Patient-Centered Specialty Practice Recognition, the evaluation program NCQA launched in March 2013 that spreads PCMH concepts beyond primary care.
Program Description

In 2003, CMOH implemented an EHR in its four-office practice. While the EHR addressed the immediate needs of nursing and office staff, it did not meet the needs of the physicians who wanted to use it for compiling and presenting patient data that could inform their clinical decisions and facilitate systematic measurement and process improvement. CMOH sought to achieve this through the synchronization of the EHR and clinical operations workflow. In 2004, the CMOH formed a team made up of a lead physician, the clinical nursing director and the information technology (IT) engineer to address inefficiencies in the EHR system and workflow that were impacting CMOH’s ability to deliver efficient, patient-centered care. The first step was to identify areas for improvement in the day-to-day use of the EHR. The IT engineer observed a physician using the EHR and found it took 23 steps to gather relevant information on a patient’s history, treatment and current condition. The practice reviewed available literature from various sources to incorporate decisions regarding best practices. These sources included the Institute of Medicine, National Comprehensive Cancer Network (NCCN), American Society of Clinical Oncology’s Quality Oncology Practice Initiative, Oncology Nursing Society (ONS), American College of Surgeons Commission on Cancer and the National Committee for Quality Assurance (NCQA)’s PCMH Recognition Standards and Guidelines.

Within six months, the team developed a new workflow by integrating the EHR with internally developed clinical decision support software, which created efficiencies for the physician. It also promptly disseminated progress notes, thus informing all practitioners involved in the patient’s care of current treatment or any changes in the patient’s condition.

The software is constantly being modified to enhance CMOH workflow, process of care, documentation and communication. It is also a vehicle to provide real-time data regarding physician and staff performance and is able to measure requirements to meet NCQA’s PCMH Recognition Standards and Elements. These IT solutions allow CMOH to set clinical, operational and quality goals. All staff members have access to the ongoing monitoring of process performance results, which can appear as soon as they log in. This serves as a reminder of the practice’s priorities. Refinements of policies and procedures are ongoing and facilitated by the continuous improvements.

Improvement in workflow, specifically document completion and turnaround, has increased the effectiveness of CMOH’s nurse triage system, which serves all four practice locations and is an essential resource for patients. Patients with questions or concerns about symptoms can call the triage number and speak to a seasoned oncology nurse. This nurse can access the patient’s current information through the EHR, including documentation from the last appointment and the most current treatment decisions. Based on this information, the nurse can offer direct
symptom management when appropriate by following a set of algorithms that were adapted and expanded from the ONS symptom management tools. Having access to the most recent data means nurses are able to act more independently to resolve patients’ concerns. Skilled oncology nurses are effective in discerning the patient’s needs and providing advice within the level of their license. Prompt decision making improved patient satisfaction resulting in increased use of the system. As patients have become more familiar with the phone triage system, the number of patient calls early in the day has increased, eliminating the need for extending the weekday hours or adding weekend hours.

The practice references NCCN Guidelines® when building the care plans in the EHR. Assessment and documentation of patients’ Eastern Cooperative Oncology Group (ECOG) Performance Status is a driver in determining treatment decisions. ECOG Performance Status is an indicator of the functional status of a patient with cancer. It is used to determine the impact of the disease, therapy and comorbid conditions on a patient’s daily living abilities and quality of life. Focusing on a patient’s Performance Status, rather than number of therapies, has been very valuable in making end-of-life care decisions. It sets the tone for a realistic discussion with patients and their families regarding patient function, quality of life and the impact of disease and therapy.

Adjustments to the IT systems were made so that CMOH could conduct chart audits for all patients with an ECOG Performance Status of 3 or higher to ensure the end-of-life–related section of the patient’s progress note, entitled “Goals of Therapy,” was updated based on status changes. Physicians are encouraged to communicate regularly with patients and their families about the natural history of their disease and treatment options, including the eventuality of hospice enrollment.

Challenges

For CMOH, there were challenging aspects to the integration of the EHR and clinical operations workflow. The limitations of the EHR system required new software to be developed and staff needed to understand why and how their roles were changing. While the practice understood the need to distinguish itself and remain competitive, it was still sometimes difficult to find ways to incentivize the staff to modify their behavior. Once the physicians realized this new workflow would increase their efficiency, there was enthusiastic buy-in. All of the staff now see the concept of patient-centered care as the way that cancer care should be delivered.

NCCN Guidelines® is a registered trademark of the National Comprehensive Cancer Network.
Outcomes

Over the past five years, the continuous adaptation of the PCMH model in the oncology setting has led to many improvements. Specifically, CMOH was able to reduce the incidence of hospitalization and ER visits, reduce the use of imaging services and other diagnostic tools, better coordinate services with other care practitioners and improve communication with patients regarding their care, especially palliative and hospice care options during later stages of disease. The practice was able to gather performance data in all of these areas. They were also able to demonstrate improved practice efficiency. In the past five years, the practice increased its patient base by 30 percent, while reducing its staff-to-physician ratio from 8.3 full-time equivalents (FTE) to 5.5 FTEs. In the same time period, ER visits decreased by 68 percent and hospital admissions decreased by 51 percent. The hospital length of stay decreased by 21 percent, while hospice length of stay increased by 26 percent. Reductions have also been seen in ER evaluations and hospital admissions occurring during the last 30 days of life (see Table 1).

Table 1. OPCMH® Results at Consultants in Medical Oncology and Hematology

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<tbody>
<tr>
<td>Number of calls</td>
<td>2,102</td>
<td>2,594</td>
<td>3,261</td>
<td>3,965</td>
<td>4,375</td>
<td>52%</td>
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<tr>
<td>Patients seen within 24 hours</td>
<td>197</td>
<td>261</td>
<td>345</td>
<td>435</td>
<td>352</td>
<td>44%</td>
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<tr>
<td>Symptoms managed at home (%)</td>
<td>76.10</td>
<td>77.10</td>
<td>77.60</td>
<td>75.80</td>
<td>81.20</td>
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<tr>
<th>Utilization Measures</th>
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<tr>
<td>NCCN Guidelines® compliance (%)</td>
<td>87</td>
<td>90</td>
<td>93</td>
<td>94</td>
<td>96</td>
<td></td>
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<td>ER utilization (per chemotherapy patient per year [PCPPY])</td>
<td>1.64</td>
<td>1.27</td>
<td>1.11</td>
<td>0.91</td>
<td>0.81</td>
<td>-51%</td>
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<td>Hospital admissions (PCPPY)</td>
<td>1.08</td>
<td>1.05</td>
<td>0.87</td>
<td>0.6</td>
<td>0.53</td>
<td>-51%</td>
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<tr>
<td>Hospice length of stay (days)</td>
<td>NM</td>
<td>NM</td>
<td>26</td>
<td>32</td>
<td>35</td>
<td>26%</td>
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<tr>
<td>ER evaluations occurring in last 30 days of life (%)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>23</td>
<td>20</td>
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<tr>
<td>Admissions occurring in last 30 days of life (%)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>39</td>
<td>36</td>
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<td>Documentation turnaround time (days)</td>
<td>~</td>
<td>&gt;28</td>
<td>28</td>
<td>3.8</td>
<td>1.9</td>
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~ = Not measured.

The use of the clinical nurse triage system during the same five-year period has increased by 52 percent, and the number of patients seen within 24 hours has increased by 44 percent. As of 2011, 81 percent of patient-initiated symptom calls were able to be managed at home.

These improvements are attributable to the improvements in the telephone triage algorithms, staff training and the availability of real-time data made available through the IT solutions. Compliance with the NCCN Guidelines® has increased from 87 percent to 96 percent, and documentation turnaround time has decreased from over 28 days to 1.9 days.
These efforts have had a significant financial impact on the total cost of cancer care. According to CMOH’s estimates based on internal data, the OPCMH model of care has saved $1 million per physician per year, mainly from reduced utilization of unnecessary resources.

Lessons Learned

CMOH learned several valuable lessons through this process. First, adopting an EHR does not guarantee improvements in outcomes. Coordination between a practice’s clinical operations workflow and the EHR to deliver useful, actionable data is necessary to inform decisions and track progress. For CMOH this was achieved through a software overlay to a vendor’s EHR. Second, secure physician support for change. The lead physician at the practice secured his colleagues’ “buy-in” for standardized care processes by emphasizing the positive impact the program would have on quality, physician efficiency and practice sustainability. Third, work collaboratively with payers to share goals, review data and identify new payment systems. Practices adopting this model may develop new programs (such as telephone triage symptom algorithms) that improve quality but do not qualify for reimbursement on their own or that reduce the need for reimbursable services (such as office visits). As a result, practices adopting this model may suffer financially unless payment models are revamped. To that end, would-be adopters should contact payers to discuss development of shared-savings programs, pay for performance/value or other payment methodologies that reward practices financially for improving quality and reducing costs and utilization.

Future Directions

Typically, new payment methodologies have been driven by the payers, not practices. As a result, historic payment methodologies have not kept pace with the transformation of specialty practices into PCMH-like specialty operations. CMOH is working with payers to negotiate new reimbursement terms that reflect the value of the new system. The practice has one payer contract that recognizes the model and it is expecting to soon add more. Ideally, as suggested by Barr et al.,¹ a contract that supports the model should include

1. An initial increase in evaluation and management payments to support the changes to IT system, duties and workflow of the new care model,

2. A shift toward payment for disease management when new services are added and

3. A shared savings component based on the practice’s performance when compared with its market.
Each payer has unique internal roadblocks toward adapting its payment structure to the new model, but CMOH anticipates that a growing body of supporting literature, combined with the practice’s own data, will help in the continuing negotiation process. Another future plan is to track the impact of these changes on the patient experience. In 2013, the practice plans to introduce new patient surveys based on the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey for PCMH customized for hematology-oncology practices. Since patients’ wants overlap to a great degree with payer and practice goals (e.g., best outcomes, preservation of quality of life, fewer ER and hospital visits and rational end-of-life care), these survey results should be very useful in highlighting further areas for improvement.

Reference