TEAMHealth

WHITE PAPER

BUILDING THE PATIENT-CENTERED HOSPITAL HOME

A New Model for Improving Hospital Care

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OVERVIEW

Hospitals across the country are looking for new and innovative ways to improve the delivery of healthcare in order to lower costs, increase patient satisfaction and enhance patient outcomes. With mounting evidence that the Patient-Centered Medical Home model is effective on all of these fronts, hospitals should consider applying the principles of this primary care model to the inpatient hospital setting.

This white paper will outline the history, goals and attributes, and successes of the Patient-Centered Medical Home model. It will explain why and how this model should be adapted to the hospital environment, introducing in a new concept for inpatient care: The Patient-Centered Hospital Home. Further, the paper will explore the benefits of the Hospital Home model, provide best practices for implementing this new approach to care, and explore relevant challenges and opportunities.

UNDERSTANDING MEDICAL HOMES

The idea of a "medical home" entered the healthcare industry lexicon decades ago with the concept of the Patient-Centered Medical Home (PCMH).

A 2007 report called the "Joint Principles of the Patient-Centered Medical Home,"[i] defines the PCMH as "an approach to providing comprehensive primary care for children, youth and adults. The PCMH is a healthcare setting that facilitates partnerships between individual patients and their personal physicians and, when appropriate, the patient's family." Created by the American Academy of Family Physicians (AAFP), the American College of Physicians, the American Academy of Pediatrics (AAP), and the American Osteopathic Association, the report was intended to define the fundamental elements of a PCMH.

The PCMH term, however, originated back in 1967, when the AAP introduced it in reference to

the physical location for storing a medical record. Before the AAP expanded the concept in 2002 to include the operational characteristics of a medical home—as providing accessible, continuous, comprehensive, family-centered, coordinated, compassionate and culturally effective care[ii]—at least two reports, in the 1970s and 1990s, began to explore ideas around the role of primary care in promoting individual health.[iii]

In recent years, the term has continued to evolve, taking a more definitive shape and gaining favor and widespread adoption across the healthcare industry. In particular, provisions of the 2010 Patient Protection and Affordable Care Act included strategies for enhancing primary care and medical homes. According to the National Academy for State Health Policy, 43 states had adopted policies and programs to advance medical homes as of April 2013[iv]. In September of 2013, The Joint Commission awarded a hospital the first "Gold Seal of Approval" certification for its Primary Care Medical Home.

Goals and Attributes

The goal of a PCMH is to improve healthcare by transforming the way primary care is organized and delivered. Providing good primary care—care that helps prevent illness and recognizes and treats health problems early—can improve health outcomes, help patients better manage chronic diseases and lower costs for patients, providers and payers. These better-managed patients should, for example, avoid unnecessary trips to the emergency department and have fewer inpatient admissions.

PCMH RESULTS

- **Higher quality, improved preventative care and lower cost:** BlueCross BlueShield of Michigan found that its PCMH saved an estimated $155 million over its first three years.[v] In an analysis published in the Health Services Research Journal, researchers estimated that, when fully implemented, BCBS of Michigan's PCMH is associated with "a 3.5 percent higher quality measure, a 5.1 percent higher preventive care measure, and a $26.37 lower per member per month medical cost for adults."
- **Improved wellness screenings and lower readmissions:** In Boston, a PCMH program serving seniors achieved positive results, including increased rates of immunization, mammography, colorectal cancer screenings and eye exams.[vi] The rate of 30-day hospital readmission for this population dropped from 20.2 percent in 2009 to 18.1 percent in 2010, and the average hospital length-of-stay decreased from 5.21 days in 2009 to 5 days in 2011.
- **Improved outcomes and reduced utilization:** Taking a more global view, in 2012 the Patient-Centered Primary Care Collaborative conducted a review of 46 medical home initiatives across the country. The study looked at cost and quality data from PCMHs and concluded that the "PCMH improves health outcomes, enhances the patient and provider experience of care, and reduces expensive, unnecessary hospital and emergency department utilization."[vii]

Unfortunately, the PCMH is not a "cure all." While showing some success for managing patients in a preventive and primary care setting, the PCMH does not impact the way care is delivered when a patient ends up in an acute care inpatient setting. That's why the Patient-Centered Hospital Home is so important.

DEFINING THE PATIENT-CENTERED HOSPITAL HOME

The Patient-Centered Hospital Home (PCHH) is an approach to providing highly effective, coordinated care to patients during a hospital stay. The PCHH is a hospital-based care setting that provides a physician-led, multidisciplinary and team-based system of patient-centered care that guides the patient throughout the entire hospital experience, from initial diagnosis and admission through discharge and beyond.

To put it simply, the PCHH applies the functions and attributes of the primary care PCMH model to the inpatient setting, with the goal of making the entire continuum of hospital-based care safer, more efficient and effective—as evidenced by better patient outcomes and satisfaction and lower costs.

PCHH: Why Now?

The healthcare industry is in the midst of an intense period of change. The advent of Accountable Payment Models and Value-Based Purchasing[viii] has put more pressure on hospitals to deliver high quality care and improved patient outcomes—measured, in part, by the number of patients readmitted to the hospital within 30 days of discharge—while at the same time placing new emphasis on patient satisfaction. With already slim operating margins, most hospitals cannot afford to lose even a small percentage of Medicare reimbursement by missing these benchmarks.

Unfortunately, typical hospital processes do not lend themselves to providing the kind of highly

coordinated, integrated care required to excel in this new operating environment. Most hospitals are functioning in a fragmented manner—with different departments operating in self-contained "silos." The emergency department (ED), hospital medicine physicians and the surgical team all work independently of one another, communicating only at patient handoffs.

This is an operating model rife with inefficiencies that can cause unnecessary miscommunication and delays, which can be costly both in terms of actual dollars and patient outcomes. For example, in a typical hospital, the process of caring for an elderly patient who arrives at the ED with a hip fracture would go something like this:

The patient receives an X-ray and pain medication in the ED. Once the emergency physician diagnoses the hip fracture, he or she hands off the patient to a hospitalist who admits the patient, conducts an assessment and requests a consultation with a surgeon. It may then be several hours before the surgeon is able to see the patient, obtain clearance for the surgery and consult with the anesthesia department to make sure the patient is surgery-ready. At that point the anesthesiologist may also need to run additional tests prior to surgery.

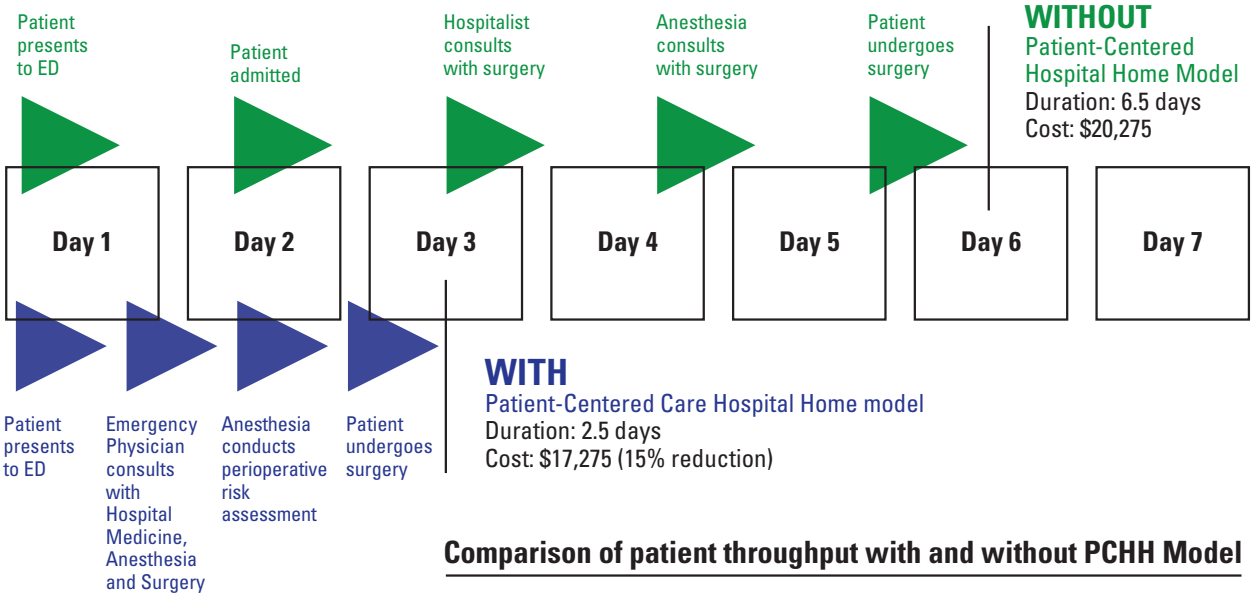
At this rate, it may take up to 36 hours after the patient presents in the ED before the pre-surgical process even begins. In fact, many hip fracture patients end up facing a costly three-to-five-day inpatient wait for surgery. In 2011, the mean cost for a hospital stay for a hip fracture was $15,400, according to the Healthcare Cost and Utilization Project.[ix] And for these high-risk, older patients, the longer they are in the hospital, the greater the chance they will face an infection, complications or even mortality. According to the Centers for Disease Control and Prevention, one out of five hip fracture patients die within a year of their injury.[x]

PCHH Solution

If, however, the hospital adopts a PCHH approach to care, it can develop and implement much more efficient protocols and pathways to manage high-risk, high-cost cases like hip fractures.

In a PCHH model, after the emergency physician confirms a hip fracture, he or she immediately notifies the anesthesia and hospital medicine teams about the patient. The hospitalist admits the patient, and the anesthesiologist immediately notifies the orthopedic surgeon, schedules the surgery and does a pre-operative risk assessment before the patient is moved to surgery. In many cases, the patient can receive surgery the very same day.

This rapid hip protocol, which simultaneously involves multiple members of a patient's care team in the care process, improves communication among providers and creates a much more efficient, streamlined experience for the patient. In hospitals that have adopted this model, it has been shown to dramatically lower length-of-stay, reduce the likelihood the patient will need a blood transfusion, and lessen the risk of post-operative infection, consequently cutting the rehabilitation time the patient needs to return to a normal level of activity. These improvements not only save the



Comparison of patient throughput with and without PCHH Model

hospital time, money and bed capacity, they help ensure patients have better outcomes.

Benefits of PCHH

As evidenced in the rapid hip protocol, the PCHH approach to care can help hospitals reduce costs while improving care because providers across the organization work as an integrated team.

In general, when the PCHH approach is successfully applied to hospital-based care, benefits can include:

- Preventing unnecessary or repetitive testing
- Avoiding unanticipated ICU admissions
- Preventing cancelled/delayed surgery
- Reducing length of stay
- Improving patient satisfaction
- Managing and facilitating the transition of care at discharge
- Preventing unnecessary readmissions
- Decreasing the need for blood transfusion
- Decreasing risks from post-operative infection

BUILDING THE PCHH

So how does a hospital create an environment where all departments work together to provide coordinated patient care? It must first create integration among service lines so disparate departments are willing to communicate with one another to treat patients in a way that considers the patient's entire hospital experience and potential outcomes, not just the treatment delivered by the individual provider at a fixed point in time.

Hospitals must convene the most important participants in the PCHH to build consensus around this new approach to delivering care. Creating a new sense of teamwork and understanding around the importance of a PCHH is a critical first step that, for hospitals with many independent provider groups, may prove difficult. Hospitals that opt to consolidate multiple service lines under a single outsourcing partner with defined incentives and performance metrics may find it easier to align these physician groups to achieve shared quality and financial goals.

The following departments/groups are the most important to include in these discussions:

- *Emergency Medicine.* Serving as the "front door" of the hospital for many patients, emergency physicians make early patient care decisions that can have a dramatic impact on the rest of the patient's hospital stay. For example, providing an emergent patient with morphine may reduce pain but cause delirium, requiring an anesthesiologist to make different choices and potentially extend the length of the hospital stay. If the emergency physician consults with anesthesia immediately, he or she may avoid narcotics and help the patient get to surgery faster. It's important these physicians understand their role in the PCHH for getting patients on the "right track" for the entirety of their hospital care.
- *Hospital Medicine.* As the patient's primary provider after admission to the hospital, the hospitalist has a role in the PCHH that is similar to that of the primary care physician in a PCMH. He or she is the "owner" of the patient and serves as an important central point of contact for making sure the patient's care is coordinated.
- *Anesthesiology.* Responsible for pre-surgical testing, pain management and the intraoperative care, the anesthesia team should be closely involved in pain regulation and pre-operative testing for patients who are surgical candidates. In close coordination with emergency physicians, hospitalists and surgeons, the anesthesiologist can more easily facilitate any needed surgery.
- *Surgery.* New protocols for getting patients to surgery faster may mean a shift in the workflow of a typical surgeon, allowing for same-day scheduling or varied hours for some cases.

Once all team members understand their roles, hospitals should begin looking at the specific diagnoses or cases where they can best collaborate as a team to produce better outcomes for the patient and the hospital.

Surgery and Anesthesia

Generally, high-risk surgical or procedural cases are a good place to begin to make the most impact—as in the case of the rapid hip protocol. Obstructive sleep apnea is another good example. Proper risk stratification and pre-operative planning to minimize potential complications can prevent post-operative problems and unnecessary admissions.

In most hospitals, somewhere between 70 percent and 90 percent of all patients will need some sort of procedure or surgery during their stay—whether it's major surgery or something like an endoscopy or image-guided biopsy. And approximately 65 percent to 70 percent of the costs of inpatient care come from surgical or procedural practices.[xi] The importance of surgical

services makes it a natural place to begin a new focus on a coordinated, integrated, inpatient care model.

In fact, the American Society of Anesthesiologists is developing the Perioperative Surgical Home model[xii] as a way to provide better coordinated care throughout a surgical patient's stay. In the Perioperative Surgical Home, patients who need surgery are managed by a coordinated, multi-disciplinary team from pre-operative assessment through the post-discharge period with the goal of reducing issues such as duplicate testing, surgical complications, and lengthy hospital stays while providing safer, more cost-effective care.

To help hospitals determine their readiness to become a Perioperative Surgical Home, clinical outsourcing company TeamHealth has built a comprehensive assessment tool. The assessment looks at all aspects of leadership, clinical care, quality assurance, performance improvement and data management throughout the perioperative continuum to determine a hospital's progress toward becoming a Perioperative Surgical Home. This tool serves as a guide for an organization to enhance integration of the physician leaders engaged in all perioperative care and to eventually prepare for the certification process to become a Perioperative Surgical Home, the same way they do for the Patient Centered Medical Home, once this accreditation process is fully developed.

For hospitals looking to become a Patient Centered Hospital Home, the Perioperative Surgical Home provides a strong base from which to expand a coordinated model of care throughout the inpatient setting.

Challenges and Opportunities

Once identified, re-engineering care protocols for a PCHH model can be a challenging process, requiring engaged physician champions not only for determining the new approach to care within the organization, but also because the new clinical protocols may need to become part of the hospital's policies and procedures and receive approval from all the various participating physician groups.

Because physicians coming together under a PCHH are used to working independently of one another in the traditional "silod" hospital operational model, garnering the necessary buy-in and achieving practice pattern changes may be very difficult for some hospitals. This is particularly true if all the participating departments are operated by independent physician groups that have no incentive to work together, stay later, or undertake whatever additional tasks may be required under new care models.

One way to overcome this challenge is through consolidated service lines. Hospitals that choose to partner with a single clinical outsourcing provider with the resources and experience in integrated care "home" models can, for example, create shared incentives for providers to work together on the new protocols and approach to care that deliver upon improved clinical outcomes, expediting patient flow while reducing morbidity and mortality. Together, the hospital and clinical partner create a shared risk pool based upon mutually desirable metrics that are tied to quality and service performance outcomes. If the provider teams achieve those metrics, then all involved physicians—emergency medicine, hospital medicine, anesthesia, etc.—would benefit from the shared savings. This approach helps ensure that all providers are sufficiently motivated to do their part, even if it requires additional effort, so hospitals and patients can reap the rewards of better patient outcomes and lowered costs.

CONCLUSION

Transformations in the healthcare industry linking payments to quality are requiring hospitals to develop new approaches to delivering care to operate more efficiently, improve outcomes, and achieve high levels of patient satisfaction. By adopting the PCHH approach to care, hospitals can break down the internal silos that cause costly inefficiencies, providing care in a multidisciplinary, coordinated way that allows for better health outcomes for patients and better financial outcomes for the hospital.

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