Coordinating the Medical Home
With Hospitalist Care

THE MEDICAL HOME

The Patient Centered Medical Home (PCMH) is an approach to providing comprehensive primary care for children, youth, and adults.1 PCMH facilitates partnerships with individual patients, their personal physicians, and family. In pediatrics, PCMH is usually referred to as the Patient and Family Centered Medical Home, or just the Medical Home (MH). The MH was named over 40 years ago as a way to maintain centralized medical records of children and has evolved over the years to the current concept. The MH should be accessible, continuous, comprehensive, patient- and family-centered, coordinated, compassionate, community-based and culturally effective.2–4 The principles of the MH are:

1. Each patient has an ongoing relationship with a personal physician;
2. The personal physician participates in a team of individuals who take responsibility for the ongoing care of that patient;
3. The personal physician is responsible for providing all of the patient’s health care needs or appropriately arranging care with other qualified professionals;
4. The patients’ health care is coordinated across all elements of the health care system (including hospitals) as well as with community-based organizations (schools, mental health centers, etc).

Care coordination is one of the key principles of the MH.5 Care coordination tracks ancillary studies, referrals, and transitions in care to ensure completion and document outcomes. Consistent, timely, bidirectional communication is at the heart of care coordination. Such communication includes the primary care MH, the other involved health care professionals, and the patient or family. Knowing the patient and family’s preferences and wishes for care and sharing that information with other caregivers is essential.6

When a child requires hospitalization the child may arrive self-referred, by ambulance, or by referral from the MH. Hospitalization is a significant and stressful event in the life of a child and family. Some MHs are part of a larger health care organization, including the hospital, making care coordination and hospital admission an integrated process. However, most of the time the transfer of care requires contact by the MH physician with a hospitalist when admission is necessary.

PEDIATRIC HOSPITALISTS

The hospitalist movement began over 20 years ago with adult programs7 and spread to pediatrics at least 15 years ago. The American Academy of Pediatrics instituted the Provisional Section on Hospital Medicine in 1999 which matured into the Section on Hospital Medicine in 2003. Benefits of care by pediatric hospitalists...
may include a decrease in cost of hospital care and length of stay.8,9 There is possible improvement and at least no decrease in quality of care, patient and family satisfaction, and teaching in residency programs.10,11

**HOSPITALIZATION**

A major problem with sharing care between the MH and hospitalists seems to lie with the transitions between caregivers.12–14 On admission, information shared between the hospitalist and the MH physician should include the rationale for admission, the working diagnosis and chronic conditions (problem list), key components of the history, especially recent changes, pertinent laboratory results, radiologic tests, and the patient’s and family’s status and reaction to the hospitalization.15 During hospitalization, routine communication regarding progress in the hospital, significant events, surgeries, and other procedures during the hospital stay should trigger communication with the MH physician. Without such communication, the MH physician who knows that child and family best may be left out of important evaluation and management decisions. Poor communication between the MH and the hospitalist at the time of admission and between the hospitalist and MH at the time of discharge may have detrimental effects on the patient.16–20 Readmission and adverse events due to medical errors especially those involving medications, failures in diagnostic test follow-up, and poor follow-through with the treatment plan are common and may be prevented or ameliorated by effective communication at hospital discharge.18,21–23

Children with medical complexity, in particular, those who are medically fragile or technology dependent, account for increasing numbers of pediatric hospitalizations.24,25 Care coordination and effective communication between the hospitalist and the primary care MH are critical for this population. In such instances, a “continuity visit” by the MH physician may be useful to endorse the hospitalist and the care being given, propose revisions in care, fill gaps in the patient’s history, clarify patient or family preferences for care, and gain familiarity with the patient’s condition in the hospital that will benefit care as an outpatient.15,26

**DISCHARGE COMMUNICATION**

Planning for discharge begins at the time of admission. Criteria for discharge should be developed simultaneously with the plan of care resulting in a time line or estimate for the length of hospitalization. Before discharge there should be agreement among the inpatient team, the patient/family, and the MH physician on the conditions and timeliness of discharge. If the family is not ready (issues with home caregivers or equipment, etc) or the MH team cannot arrange a follow-up visit in the time period necessary, the discharge may be delayed. Safety is of paramount importance and The Joint Commission’s patient safety goals require communication at discharge (as well as at admission and at regular intervals during hospitalization).27

Methods of discharge communication should include a telephone call for rapid notification of discharge followed by discharge information by fax, e-mail, regular mail, or electronic transfer. Communication should include the discharge diagnosis, medications (reconciled with the admission medications), laboratory and radiology test results, pending test results, and the timing of follow-up appointments. Naturally, this information needs to reach the MH before the hospitalization follow-up visit. The hospitalist should provide a written plan for the family to follow, including instructions in case the patient’s condition changes and whom to contact with problems or questions before the follow-up appointment.

The few controlled studies looking at hospital discharge involved adult patient settings.28–30 The idea of an explicit “care transitions intervention” to improve outcomes after discharge has developed. Four principles form the core of this intervention: (1) assistance with medication self-management; (2) a patient-centered record owned and maintained by the patient (or family) to facilitate cross-site information transfer; (3) timely follow-up with primary and specialty care; and (4) a list of “red flags” indicative of a worsening condition and instructions on how to respond to them. Two mechanisms were used to encourage patients and their caregivers to assert a more active role during transitions and to foster care coordination and continuity: (1) a personal health record and (2) a series of visits and/or telephone calls with a “transition coach.” The transition coach was an advance practice nurse in Coleman’s study, but could be a registered nurse in the MH.21,30

**TRANSITIONS OF CARE**

The “Transitions of Care Consensus Policy Statement” was published in 2009, endorsed by the American College of Physicians, Society of General Internal Medicine, Society of Hospital Medicine, American Geriatrics Society, American College of Emergency Physicians and Society for Academic Emergency Medicine,31 and identified 9 principles for effective care transitions:
1. Accountability
2. Communication: clear and direct communication of treatment plans and follow-up expectations
3. Timely feedback and feed-forward of information
4. Involvement of the patient and family member, unless inappropriate, in all steps
5. Respect for the hub of coordination of care (the MH).
6. Ability of patients and families to identify their MH or coordinating clinician.
7. Clarity for patients and families at all times during the transition process about who is responsible for care at a given time, whom to contact, and how to do so.
8. Establishment of national standards for transitions in care to be adopted and implemented at the national and community level through public health institutions, national accreditation bodies, medical societies, and medical institutions to improve patient outcomes and patient safety.
9. Standard measures related to these standards to track outcomes and undertake continuous quality improvement and accountability.

From these 9 principles the Transitions of Care Consensus Conference attendees identified 7 standards and prioritized them in this order:

1. All transitions include a transition record (care plan)
2. Transition responsibility is explicitly identified
3. Coordinating clinicians (the MH) are identified
4. Patient and family are involved and own the transition record
5. Communication infrastructure exists for the transmission of information
6. Timeliness remains a priority
7. Community standards are adopted and followed

CONCLUSIONS
Future challenges include documenting the effectiveness of the standards, obtaining the endorsement of various physician groups, hospitals, and insurance carriers (including Medicare and Medicaid) and then implementing them around the country. Excess costs for the development of MH programs and their implementation are likely to be mitigated by savings from prevention of readmission, duplication of laboratory and radiology testing, and prevention of medical errors.

REFERENCES
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