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The Patient-Centered Medical Home Neighbor

The Interface of the Patient-Centered Medical Home with Specialty/ Subspecialty Practices

American College of Physicians

A Position Paper

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The Patient-Centered Medical Home Neighbor: The Interface of the Patient-Centered Medical Home with Specialty/Subspecialty Practices

A Position Paper of the
American College of Physicians

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Executive Summary

The Council of Subspecialty Societies (CSS) of the American College of Physicians (ACP) established a Workgroup to specifically address the relationship between the Patient-Centered Medical Home (PCMH) care model and specialty/subspecialty practices. This policy paper, informed through the deliberations of the Workgroup over the past 3 years and through feedback from the various societies represented in the CSS, addresses the interface between the PCMH and specialty/subspecialty practices and specifically:

- Highlights the important role of specialty and subspecialty practices within the PCMH model
- Provides a definition of the PCMH Neighbor (PCMH-N) concept
- Provides a framework to categorize interactions between PCMH and PCMH-N practices, which highlights that the specific type of interaction is a function of the clinical situation being addressed, the professional judgment of the physicians involved, and the expressed needs and preferences of the patient
- Offers a set of principles for the development of care coordination agreements between PCMH and PCMH-N practices that are aspirational in nature and recognizes that their application should take into account local community practice standards, administrative burden, practice size, and resources (e.g., paper-based vs. use of an electronic medical record system)
- Recognizes the importance of incentives, both financial and nonfinancial, to encourage PCMH-N involvement within the PCMH model
- Introduces the concept of a PCMH-N recognition process.

The policy paper makes the following specific recommendations:

1. **The ACP recognizes the importance of collaboration with specialty and subspecialty practices to achieve the goal of improved care integration and coordination within the Patient-Centered Medical Home (PCMH) care delivery model.**
2. **The ACP approves the following definition of a Patient-Centered Medical Home Neighbor (PCMH-N) as it pertains to specialty and subspecialty practices:**

A specialty/subspecialty practice recognized as a PCMH-N engages in processes that:

- Ensure effective communication, coordination, and integration with PCMH practices in a bidirectional manner to provide high-quality and efficient care
- Ensure appropriate and timely consultations and referrals that complement the aims of the PCMH practice
- Ensure the efficient, appropriate, and effective flow of necessary patient and care information
- Effectively guides determination of responsibility in co-management situations
- Support patient-centered care, enhanced care access, and high levels of care quality and safety
- Support the PCMH practice as the provider of whole-person primary care to the patient and as having overall responsibility for ensuring the coordination and integration of the care provided by all involved physicians and other health care professionals.

3. The ACP approves the following framework to categorize interactions between PCMH and PCMH-N practices:

The clinical interactions between the PCMH and the PCMH-N can take the following forms:

- Preconsultation exchange—intended to expedite/prioritize care, or clarify need for a referral
- Formal consultation—to deal with a discrete question/procedure
- Co-management
  - Co-management with Shared Management for the disease
  - Co-management with Principal care for the disease
  - Co-management with Principal care of the patient for a consuming illness for a limited period
- Transfer of patient to specialty PCMH for the entirety of care.

4. The ACP approves the following aspirational guiding principles for the development-of-care coordination agreements between PCMH and PCMH-N practices.

- A care coordination agreement will define the types of referral, consultation, and co-management arrangements available.
- The care coordination agreement will specify who is accountable for which processes and outcomes of care within (any of) the referral, consultation, or co-management arrangements.
- The care coordination agreement will specify the content of a patient transition record/core data set, which travels with the patient in all referral, consultation, and co-management arrangements.
- The care coordination agreement will define expectations regarding the information content requirements, as well as the frequency and timeliness of information flow within the referral process. This is a bidirectional process reflecting the needs and preferences of both the referring and consulting physician or other health care professional.
- The care coordination agreement will specify how secondary referrals are to be handled.
- The care coordination agreement will maintain a patient-centered approach including consideration of patient/family choices, ensuring explanation/clarification of reasons for referral, and subsequent diagnostic or treatment plan and responsibilities of each party, including the patient/family.
- The care coordination agreement will address situations of self-referral by the patient to a PCMH-N practice.
- The care coordination agreement will clarify in-patient processes, including notification of admission, secondary referrals, data exchange, and transitions into and out of hospital.
- The care coordination agreement will contain language emphasizing that in the event of emergencies or other circumstances in which contact with the PCMH cannot be practicably performed, the specialty/subspecialty practice may act urgently to secure appropriate medical care for the patient.
- Care coordination agreements will include:
  - A mechanism for regular review of the terms of the care coordination agreement by the PCMH and specialty/subspecialty practice.

- A mechanism for the PCMH and specialty/subspecialty practices to periodically evaluate each other's cooperation with the terms of the care coordination agreement, and the overall quality of care being provided through their joint efforts.

5. **The ACP recognizes the importance of incentives (both non-financial and financial) to be aligned with the efforts and contributions of the PCMH-N practice to collaborate with the PCMH practice.**

6. **The ACP supports the exploration of a PCMH-N recognition process.**

Introduction

In 2007, the Council of Subspecialty Societies (CSS) of the American College of Physicians (ACP) established a workgroup to specifically address the relationship between the Patient-Centered Medical Home (PCMH) care model and specialty/subspecialty practices. This policy paper, informed through the deliberations of the Workgroup over the past 3 years and through feedback from the various societies represented in the CSS, addresses the interface between the PCMH and specialty/subspecialty practices. It also introduces the concept of the specialty/subspecialty practice as a PCMH Neighbor (PCMH-N), provides a framework to categorize the different types of interactions between PCMH and PCMH-N practices, and defines a set of care coordination agreement principles to facilitate improved coordination and integration between the practices and result in the provision of higher quality and more efficient patient care.

The Patient-Centered Medical Home

In March 2007, the ACP and the American Academy of Family Physicians (AAFP) collaborated with the American Academy of Pediatrics (AAP) and the American Osteopathic Association (AOA) to develop a set of "Joint Principles" to describe the key attributions of the PCMH.[1] These principles promote health care delivery for all patients through all stages of life, characterized by the following features:

***Personal physician*—**each patient has an ongoing relationship with a personal physician trained to provide first contact and continuous and comprehensive care.

***Physician-directed medical practice*—**the personal physician leads a team of individuals at the practice level that collectively takes responsibility for the ongoing care of patients.

***Whole-person orientation*—**the personal physician is responsible for providing all the patient's health care needs or taking responsibility for appropriately arranging care with other qualified professionals.

Care is coordinated and/or integrated across all elements of the complex health care system. Care is facilitated by registries, information technology, health information exchange, and other means to ensure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner.

Quality and safety are hallmarks of the medical home and are promoted through such practices as having patients actively involved in decision making, using evidence-based medicine and clinical decision-support tools to guide decision making, and expecting physicians in the practice to be accountable for continuous quality improvement.

Enhanced access to care is available through such systems as open-access scheduling, expanded hours, and new options for communication (e.g., e-consults) between patients, their personal physician, and practice staff.

The PCMH operates as the central hub of patient information, primary care provision, and care coordination. Within a PCMH, the concept of the care team is expanded to include health care professionals including nurses, pharmacists, care managers, and others. Care delivery places a high priority on patient involvement and recognition of patient needs and preferences—it is patient-centered. Population management processes are incorporated into the practice workflow that facilitates the delivery of evidence-based disease management and patient self-management services. A more complete history and description of the PCMH model are included in Addendum I.

The Specialty/Subspecialty Practice as a PCMH Neighbor (PCMH-N)

The members of the CSS PCMH Workgroup support the goal of the PCMH model to promote integrated, coordinated care throughout the health care system, but also recognize that the effectiveness of the PCMH care model to achieve this goal is dependent on the cooperation of the many subspecialists, specialists, and other health care entities (e.g., hospitals, nursing homes) involved in patient care. Fisher[2] also noted that the success of the PCMH model depended on the availability of a "hospitable and high-performing medical neighborhood" that aligns their processes with the critical elements of the PCMH. Consistent with this observation, the CSS PCMH Workgroup developed the following definition of a *"PCMH Neighbor"* with particular reference to specialty/subspecialty practices:

A specialty/subspecialty practice recognized as a Patient-Centered Medical Home Neighbor (PCMH-N) engages in processes that:

- Ensure effective communication, coordination, and integration with PCMH practices in a bidirectional manner to provide high-quality and efficient care
- Ensure appropriate and timely consultations and referrals that complement the aims of the PCMH practice
- Ensure the efficient, appropriate, and effective flow of necessary patient and care information
- Effectively guides determination of responsibility in co-management situations
- Support patient-centered care, enhanced care access, and high levels of care quality and safety
- Support the PCMH practice as the provider of whole person primary care to the patient and as having overall responsibility for ensuring the coordination and integration of the care provided by all involved physicians and other health care professionals.

The concept of a PCMH-N acknowledges that, at times, patient care is required by physicians and other health care professionals outside of a patient's PCMH practice. The PCMH- N concept highlights the importance of effective integration and coordination of services provided by specialist/subspecialist practices with the PCMH. The Workgroup proposes, based on a modification of a typology of specialist roles offered by Forrest,[3] that the clinical interactions between the PCMH and the PCMH-N can take the following forms:

- Preconsultation exchange—intended to expedite/prioritize care—a preconsultation exchange either answers a clinical question without the necessity of a formal specialty visit ("curbside consultation") and/or better prepares the patient for specialty assessment. This category includes the establishment of general referral guidelines to help expedite timeliness and appropriateness of referrals, and also provides guidance on what defines an "urgent" consult and how these should be specifically addressed. Several national specialty/subspecialty societies have already developed referral guidelines, and these should be utilized to inform this process.
- Formal consultation—to deal with a discrete question/procedure—is a formal consultation limited to one or a few visits that are focused on answering a discrete question. This may include a particular service request by a PCMH for a patient. A detailed report and discussion of management recommendations would be provided to the PCMH. However, the specialty/subspecialty practice would not manage the problem on an ongoing basis.
- **Co-management**
  - ***With Shared Management for the disease*—**the specialty/subspecialty practice provides guidance and ongoing follow up of the patient for one specific condition. Both the PCMH and specialty/subspecialty practice are responsible for clear delineation of expectations for the other. Within this model, the specialty/subspecialty practice will typically provide expert advice, but will not manage the illness on a day to day basis.
  - ***With Principal care for the disease*—**both the PCMH and specialty/subspecialty practice are concurrently active in the patient's treatment, but the specialty practice's responsibilities are limited to a discrete group or set of problems. The PCMH maintains responsibility for all other aspects of patient care, and remains the first contact for the patient.
  - ***With Principal care of the patient for a consuming illness for a limited period*—**the specialty/subspecialty practice needs to temporarily become the first contact for care of the patient because of the significant nature and impact of the disorder. However, the PCMH still receives on-going treatment information, retains input on secondary referrals, and may provide certain, well-defined areas of care.
- Transfer of patient to specialty/subspecialty PCMH for the entirety of care—this refers to situations in which the specialty/subspecialty practice assumes the role of the PCMH after consultation with the patient's current PCMH personal physician, and approval by the patient. The PCMH model is mostly aligned with a primary care practice and is specialty nonspecific. Thus, there may be situations in which the specialty/subspecialty practice may be the medical home for a subgroup of

their patients. The specialty/subspecialty practice would be expected to meet the requirements of an approved third-party PCMH recognition process (for example, the NCQA PPC-PCMH recognition), and affirm the willingness to provide care consistent with the "Joint Principles," including the delivery of first-contact, whole-person, comprehensive care. This situation is best represented by a specialty/subspecialty practice that is seeing a patient frequently over a relatively long period for the treatment of a complex condition that affects multiple aspects of his or her physical and general functioning. Representative examples include:

- An infectious disease practice caring for a patient with HIV/AIDS with complex medical and treatment issues.
- A nephrology practice caring for a dialysis patient with end-stage renal disease.

Clinical examples of these categories of referral, consultation, and co-management arrangements are included in Addendum III.

The decision regarding the type of clinical interaction (relationship) between the PCMH and PCMH-N would be a function of the clinical situation being addressed, the professional judgment of the physicians involved, and the expressed needs and preferences of the patient. Furthermore, the Workgroup recognizes the fluid nature of these categories. Finally, the Workgroup encourages the various specialty/subspecialty societies to develop evidence-based, care coordination models for the treatment of specific conditions to help inform these decisions.

While the PCMH model conceptualizes the medical home as the voluntary choice for first-contact care by the patient, it doesn't preclude the patient from self-referral to a specialist/subspecialist—the PCMH practice is not a required "gatekeeper." It does highlight the need for processes to ensure that the clinical activities of the patient's PCMH and specialty/subspecialty practices are coordinated and integrated.

Care Coordination Agreements to Facilitate Improved Referral, Information Flow and Responsibility Designation Between the PCMH and PCMH-N Practices

The CSS PCMH Workgroup spent considerable time addressing the type of processes necessary to improve referral, informational flow, and responsibility designation between PCMH and PCMH-N practices. The Workgroup reviewed the recommendations of the "Stepping Up to the Plate Consortium"[4] organized by the American Board of Internal Medicine (ABIM) Foundation and the "Transitions in Care" conference[5] organized by the College in collaboration with the Society of General Internal Medicine (SGIM), the Society of Hospital Medicine, the American Geriatrics Society (AGS), the American College of Emergency Physicians, and the Society of Academic Emergency Medicine. The Workgroup has affirmed the principles developed through these initiatives and applied them to the PCMH specialty/subspecialty practice interface in a document titled "Patient-Centered Medical Home (PCMH) Transition, Flow of Information and Care Coordination" (Addendum II). The Workgroup also reviewed the work of the multistakeholder Health Information Technical Standards Panel (HITSP)[6] and its development of a continuity-of-care document. Finally, the Workgroup developed a series of clinical "use cases" covering

a broad spectrum of specialty/subspecialty disciplines, and used them to further establish means for facilitating increased coordination and integration between PCMH and PCMH-N practices. On the basis of these activities, the Workgroup recommended that the functions of improved referral, information flow, and responsibility designation could best be implemented through the development of care coordination agreements, also recently referred to as service agreements[7] or compacts,[8] between the PCMH and PCMH-N practices based on the following principles:

1) A care coordination agreement will define the types of referral, consultation, and co-management arrangements available.
2) The care coordination agreement will specify who is accountable for which processes and outcomes of care within (any of) the referral, consultation or co-management arrangements.
3) The care coordination agreement will specify the content of a patient transition record/core data set that is to go with the patient in all referral, consultation, and co-management arrangements.
4) The care coordination agreement will define expectations regarding the information content requirements, as well as the frequency and timeliness of information flow within the referral process. This is a bidirectional process, reflecting the needs and preferences of both the referring and consulting physician or other health care professional.
5) The care coordination agreement will specify how secondary referrals are to be handled.
6) The care coordination agreement will maintain a patient-centered approach, including consideration of patient/family choices and ensuring explanation/clarification of reasons for referral, the subsequent diagnostic or treatment plan and responsibilities of each party, including the patient/family.
7) The care coordination agreement will address situations of self-referral by the patient to a PCMH-N practice. (Note that the PCMH care delivery model recognizes the right of the patient to self-refer.)
8) The care coordination agreement will clarify in-patient processes, including notification of admission, secondary referrals, data exchange, and transitions into and out of hospital.
9) The care coordination agreement will contain language emphasizing that in the event of emergencies or other circumstances in which contact with the PCMH cannot be practicably performed, the specialty practice may act urgently to secure appropriate medical care for the patient.
10) Care coordination agreements will include:

    - A mechanism for regular review of the terms of the care coordination agreement by the PCMH and specialty practice.
    - A mechanism for the PCMH and specialty/subspecialty practices to periodically evaluate each other's cooperation with the terms of the care coordination agreement, and the overall quality of care being provided through their joint efforts.

At this time, implementation of the above principles within care coordination agreements represents an aspiration goal. The typical PCMH will need to coordinate with a large number of different specialty/subspecialty practices,[9] and this process would become much more complex if the agreement between an

individual PCMH and each of their neighbors is highly differentiated. Thus, the Workgroup recommends that current attempts to implement these care coordination agreements emphasize uniformity and cover more limited, common forms of interactions. Similarly, such factors as local community practice standards, administrative burden, practice size, and resources (e.g., paper-based vs. use of an electronic medical record system) should also be considered when these agreements are being developed. As the use of interoperable EHR systems becomes more standard within the health care community, increased differentiation and elaboration can take place within the agreements.

The proposed use of these care coordination agreements within the Texas Medical Home Initiative[10] serves as an example of first-stage implementation. Each participating PCMH is to set up a care coordination agreement with one frequently referred to specialty/subspecialty practice from three specialty areas. The agreements are to include relevant contact information; an expression of willingness to engage in bidirectional, informal "curbside consult" communications; and an agreed-upon referral and feedback format. Once established, these agreements will serve as models to expand to other "neighbor" practices. Similarly, care coordination agreements are being used in a systems-of-care pilot project in Colorado between an NCQA-recognized medical home and preferred specialty practices.[11] Components of these agreements include the development of standard referral and feedback forms, an agreed-upon "transition-of-care" patient information document, and a expressed willingness for prereferral consultation.

The care coordination agreements should be viewed *solely* as a means of specifying a set of expected working procedures agreed upon by the collaborating practices toward the goals of improved communication and care coordination—they are not legally enforceable agreements between the practices.

An extended discussion of these principles with clinical examples of the different categories of referral, consultation, and co-management is included in Addendum III. In addition, the Workgroup is in the process of developing model referral, feedback, and care coordination agreements to help inform efforts to establish "neighbor" communities within PCMH projects. These model documents will highlight efforts to minimize unnecessary administrative burden and help ensure, with the service agreements, that there is no additional medical liability risk for the practices engaging in such agreements.

PCMH-N Incentive Structure

An incentive structure is required to encourage specialty/subspecialty practices to become a PCMH-N and to collaborate with PCMH practices to facilitate care coordination. Nonfinancial incentives include improved quality of referrals and increased likelihood of PCMH's referring their patients to PCMH-N practices due to their emphasis on integrating care coordination processes. An effective incentive structure, in the opinion of the Workgroup, would also have to reward recognized practices through some form of enhanced payment to cover the time and infrastructure costs of providing services consistent with the PCMH-N definition. (It is assumed that the PCMH practice is already receiving payment [e.g., a monthly care coordination fee] in recognition of the increased care coordination work required under the model.) This refers to the added practice expenses related to such activities as establishing and routinely evaluating care coordination agreements with PCMH practices; engaging in enhanced communication with PCMH practices, including increased preconsult interactions to ensure appropriate and effective referrals; and establishing

practice processes consistent with the PCMH care model that support patient-centered care and enhanced care access and promote high levels of care quality and safety. Over time, it is anticipated that this financial incentive structure would transition to a more bundled and/or integrated payment approach (e.g., Accountable Care Organization [ACO]) with the potential for reimbursement through performance bonuses or shared savings.

There are many incentive structures available to recognize the efforts (including non– face-to-face patient activities) and contributions of specialty/subspecialty practice neighbors in facilitating care coordination in the PCMH model. The implementation of various incentive structures in present and newly developed PCMH demonstration projects will help determine the most effective and efficient ways of providing this important recognition.

The Development of a PCMH-N Recognition Process

The Workgroup is currently in the process of defining a process, similar to the NCQA PPC-PCMH procedure, to designate those specialty/subspecialty practices that provide services consistent with the PCMH-N model. The practices recognized through this process as a PCMH-N could benefit by being a preferred consultant of the PCMH practices, as well as receiving enhanced payment from the payer. Evaluative categories being considered as part of this recognition process include communication; effective flow of information; care coordination and integration; care responsibility; patient-centeredness; access to care; and quality and safety. The Workgroup is discussing the possible further development of this recognition process with various qualified third-party certification entities.

Recommendations

Based upon the Workgroup's analysis of the interface between PCMH and PCMH-N specialty/subspecialty practices presented in this policy paper, the following recommendations are offered:

1. **The ACP recognizes the importance of collaboration with specialty and subspecialty practices to achieve the goal of improved care integration and coordination within the Patient-Centered Medical Home (PCMH) care delivery model.**
2. **The ACP approves the following definition of a Patient-Centered Medical Home Neighbor (PCMH-N) as it pertains to specialty and subspecialty practices:**

A specialty/subspecialty practice recognized as a Patient-Centered Medical Home Neighbor (PCMH-N) engages in processes that:

- Ensure effective communication, coordination, and integration with PCMH practices in a bidirectional manner to provide high-quality and efficient care
- Ensure appropriate and timely consultations and referrals that complement the aims of the PCMH practice
- Ensure the efficient, appropriate, and effective flow of necessary patient and care information
- Effectively guide determination of responsibility in co-management situations

- Support patient-centered care, enhanced care access and high levels of care quality and safety
- Support the PCMH practice as the provider of whole-person primary care to the patient and as having overall responsibility for ensuring the coordination and integration of the care provided by all involved physicians and other health care professionals.

3. The ACP approves the following framework to categorize interactions between PCMH and PCMH-N practices:

The clinical interactions between the PCMH and the PCMH-N can take the following forms:

- Preconsultation exchange—intended to expedite/prioritize care, or clarify need for a referral.
- Formal Consultation—to deal with a discrete question/procedure
- Co-Management
  - Co-management with Shared Management for the disease
  - Co-management with Principal care for the disease
  - Co-management with Principal care of the patient for a consuming illness for a limited period
- Transfer of patient to specialty PCMH for the entirety of care.

4. The ACP approves the following aspirational guiding principles for the development of care coordination agreements between PCMH and PCMH-N practices.

- A care coordination agreement will define the types of referral, consultation, and co-management arrangements available.
- The care coordination agreement will specify who is accountable for which processes and outcomes of care within (any of) the referral, consultation, or co-management arrangements.
- The care coordination agreement will specify the content of a patient transition record/core data set, which travels with the patient in all referral, consultation, and co-management arrangements.
- The care coordination agreement will define expectations regarding the information content requirements, as well as the frequency and timeliness of information flow within the referral process. This is a bidirectional process reflecting the needs and preferences of both the referring and consulting physician or other health care professional.
- The care coordination agreement will specify how secondary referrals are to be handled.
- The care coordination agreement will maintain a patient-centered approach including consideration of patient/family choices and ensuring explanation/clarification of reasons for referral, the subsequent diagnostic or treatment plan, and responsibilities of each party, including the patient/family.
- The care coordination agreement will address situations of self-referral by the patient to a PCMH-N practice.
- The care coordination agreement will clarify in-patient processes, including notification of admission, secondary referrals, data exchange, and transitions into and out of hospital.
- The care coordination agreement will contain language that emphasizes that in the event of emergency or other circumstance in which

contact with the PCMH cannot be practicably performed, the specialty practice may act urgently to secure appropriate medical care for the patient.
- Care coordination agreements will include:
  - A mechanism for regular review of the terms of the care coordination agreement by the PCMH and specialty practice.
  - A mechanism for the PCMH and specialty/subspecialty practices to periodically evaluate each other's cooperation with the terms of the care coordination agreement, and the overall quality of care being provided through their joint efforts.

5. The ACP recognizes the importance of incentives (both non-financial and financial) to be aligned with the efforts and contributions of the PCMH-N practice to collaborate with the PCMH practice.

6. The ACP supports the exploration of a PCMH-N recognition process.

References

1. **American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, and the American Osteopathic Association.** Joint Principles of the Patient-Centered Medical Home. March 2007. Accessed at www.acponline.org/advocacy/where_we_stand/medical_home/approve_jp.pdf on 18 December 2009.
2. **Fisher ES.** Building a medical neighborhood for the medical home. N Engl J Med. 2008:359(12)1202-1205. Accessed at http://content.nejm.org/cgi/content/full/359/12/1202 on 4 January 2010.
3. **Forrest C.** A typology of specialists' clinical roles. Arch. Intern Med. 2009:169(11);1062-68. Accessed at www.archinternmed.com on 4 January 2010.
4. **Greiner A.** White space or black hole: What can we do to improve care transitions? American Board of Internal Medicine Issue Brief #6. 2007. Accessed at www.abimfoundation.org/~/media/Files/Publications/F06-05-2007_6.ashx on 4 January 2010.
5. **Snow V.** Beck D. Budnitz T. et. al. Transitions of care consensus policy statement American College of Physicians-Society of General Internal Medicine-Society of Hospital Medicine-American Geriatrics Society-American College of Emergency Physicians-Society of Academic Emergency Medicine. J Gen Intern Med. April 2009.DOI: 10.1007/s11606-009-0969-x.
6. **Health Information Technology Standards Panel (HITSP).** HITSP Summary Documents Using HL7 Continuity of Care Document (CCD) Component. July 8, 2009. Accessed at www.hitsp.org/about_hitsp.aspx on 23 March 2010.
7. **Greenlee CM.** Pham H. and Bornstein S. What Makes a Good Neighbor? The Interface Between the Patient-centered Medical Home (PCMH) and Subspecialty Practices Centered Medical Home (PCMH) and Subspecialty Practices. Panel Discussion. Internal Medicine 2010. April 2010. Toronto.
8. **Personal communication.** The Colorado Systems of Care (SOC)-PCMH Grant project is using the term "compact" to describe a care coordination agreement between a PCMH practice and a "neighbor" practice. www.coloradoguidelines.org/pcmh/default.asp.
9. **Pham H.** O'Malley A. Bach P. et. al. Primary care physicians' Links to other physicians through Medicare patients: The scope of care coordination. Ann Intern Med. 2009;150:236-242. Accessed at www.annals.org/content/150/4/236.full.pdf+html?sid=dd08385d-b250-43a7-909a-023c2c8fc7e5 on 4 January 2010.

10. **Personal Communication.** Sue Bornstein, MD. Executive Director, Texas Medical Home Initiative. Nov 2009.
11. **Hammond S.** Continuity in care: A small practice journey. Presentation to the Patient-centered Primary Care Collaborative March 30, 2010 Summit. Assessed at www.pcpcc.net/files/hammond_march_30_2010_ppt.pptx on 29 June 2010.

ADDENDUM I

Description and Brief History of the Patient-Centered Medical Home (PCMH)

The roots of the PCMH care model stem from the pediatric literature of the 1960s and '70s highlighting the importance of a "medical home" to facilitate the coordination of care for special-needs children. More recently, the American Academy of Family Physicians (AAFP)[1] and the American College of Physicians[2] expanded the concept to the full patient population and added elements of patient-centered care,[3] the Wagner Chronic Care model,[4] and health information technology.

In March 2007, the AAFP and ACP collaborated with the American Academy of Pediatrics (AAP) and the American Osteopathic Association (AOA) to develop a set of "Joint Principles" to describe the key attributes of the PCMH.[5] These principles promote health care delivery for all patients through all stages of life that is characterized by the following features:

***Personal physician*—**each patient has an ongoing relationship with a personal physician trained to provide first contact and continuous and comprehensive care.

***Physician-directed medical practice*—**the personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients.

***Whole-person orientation*—**the personal physician is responsible for providing for all of the patient's health care needs or taking responsibility for appropriately arranging care with other qualified professionals.

Care is coordinated and/or integrated across all elements of the complex health care system. Care is facilitated by registries, information technology, health information exchange, and other means to ensure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner.

Quality and safety are hallmarks of the medical home and are promoted through such practices as having patients actively involved in decision making, using evidence-based medicine and clinical decision-support tools to guide decision- making, and expecting physicians in the practice to be accountable for continuous quality improvement.

Enhanced access to care is available through such systems as open-access scheduling, expanded hours, and new options for communication (e.g., e-consults) between patients, their personal physician, and practice staff.

The PCMH operates as the central hub of patient information and care coordination, expanding on the concept of the care team. Care delivery places a high priority on patient involvement and recognition of patient needs and preferences. Population management processes are incorporated into the practice workflow that facilitates delivery of evidence-based disease management and patient self-management services. The PCMH care model requires substantial practice restructuring that necessitates additional reimbursement to cover the

initial and ongoing costs of practice infrastructure, systems, and services not currently recognized.

The AAFP, AAP, ACP, and AOA collaborated with the National Committee for Quality Assurance (NCQA) to develop a voluntary, three-tiered recognition process to measure the degree to which practices have the services and infrastructure consistent with the PCMH care model. The nine practice elements assessed through this process are access and communication; patient tracking and registry functions; case management; patient self-management support; electronic prescribing; test tracking; referral tracking; performance reporting and improvement; and advanced electronic communication. The tool has received the endorsement of the major primary care groups for use only within PCMH demonstration projects.[6]

The PCMH "Joint Principles" also outlined a hybrid, risk-adjusted payment system that appropriately recognizes the value of this model of care. The components of this payment system are:

- A care coordination fee to cover additional physician, staff, and infrastructure costs not recognized under the current Medicare Physician Fee Schedule
- The current visit-based, fee-for-service payment
- A performance-based fee linked to quality, efficiency, and patient experience measures.

The concept of the PCMH has received substantial support from multiple health care stakeholders. The "Joint Principles" have been endorsed by 19 medical societies[7] in addition to the four primary care groups, including the American Medical Association. In May 2007, the Patient-Centered Primary Care Collaborative was formed—a coalition now representing over 600 major employers, consumer groups, professional societies, and other stakeholders supportive of the elements of the PCMH. At least 31 states are engaged in efforts to incorporate medical home concepts within their SCHIP and Medicaid programs,[8] the Federal government will be implementing medical home demonstrations, and there are multiple private and public-private PCMH demonstration projects being implemented throughout the country.

ADDENDUM II

Patient-Centered Medical Home (PCMH) Transition, Flow of Information, and Care Coordination Document

The Council of Subspecialty Societies PCMH Workgroup reaffirms the following principles developed by the Transitions of Care Consensus Conference (TOCCC)[9] and the Stepping Up to the Plate (SUTTP) Alliance initiative.[10] The material in *italics* reflects the Taskforce's recommendations on how these principles affect the interface between the PCMH and specialty/subspecialty practices.

1. **Respecting the hub of coordination of care—**All patients should have a central hub of care—the location that is responsible for the overall care coordination. All patients (and their family/caregivers) should have and be able to identify their medical home (i.e., practice or practitioner). This function is traditionally performed by primary care practices

although specialists may also play this role for patients with chronic conditions within the specialty. Regardless of whether the providers at the hub of care are directly involved, they should be informed of all transitions between sites of care—for example, between a hospital and skilled care facility—by receiving direct communication about expectations, medications, appropriate follow-up, and the assignment of care responsibilities.

The PCMH is the hub of care coordination. The PCMH must receive all relevant information regarding patient care delivered by members of the treatment team outside of the PCMH practice. This includes all referrals and diagnostic and lab tests requested and obtained, and diagnostic and treatment plans initiated. In addition, the PCMH is responsible for providing similar necessary information to subspecialists/specialists outside of the PCMH practice who are providing care to the PCMH patient.

2. **Accountability**—At all times, a personal physician must be accountable for ensuring that patients of all ages experience effective transitions between locations of care through the timely exchange of appropriate information. The accountability should be clearly established—all involved parties should meet to discuss the transitions of interest and reach consensus about accountability for outcomes. In order to demonstrate accountability for care across transitions, a system must have agreed-upon, feasible, reliable, and valid measures for meeting established standards of care. Although not optimal, standards should acknowledge and plan for situations in which patients do not have a primary care provider.

The personal physician within the PCMH practice is primarily accountable for ensuring that patients of all ages experience efficient transitions between locations of care through timely exchange of appropriate information. In those situations in which care is co-managed between the PCMH and a specialty/subspecialty practice or temporarily transferred (e.g., during a hospital admission), the responsibility for referrals and effective transitions must be clearly defined between the practices involved, and also defined for and understood by the patient and related family/caregivers. In all cases, referrals and information obtained from other sources by the co-managing specialty/subspecialty practice or temporary care entity (e.g., hospital) must be communicated to the hub of care coordination—the PCMH.

3. **Clear and direct communication of treatment plans and follow-up expectations—**Communication between providers and sites of care are frequently nondirective—they provide general suggestions on what might be done rather than provide specific instructions about what needs to be done. This leaves expectations and needs uncertain. To improve transitions in care, appropriate communication should be direct and specific, clearly stating what is needed and why, and the expected follow-up. Such communication clarifies the expectations of the receiving party, and makes clear why the expectations were made.

Referrals by the PCMH to the specialty/subspecialty practice, as well as transitions of care back from the specialty/subspecialty practice to the PCMH, must include a clear statement of what is needed, why it is needed, and any required follow-up.

The PCMH and the specialty/subspecialty practices involved in the care of their patients must develop "service relationship agreements," which clearly define the referral relationship (e.g., best practice guidelines on when to refer); the specific information expected from the PCMH when referring to the specialty/subspecialty practice, and the information expected back to the PCMH from the specialty/subspecialty practice; the form this information flow should take (e.g., electronic through an electronic medical record, fax, paper report mailed, etc); and the expected timelines for this information flow under typical circumstances. These agreements should reflect national standards, but will also have to take into account the culture of the local community and the current capabilities of the participating practices.(Templates for these agreements will need to be developed.)

4. **Timely feed-forward and feedback of information—**Appropriate information should be exchanged between providers and sites of care as quickly as possible. When a consult is requested, information should arrive at the consulting location before the patient visit. After a consultation, a report with specific instructions and expectations for subsequent actions should be returned to the requesting practice in a timely manner. When a patient is transferred between sites of care, such as from a hospital to a nursing home or is admitted to the hospital, a complete package of information with specific care instructions should accompany or precede the patient, and its receipt acknowledged by the receiving provider.

The PCMH and the specialty/subspecialty practices working with their patients should strive to provide all necessary information for use in a timely manner—typically when the patient is next scheduled to be seen in consultation or treatment by a member of the treatment team. This emphasis on timeliness should be reflected in the "service relationship agreements" between the PCMH and the specialty/subspecialty practices included in their treatment team.

5. **The *involvement and awareness* of the patient and family member, unless inappropriate, in all steps—**At every point along the transition, the patient and/or their family/caregivers need to know who is responsible for their care at that point and who to contact and how. While patients obviously do not need to be involved in all communications and while we should not rely on them to transmit information between locations of care, patients do have the right to be involved to the extent that they desire. Nothing should transpire about a patient without his or her input. From the patient's perspective, that means "nothing about me without me."

a. All patients and their family/caregivers should have and be able to identify who is their medical home or coordinating clinician (i.e., practice or practitioner).
b. At every point along the transition, the patient and/or their family/caregivers need to know who is responsible for their care at that point and who to contact and how.

The PCMH care model emphasizes the importance of involv*ing the patient and related family members/caregivers (unless inappropriate) in any transition process. This includes ensuring that the patient and their family/caregivers understand the reasons for a referral or transition of care, the specific roles of the PCMH and other providers involved in the care of the patient, and information on how to contact each of the providers participating in the patient's care.*

6. ***Establishing national standards—***National standards should be established for transitions in care and should be adopted and implemented at the national and community levels through public health institutions, national accreditation bodies, medical societies, and medical institutions to improve patient outcomes and patient safety The experience of local practice environments would inform the establishment of national standards and the implementation of standards.

The "service-relation agreement" between the PCMH and specialty/subspecialty practices working with their patients should reflect national standards when available, but must also take into account the culture of the local community and the current capabilities of the participating practices. The Task Force supports efforts toward rapid adoption of interoperable electronic medical records to facilitate effective and efficient communication of patient information.

7. ***Measurement—***For monitoring and improving transitions, standardized metrics related to these standards should be used to lead to continuous quality improvement and accountability.

Nationally recognized, multistakeholder performance measure standards groups (e.g., NQF, AQA) should encourage the development and endorse standardized metrics related to care transitions. The PCMH should use such measures as part of the continuous quality improvement efforts required within the care model. In addition, information from these measures should be used to evaluate the quality of the services received from the specialty/subspecialty practices working with their patients.

The TOCCC and SUTTP efforts recommended informational elements that should be included in an "ideal transition record." These elements consisted of:

- Clearly identifies medical home and/or transferring coordinating physician/institution
- Emergency plan and contact number and person
- Patient's cognitive status
- Assessment of caregiver status
- Advance directives, power of attorney, consent
- Principle diagnosis and problem list
- Medication list (reconciliation) , including immunizations, over-the-counter/ herbal remedies, allergies and drug interactions
- Prognosis and goals of care
- Ongoing treatment and diagnostic plan
- Test results/pending results
- Planned interventions, DME, wound care.

The CSS PCMH Workgroup affirms these components and believes that they should be included with all referrals for consultations and requests for care co-management. In addition, a list of providers (with contact information) currently participating in the treatment of the patient should be added to this core information. The Task Force further recommends that in addition to this core transition record, a clear request outlining "what is needed and why, and the expected follow-up" must be provided for any referral made by the PCMH. Responses by the specialty/subspecialty practice back to the PCMH should, at a minimum, address the reasons for referral, any follow-up required with an explicit statement of who is responsible, and any changes to the core information provided by the PCMH.

ADDENDUM III

Principles of Care Coordination Agreements Between Patient-Centered Medical Homes (PCMH) and Specialty/Subspecialty Practices Serving as PCMH Neighbors (PCMH-N) in Ambulatory Settings

1) A care coordination agreement will define the types of referral and co-management agreements available.

The agreements regarding scope of patient care management should clearly define the types of consultation and/or co-management elements and specifics. These should be fluid (dynamic) to adapt to changes in patient or disease status and should be clearly communicated and understood by all parties, including the PCMH and the specialty practice as well as patients and their families and caregivers. The agreements may include the following arrangements:

- **Preconsultation exchange—intended to expedite/prioritize care—** a preconsultation exchange either answers a clinical question without the necessity of a formal specialty/subspecialty visit and/or better prepares the patient for specialty/subspecialty assessment. This category includes the establishment of general referral guidelines to help expedite timeliness and appropriateness of referrals and also provides guidance on what defines an "urgent" consult and how these should be specifically addressed. Several national specialty/subspecialty societies have already developed referral guidelines and these should be utilized to inform this process.
- **Formal Consultation—to deal with a discrete question/procedure—**is a formal consultation limited to one or a few visits that are focused on answering a discrete question. This may include a particular service request by a PCMH for a patient. A detailed report and discussion of management recommendations would be provided to the PCMH. However, the specialty/subspecialty practice would not manage the problem on an ongoing basis.
- **Co-management**
  - **Co-management with Shared Management for the disease—** the specialty/subspecialty practice provides guidance and ongoing follow-up of the patient for one specific condition. Both the PCMH and specialty/subspecialty practice are responsible for clear delineation of expectations for the other. Within this model, the specialty/subspecialty practice will typically provide expert advice, but will not manage the illness day to day.
  - **Co-management with Principal care for the disease—**both the PCMH and specialty/subspecialty practice are concurrently actively involved in the patient's treatment, but the specialty/subspecialty practice's responsibilities are limited to a discrete problem group or set of problems. The PCMH maintains control over all other aspects of patient care and remains the first contact for the patient.
  - **Co-management with Principal care of the patient for a consuming illness for a limited period of time—**the specialty/subspecialty practice needs to temporarily become the first contact of care for the patient because of the significant nature and impact of the disorder. However, the PCMH still receives ongoing treatment information, retains input on secondary referrals, and may provide certain, well-defined areas of care.

- Transfer of patient to specialty PCMH for the entirety of care—this refers to situations in which the specialty/subspecialty practice assumes the role of the PCMH after consultation with the patient's current PCMH personal physician and approval by the patient. The PCMH model is mostly aligned with a primary care practice and is specialty nonspecific. Thus, there may be situations where the specialty/subspecialty practice may be the medical home for a subgroup of their patients. The specialty/subspecialty practice would be expected to meet the requirements of an approved third-party PCMH recognition process (e.g., the NCQA PPC-PCMH recognition), and affirm the willingness to provide care consistent with the "Joint Principles," including delivery of first-contact, whole-person, comprehensive care. This situation is best represented by a specialty/subspecialty practice that is seeing a patient frequently over a relatively long period for the treatment of a complex condition that affects multiple aspects of physical and general functioning.

Examples of each type of clinical arrangement are included at the end of this addendum.

2) The care coordination agreement will specify who is accountable for which processes and outcomes of care in (any of) the consultation or co-management arrangements.

The specific elements of care that could be addressed and assigned accountability include:

- Recommended prereferral testing
- Pharmacologic therapy and equipment
  - Prescribing, monitoring, refills, prior authorization
- Referral management
  - Additional specialists or services
- Diagnostic testing
  - Ordering, communication of results, tracking
- Patient education on disease management
- Addressing secondary diagnoses
- Care teams/community support
- Patient phone calls/concerns/disease and medication issues
- Monitoring/surveillance/follow-up

Responsibility for specific elements will vary based on the consultation or co-management arrangement. These accountability arrangements will be affected by such factors as geographic location of the practices and related practice patterns, preferences of the collaborating physicians/practices, and the needs and preferences of the patient, and when appropriate, the family.

3) The care coordination agreement will specify the content of a patient transition record/core data set, which travels with the patient in all care transitions. This will be established as mutually agreeable to all involved.

Elements of a suggested transitions record/core data set primarily based on the recommendations of the Transitions of Care Consensus Conference (TOCCC)[11] and the Stepping Up to the Plate (SUTTP) Alliance initiative[12] include the following:

- Clearly identified medical home and/or transferring coordinating physician/institution
- Personal information, including language spoken
- Emergency plan and contact number and person
- Patient's functional status
- Assessment of caregiver status
- Advance directives, power of attorney, consent
- Principle diagnosis and problem list
- Surgical and procedure history
- Medication list (reconciliation) , including immunizations, OTC/ herbals, allergies and contraindications
- Prognosis and goals of care
- Ongoing treatment and diagnostic plan
- Test results/pending results
- Planned interventions, DME, wound care, etc.
- List of all treating physicians and other health care professionals (and preferably the disorder they help co-manage)

The transitional record should take the form of a national standard, when and if such a standard is developed and approved by the majority of health care stakeholders. Consistent with a national standard approach, the elements included in a core data set should be compatible with the data elements already defined in the continuity of care document developed and approved by the multistakeholder Health Information Technical Standards Panel (HITSP).[13] It is also recognized that under the current paper-based practice environment, this list of categories would excessively burden practices. A more basic list must be developed and agreed upon for use in the current practice environment. As the implementation of interoperable electronic health record (EHR) systems among practices increases, the capability to incorporate all these of categories becomes more realistic.

4) The care coordination agreement will define expectations regarding the information content requirements, as well as the frequency and timeliness of information flow within the referral process. This is a bidirectional process reflecting the needs and preferences of both the referring and consulting physician or other health care professionals.

In addition to the "transition record/core data set" that should accompany the patient in any transition of care, the request from the PCMH for consultation or referral should indicate a clear clinical question, and reflect whether a service or procedure or request for co-management is being sought. It should also include a clinical summary of the issues necessitating the referral and/or the pertinent medical records and test results. Any urgent consultation requests should be communicated in an agreed-upon manner that allows the specialty practice to be directly aware of the situation.

The report back from the specialty practice should clearly address the referral request, indicate the diagnostic and/or treatment plan, and specify which

components of that plan are the responsibilities of the specialty practice and which are to be completed by the PCMH. Certain items critical to the safety and care coordination of the patient need to be directly specified and include any new or changed diagnoses, changes to medications or medical equipment, any diagnostic study ordered (with results or pending status) or recommended (with an indication of who is to order), any procedure performed and outcome of the procedure or planned/scheduled procedure, any secondary referrals made or recommended, any patient education provided (or recommended), and/or self-management expectations and recommended follow-up by the specialty practice and/or PCMH.

The care coordination agreement should also address a mutually agreed-upon timeline for receipt of reports and the manner in which the report will be sent (e.g., mail, fax, e-mail, EMR). Communication arrangements for emergencies or situations requiring expedited contact should be developed. Notification guidelines for "no shows" for appointments or procedures should also be part of the response process. The importance of responsible and agreed–upon communication processes among treating physicians and other health care professionals to the safe and effective care of patients cannot be overstated.

5) The care coordination agreement will specify how secondary referrals are to be handled.

Secondary referrals are those that arise from a referral to a specialty/subspecialty practice for consultation, procedures, or co-management in the outpatient setting. Who is responsible for instituting and coordinating these secondary referrals and how the information from these referrals is shared and communicated need to be established. In some instances, the referral for special services may require some specialty knowledge and may best be managed by the specialty/subspecialty practice. There needs to be clear expectations with regard to when the PCMH wishes to be involved in secondary referrals and when it is preferable for the specialty/subspecialty practice to proceed without conferring with the PCMH. In all cases, the PCMH needs to be included in the communication regarding the secondary referral and the outcomes of that referral and a process for ensuring this communication connection needs to be established.

6) The care coordination agreement will maintain a patient-centered approach, including consideration of patient/family choices and ensuring explanation/clarification of reasons for referral, the subsequent diagnostic or treatment plan, and responsibilities of each party, including the patient and family.

Both the PCMH and specialty/subspecialty practice establish processes to deliver care in a patient-centered manner that fosters increased patient involvement and responsibility. This should include providing information sensitive to the level of health literacy, allowing time for questions and explanations, and providing clear guidelines for when and how to utilize the specialty services. A written guide about the practice operations (such as contact numbers for help with scheduling, billing issues, or medical/medication questions as well as how prescriptions, diagnostic test results, and follow-up will be handled) is recommended. Development of treatment plans should include patient input and acknowledgment of goals and responsibilities. Resources for education about the disease state as well as patient self-management should be made available to

patients and families. Openness to and facilitation of additional expert opinion for difficult diagnoses should be part of the patient-centered approach.

7) The care coordination agreement will address situations of self-referral by the patient to a PCMH-N practice.

Consistent with the patient-centered approach of the PCMH care model, patients may self-refer. When a self-referral is made, it should be handled in a thoughtful and considerate manner. There should be processes in place to ascertain that the referral is appropriate and if not, to guide the patient to the appropriate specialist. Furthermore, after receiving appropriate patient consent, processes should exist for the patient's PCMH to provide relevant background information to facilitate the self-referred appointment and the Neighbor should provide information back to the PCMH so treatment can be coordinated and integrated with the patient's overall health care plan. The following is an example of a self referral situation within this framework:

A 42-year-old woman has mild intermittent asthma and severe seasonal allergic rhinitis. Her asthma can be controlled by a short-acting bronchodilator. Her rhinoconjunctivitis does not responded to oral antihistamines, nasal steroids, or the eye drops prescribed by her PCP in a PCMH practice. The patient chooses to self-refer to an allergist/immunologist (A/I) who ascribes to the principles of a PCMH-N.

The A/I specialist evaluates the patient by history, physical exam, skin tests, and pulmonary function tests. The specialist finds that the patient also has exercise asthma that might respond to a leukotriene-receptor inhibitor. Evaluation reveals that the patient is severely sensitive to pollen and that environmental control will not be helpful. Immunotherapy with an allergy extract is recommended.

According to prior coordination agreements between the PCMH and the PCMH-N specialist, the specialist sends records (by e-mail, fax, or paper) to the PCMH with the patient's permission. By prior agreement the specialist follows up on the care for the presenting problem, seeing the patient at a visit to evaluate her response to montelukast. By prior agreement immunotherapy is administered in the PCMH or the specialist's office. The specialist continues to follow the patient at 6- to 12-month intervals as long as the patient is receiving immunotherapy. She continues to see the PCMH for all other aspects of medical care. The PCMH sends pertinent records on asthma care to the PCMH-N. The PCMH-N sends records of follow-up visits to the PCMH.

The patient has the option of seeing the specialist or the PCP for asthma flares. Each is obligated to communicate. The patient is encouraged to seek care from her physicians rather than from an urgent care or emergency care facility.

8) The care coordination agreement will clarify in-patient (e.g., acute hospital, rehabilitation facility, nursing home) processes, including notification of admission, secondary referrals, data exchange, and transitions into and out of hospital.

The specific elements of inpatient care that should be addressed include:

- Responsibilities of the PCMH and specialty practice regarding notification of an inpatient admission.
- Processes to facilitate the determination of service assignments for the PCMH and specialty/subspecialty practice in the management of the patient during inpatient care.
- Processes to delineate the responsibilities for the PCMH and specialty/subspecialty practice regarding the transition of the patient from the inpatient setting.
- Processes to delineate the responsibilities for the PCMH and specialty/subspecialty practice regarding postdischarge care.

9) **The care coordination agreement will contain language emphasizing that in the event of emergencies or other circumstances in which contact with the PCMH cannot be practicably performed, the specialty practice may act urgently to secure appropriate medical care for the patient.**

10) **Care coordination agreements will include:**

- A mechanism for regular review of the terms of the care coordination agreement by the PCMH and specialty/subspecialty practice.
- A mechanism for the PCMH and specialty/subspecialty practices to periodically evaluate each other's compliance with the terms of the care coordination agreement, and overall quality of care being provided.

Examples of Various Referral, Consulting, and Care Co-management Arrangements

Preconsultation exchange—intended to expedite/prioritize care. It is envisioned that a preconsultation exchange would either answer a clinical question without the necessity of a formal specialty visit and/or better prepare the patient for specialty assessment. This category includes the establishment of general referral guidelines to help expedite timeliness and appropriateness of referrals and also provides guidance on what defines an "urgent" consult and how these should be specifically addressed. Several national specialty societies have already developed referral guidelines and these should be utilized to inform this process.

1) Inappropriate referral:

- A patient is referred to a PCMH-N endocrinologist for hyperhidrosis. The endocrinologist or point person on staff contacts the PCMH to indicate that dermatology is the correct referral for this disorder, and does not book the patient.
- An asymptomatic 52-year-old patient whose colonoscopy at age 50 revealed 2 small hyperplastic polyps is referred for a surveillance colonoscopy. The gastroenterologist contacts the PCMH to inform them that based on patient's history and pathology findings from the previous procedure, surveillance colonoscopy is not indicated at this time. The gastroenterologist does not schedule the patient for surveillance colonoscopy but recommends an alternative follow-up.

2) Answer a clinical question without necessity of formal specialty visit:
- A PCMH physician has a 26-year-old patient with a single lesion he suspects is a MRSA carbuncle. He contacts his PCMH-N infectious disease consultant who gives him advice regarding how to treat the patient. A formal consultation is neither necessary nor performed.
- A PCMH calls a PCMH-N hematologist/oncologist physician concerning advice on a patient with anemia. After a brief discussion, the hematologist outlines the key clinical features to screen for (e.g., stool guaiacs) and reviews the "first line" of lab/diagnostic inquiry. Included in the discussion is a comment and guidance from the hematologist on when the PCMH may need to send the patient for evaluation to the hematologist.
- A patient is referred to a PCMH-N endocrinologist for thyroid nodules first noted on carotid ultrasonography (US). A subsequent thyroid US shows two 5-mm hypoechoic nodules on the right and a 7-mm similar nodule on the left. Thyroid-stimulating hormone is 1.6. The endocrinologist consults with the PCMH by phone recommending a follow-up thyroid US in 12 months. The PCMH is told that he can refer the patient if nodules have enlarged or if there are additional concerns. (Saving the patient a visit, the system money and both doctors should get some "credit" for this exchange and coordination of patient care.)
- A PCMH contacts gastroenterologist during July regarding a patient who has returned from a trip to New Orleans where the patient ate raw oysters. The patient is now fatigued, jaundiced, and has abnormal LFTs. The PCMH suspects acute viral hepatitis, and requests confirmation from the gastroenterologist about what tests should be ordered.

3) Expedite care:

- A PCMH physician calls a PCMH-N oncologist concerning a patient with a palpable liver and a history of colon cancer surgery 5 years previous. There is clear acknowledgment between both physicians that the patient will need to be seen by an oncologist; however, they are able to prioritize studies prior to the visit. The oncologist advises on getting a CT scan and labs. The oncologist's office is now able to fast-track the patient into the office.
- A PCMH physician calls a PCMH-N endocrinologist regarding a patient with marked hyperthyroid symptoms. TSH is < 0.01. The endocrinologist reviews with the PCMH and recommends the patient get T4 and T3 and I123 scan and uptake ordered in anticipation of the endocrine appointment to expedite the evaluation. They also discuss any contraindications to beta-blockers and if none exist, recommend prescription metoprolol 25 to 50 mg bid to expedite patient care. The endocrinologist utilizes an urgent appointment spot on his schedule for the patient to be seen within 1 week.

Formal Consultation—to deal with a discrete question/procedure. It is envisioned that a formal consultation would be limited to one or a few visits that are focused on answering a discrete question. A detailed report and discussion of management recommendations would be provided to the PCMH. The specialty practice would not manage the problem. It is also envisioned that this may include a particular service request by a PCMH for a patient.

- A PCMH physician requests a formal consultation from the PCMH-N hematologist/oncologist for a bone marrow exam in a patient with a fever without clear origin. The request encompasses the specialist's opinion, which will be delivered along with the results of the procedure. The request for a procedure is associated with a formal consultation by the PCMH-N specialists and agreement that the study requested is appropriate.
- A PCMH physician has a 34-year-old patient with recurrent and persistent MRSA carbuncles, some of which have required surgical drainage. The patient has not responded to the PCMH's attempts to prevent recurrences. The PCMH refers the patient to his PCMH-N infectious disease consultant for recommendations. The consultant evaluates the patient and returns her to the PCMH with recommendations for ongoing management.
- A PCMH physician has a patient without known chronic liver disease or risk factors for chronic liver disease in whom an incidental cystic hepatic mass is identified. The PCMH physician refers the patient to the PCMH-N hepatologist to recommend a diagnostic and surveillance plan that would be executed and followed up by the PCMH.
- A PCMH physician has a patient with a blood calcium level of 10.8 at his annual physical examination with repeat calcium of 10.7 and PTH of 80. The PCMH physician refers this patient to a PCMH-N endocrinologist. The endocrinologist does a consultation and determines no likelihood of a familial syndrome. Further assessment shows reduced BMD with T-score of the mid-radius at -2.6. A 25- hydroxy-vitamin D level is 27, with no other abnormalities. The endocrinologist recommends correction of vitamin D and recommends surgery as the preferred management for this patient. She discusses with the patient and PCMH physician localization procedures and surgical options. The endocrinologist offers to see the patient back to monitor response postoperatively if desired by the patient or the PCMH. The specialists does recommend a follow-up DXA study in 1 year and a postoperative check on calcium and PTH levels.

Co-management Arrangements

Co-management with Shared Management for the disease. The specialty practice will provide guidance and ongoing follow-up of the patient for one specific condition. Both the PCMH and specialty practice are responsible for clear delineation of expectations for the other. Within this model, the specialty practice will typically provide expert advice but will not manage the illness day to day.

- A PCMH physician has a patient with chronic lymphocytic leukemia. The patient has been evaluated by the PCMH-N hematology/oncology physician, is determined to be very stable, and does not require any intervention. The patient will need to be followed with periodic laboratory and physical exams. As the patient has active diabetes and hypertension requiring frequent visits to PCMH, it is determined that the PCMH will provide periodic assessments of the CLL, and the hematology/oncology physician will simply follow up annually.

- A patient with chronic hepatitis C and hepatic steatosis with known early fibrosis in whom prior antiviral therapy had been unsuccessful is seen by the PCMH-N hepatologist for help with management. The patient has concomitant diabetes mellitus and dyslipidemia requiring insulin secretagogue and statin therapy, which is managed by PCMH. Liver enzymes remain abnormal, but no active hepatology interventions are imminent. Annual hepatologist (PCMH-N) follow-up is recommended, and thus responsibility for long-term outcome is shared between PCMH and PCMH-N.
- A patient has had hypothyroidism for 20 years and then began to have trouble with fluctuating thyroid hormone levels with constant change in her thyroid hormone replacement doses. The PCMH refers her to endocrinology PCMH-N for help with management. The endocrinologist works through issues with causing the labile levels and stabilizes the patient. She will follow-up with the endocrinologist in 1 year or as needed. In the meantime, the PCMH will continue to monitor TSH levels every 6 months to be sure they remain stable and will send copies to the endocrinologist. If there is a big change, the endocrinologist neighbor agrees to see the patient at that time or to discuss with the PCMH what changes are needed. The PCMH will continue to refill the LT4 and to order the TSH levels.
- A 54-year-old diabetic patient with osteomyelitis of the foot is evaluated by an infectious disease PCMH-N physician at the hospital. Upon discharge, the patient is receiving IV antibiotics as an outpatient for continued therapy of his infection. The ID physician assumes responsibility for all aspects of treatment for the patient's osteomyelitis, while the PCMH continues to provide care and follow up of the patient's other medical problems.

Co-management with Principal care for the disease. Both the PCMH and specialty practice are concurrently actively involved in the patient's treatment, but the specialty practice's responsibilities are limited to a discrete problem group or set of problems. The PCMH maintains control over all other aspects of patient care, and remains the first contact for the patient.

- A PCMH physician requests a consultation with PCMH-N oncology concerning a woman with ductal carcinoma in situ (noninvasive breast cancer—DCIS). The oncologist ensures that management is complete, provides risk assessment, and gives his opinion about any preventive strategies. The patient may continue to have occasional follow-up with oncology; however, recommendations for mammography and other screening and preventive strategies will be coordinated via the PCMH.
- A PCMH physician refers a patient with chronic hepatitis C to a PCMH-N hepatologist for interferon-alpha-based antiviral therapy. For the 72 weeks of therapy and follow-up, the PCMH-N hepatologist takes primary management role for chronic hepatitis C and adverse events related to antiviral therapy. The PCMH still provides routine care and serves as the communication/care integration hub. If the patient is cured and there is no need for surveillance, he could return to PCMH for sole management. If therapy is unsuccessful, the patient would return to PCMH primary management with shared management by PCMH-N.

- A PCMH physician refers a patient with type 1 diabetes with frequent hypoglycemia to a PCMH-N endocrinologist for help with managing the diabetes. The endocrinologist and the patient decide that insulin pump therapy would help reduce the hypoglycemic episodes. The endocrinologist arranges for the patient to have further training in carbohydrate counting and pre- and postpump education and follows the patient closely during the beginning use of the pump to adjust the settings. He then sees the patient back on a scheduled basis and with any urgent issues with regard to the diabetes. He orders the insulin and refills as well as the test strips, pump supplies, Ketostix, and glucagon kit. The PCMH obtains an annual lipid panel, urine microalbumin, TSH, and CMP on the patient, sends a copy to the endocrinologist, and reminds the patient of his eye appointments. The endocrinologist orders A1c at the time of the patient's scheduled follow-up appointments. When the patient has a problem with high or low glucose levels or with the pump, he calls the endocrinologist. If he has a sore throat, etc., he calls his PCMH. The PCMH also agrees to include the endocrinologist in communications regarding any new situations that arise in the care of the patient, especially use of glucocorticoids, and to forward notice to the endocrinologist if new medications are prescribed. If the patient has an infection he will call his PCMH for evaluation and treatment but if that infection disrupts glucose control he will call/see the endocrinologist for help with insulin adjustments to cover this (much of this agreement will just be part of the "compact" and not have to be made with each individual patient, though it should be clarified with the patient and in the note back to the PCMH).
- A PCMH has a patient with papillary thyroid cancer with nodal metastasis at the time of presentation. His postoperative management was arranged by the PCMH-N endocrinologist who is now following his thyroid hormone–suppressive therapy and monitoring disease status. The endocrinologist orders the tests for neck US and TG panel and TSH. He orders, refills, and adjusts the LT4 doses. The patient sees his PCMH for all other issues. If the patient gets a TSH per some other physician or as part of a health fair, the patient knows that only the endocrinologist should adjust the LT4 dose.
- A PCMH physician has a patient who was referred to PCMH-N endocrinology for diabetes but was found to have mild type 2 diabetes with coexisting DI. The patient has a longstanding history of amenorrhea determined to be central hypogonadism. An MRI shows a hypothalamic mass suggestive of neurosarcoid but the location precludes Bx. The neurosurgeon recommends a trial of high-dose glucocorticoids. A DXA BMD shows severe low bone density. The endocrinologist does an assessment and finds very low vitamin D in addition to the effects of prolonged premature estrogen and GH deficiency. He starts therapy for the vitamin D deficiency, the DI, low-dose HRT, and the diabetes mellitus and arranges classes on diabetes education. The endocrinologist does the precertification with the patient's insurance to start therapy with teriparatide and arranges for the patient to learn how to make the injections. The neurosurgeon coordinates the glucocorticoid therapy with the endocrinologist by notifying her of any dose changes and updates her on MRI changes in response to the meds. The endocrinologist manages all of the endocrine disorders above and orders the appropriate testing and medications. The PCMH

follows the patient for other medical conditions and other preventive health care issues and forwards copies of labs such as CMP to the endocrinologist. The endocrinologist sends notes on her visits with the patient to both the PCMH and neurosurgeon. The patient and the PCMH let the endocrinologist know if there are superimposed illnesses or medications prescribed due the complex nature of her endocrine disorders.

Co-management with Principal care of the patient for a consuming illness for a limited period: Because of the significant nature and impact of the disorder, the specialty practice needs to temporarily become the first contact for care for the patient. However, the PCMH still receives ongoing treatment information, retains input on secondary referrals, and may provide certain, well-defined areas of care.

- A 70-year-old S/P stroke with gastritis and gastrointestinal bleed is referred to the gastroenterologist for assessment and treatment of GI bleeding. Once the underlying course is identified and the bleeding is treated, the gastroenterologist will recommend maintenance treatment and any follow-up procedures to the PCMH.
- A patient with adjuvant colon cancer is seen by a PCMH-N medical oncologist in the hospital postoperatively. Information is gathered, from which it is determined that he will need 6 months of adjuvant chemotherapy. The oncologist will provide the adjuvant chemotherapy and all care related to delivery of chemotherapy drugs/monitoring toxicities, and prioritizing importance of care for other health issues. The oncologist will guide the patient to PCMH for other issues—his ongoing hypertension or hyperlipidemia management. However, over the 6 months of active therapy the oncologists will probably be the first contact for all issues. After completing the active adjuvant care the patient will continue to follow up with oncology, though after a time (such as the first 6 months), any needed study will be coordinated with PCMH.
- A PCMH-N transplant hepatologist would primarily manage the multisystemic complications of a post-liver transplant patient in the first post-transplant year. The transplant hepatologist would also take care of secondary referrals (renal, infectious disease, cardiology) if necessary. Gradual transition back to primary management by the PCMH would be initiated after stabilization of acute issues by the PCMH-N.
- A patient with decompensated cirrhosis in whom major medical issues are complications of liver disease (e.g., ascites), encephalopathy, cholestatic pruritus, hepatorenal syndrome, portopulmonary syndromes, hepatocellular malignancy, and transplant evaluation/wait-list maintenance may be under the care of a PCMH-N. A PCMH-N may be assigned the principal care role for multisystemic complications of end-stage liver disease until transplantation or death.

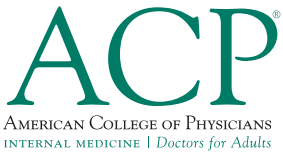
Transfer of patient to specialty PCMH for the entirety of care. This refers to situations in which the specialty practice assumes the role of the PCMH. Thus, the specialty practice would be expected to meet the requirements of an approved third-party PCMH recognition process (e.g., the NCQA PPC-PCMH recognition), and affirm the willingness to provide care consistent with the "Joint Principles," including the delivery of first-contact, whole-per-

son, comprehensive care. This situation is best represented by a specialty practice that is seeing a patient frequently over a relatively long period for the treatment of a complex condition that affects multiple aspects of their physical and general functioning.

- A 25-year-old patient with no other medical issues is diagnosed with acute lymphoblastic leukemia. This patient's care will be completely coordinated by the PCMH-N hematology/oncology specialty practice who sees the patient weekly for 2 years of active therapy. The hematology/oncology practice assumes all responsibilities for care and is first call/first responder to any health issue.
- A 30-year-old patient with Crohn's disease is on a complex medication regimen, including steroids and immunosuppressants, and is being started on anti-TNF agents. The patient suffers from malnutrition, spondylitis, fistulas, and major depression. The patient requires surveillance for potential adverse effects of steroids, including osteoporosis and opportunistic infections. Due to complexity of medications, malnutrition, and need for periodic endoscopic procedures, GI PCMH-N manages this patient as his primary care provider.
- A 46-year-old patient with a long history of HIV/AIDS, with multidrug resistant HIV on a 5-drug third-line regimen is having progressive AIDS-related complications. The patient has had a number of opportunistic infections, including *Pneumocystis*, disseminated *Mycobacterium* avium complex, and CNS toxoplasmosis. He also had hyperlipidemia and hypertension and receives a number of medications that have known interactions with his ART regimen. After discussion, the PCP transfers the patient's primary care to the infectious disease PCMH-N.

References

1. **Future of Family Medicine Project Leadership Committee.** The future of family medicine: A collaborative project of the family medicine community. Ann Fam Med. 2004; 2 Suppl 1:S3-32. Accessed at www.annfammed.org/cgi/content/full/2/suppl_1/s3 on 18 Dec 2008.
2. **American College of Physicians.** The Advanced Medical Home: A Patient-Centered, Physician-Guided Model of Health Care. 2006. Accessed at www.acponline.org/hpp/adv_med.pdf on 12 July 2006.
3. **Institute of Medicine.** Envisioning the National Health care Quality Report. 2001. National Academy Press. Accessed at: http://books.nap.edu/openbook.php?record_id=10073&page=41.
4. **Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Boroni A.** Improving chronic illness care: Translating evidence to action. Health Affairs. 2001;20;64-78.
5. **American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, and the American Osteopathic Association.** Joint Principles of the Patient-Centered Medical Home. March 2007. Accessed at www.acponline.org/advocacy/where_we_stand/medical_home/approve_jp.pdf on 18 December 2008.
6. **NCQA.** NCQA Program to Evaluate Patient-centered Medical Homes. Press Release. Jan 8, 2008. Accessed at www.ncqa.org/tabid/641/Default.aspx on 18 Dec 2008.
7. Societies that have formally endorsed the "Joint Principles" are the: American Academy of Family Physicians, American Academy of Hospice and Palliative Medicine, American Academy of Neurology, American Academy of Pediatrics, American College of Cardiology, American College of Chest Physicians, American College of Osteopathic Family Physicians, American College of Osteopathic Internists, American College of Physicians, American Geriatrics Society, American Medical Association, American Medical Directors Association, American Osteopathic Association, American Society of Addiction Medicine, American Society of Clinical Oncology, Association of Professors of Medicine, Association of Program Directors in Internal Medicine, Clerkship Directors in Internal Medicine, Endocrine Society, Infectious Disease Society of America, Society of Adolescent Medicine, Society of Critical Care Medicine, and the Society of General Internal Medicine.
8. **National Academy of State Health Policy (NASHP).** Results of State Medical Home Scan. Nov. 2008. Accessed at www.nashp.org/_docdisp_page.cfm?LID=980882B8-1085-4B10-B72C136F53C90DFB on 22 Dec 2008.
9. **Greiner A.** White space or black hole: What can we do to improve care transitions. American Board of Internal Medicine Issue Brief #6. 2007. Accessed at www.abimfoundation.org/~/media/Files/Publications/F06-05-2007_6.ashx on 4 January 2010.
10. **Snow V, Beck D, Budnitz T, et al.** Transitions of care consensus policy statement American College of Physicians-Society of General Internal Medicine-Society of Hospital Medicine-American Geriatrics Society-American College of Emergency Physicians-Society of Academic Emergency Medicine. J Gen Intern Med. April 2009.DOI: 10.1007/s11606-009-0969-x.
11. **Greiner A.** White space or black hole: What can we do to improve care transitions? American Board of Internal Medicine Issue Brief #6. 2007. Accessed at www.abimfoundation.org/~/media/Files/Publications/F06-05-2007_6.ashx on 4 January 2010.
12. **Snow V, Beck D, Budnitz T, et al.** Transitions of care consensus policy statement American College of Physicians-Society of General Internal Medicine-Society of Hospital Medicine-American Geriatrics Society-American College of Emergency Physicians-Society of Academic Emergency Medicine. J Gen Intern Med. April 2009.DOI: 10.1007/s11606-009-0969-x.
13. **Health Information Technology Standards Panel (HITSP).** HITSP Summary Documents Using HL7 Continuity of Care Document (CCD) Component. July 8, 2009. Accessed at www.hitsp.org/about_hitsp.aspx on 23 March 2010.



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