

**American College of Physicians  
Council of Subspecialty Societies (CSS) Patient-Centered Medical Home (PCMH)  
Workgroup**

**Examples of Various Referral, Consulting and Care Co-Management Arrangements**

**Pre-consultation exchange – intended to expedite/prioritize care.** It is envisioned that a pre-consultation 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 when appropriate.

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.

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 (eg stool guaiacs) and reviews the ‘first line’ of lab/diagnostic inquiry. Included in the discussion is a comment and guidance from the hematologist as to 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 a carotid US. A subsequent thyroid US shows two 5 mm hypoechoic nodules on the right and a 7 mm similar nodule on the left. TSH 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 they 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 acknowledgement 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 in order to expedite the evaluation. They also discuss any contraindications to BBlockers and if none exist, recommend Rx 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 one 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 the performance of 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 at preventing recurrences. The PCMH refers the patient to his PCMH-N Infectious Disease consultant for recommendations. The ID consultant evaluates the patient and returns him/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 liver specialist to recommend a diagnostic and surveillance plan that would be executed and followed up by PCMH.

- A PCMH physician has a patient with a blood calcium level of 10.8 at annual PE 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-hydroxyvitamin D level is 27, with no other abnormalities. The endocrinologist recommends correction of vitamin D and recommends surgery as preferred management in this patient. She discusses with the patient and PCMH physician localization procedures and surgical options as regards those experienced in this procedure. The endocrinologist offers to see patient back to monitor response postoperatively if desired by patient or PCMH. She does recommend follow up DXA study in one 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 associated 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 PCMH physician refers a patient to a PCMH-N endocrinology for help with management of glycemic control. The patient has an HgbA1c of 6.8% and FBS of 120 and has been reluctant to take medications. PCMH asks the PCMH-N endocrinologist for help in her management. The endocrinologist meets with the patient for assessment and discussion of management options. The endocrinologist explains the diabetes prevention data and progression risk in a detailed session with the patient on lifestyle modifications vs. “natural remedies”

and evidence for these options vs. pharmacologic options in addition to lifestyle. The patient opts to work on lifestyle. The PCMH is treating her high cholesterol and mild HTN and will continue to monitor the patient with intermittent A1c assessments. The patient will return to see the endocrinologist in one year or sooner if blood glucose levels escalate.

- 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 gets the patient stabilized. She will follow up with the endocrinologist in one 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 diseases 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 (non-invasive 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 provide routine care and serve as the communication/care integration hub. If the patient is cured and there is no need for surveillance, the patient 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, pre- and post-pump 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 to do with the diabetes. He orders the insulin and refills as well as the test strips, pump supplies, ketostix and glucagon kit. The PCMH gets annual lipid panel, Umicroalbumin, TSH and CMP on patient and sends a copy to the endocrinologist and also reminds the patient of his eye appts. The endocrinologist orders A1c at the time of his scheduled follow up appointments. When the patient has a problem with high or low glucoses 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 (a lot 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 mets at the time of presentation. His post operative 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 provider or as part of a health fair, the patient knows that only the endocrinologist is to make adjustments in 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 co-existing DI. The patient has a longstanding Hx 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 and 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 teraperatide and arranges for the patient to learn how to do those injections. The neurosurgeon coordinates the glucocorticoid therapy with the endocrinologist by notifying her of any dose changes and also 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 lets 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 of time:** 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 on-going 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 post operatively. 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 the 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 hyper-lipidemia management. However, over the 6 months of active therapy the oncologists will likely 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 1<sup>st</sup> 6 months), any needed study will be coordinated with PCMH.
- A PCMH-N transplant hepatologist would primarily manage the multisystem 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 pruritis, 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 multisystem complications of end-stage liver disease until transplantation or death.

**Transfer of patient to specialty PCMH for 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 person, comprehensive care. This situation is best represented by a specialty practice that is seeing a patient frequently over a relatively long period of time 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, on complex medication regimen including steroids and immunosuppressants who 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 primary care provider.
- A 46-year-old patient with a long history of HIV/AIDS, with multi-drug resistant HIV on a 5 drug third line regimen is having progressive complications related to his AIDS. The patient has had a number of opportunistic infections, including Pneumocystis, disseminated Mycobacterium avium complex and CNS toxoplasmosis. In addition, he suffers from hyperlipidemia, hypertension, and receives a number of medications which have known interactions with his ART regimen. After discussion, the PCP transfers the patient's primary care to the Infectious Disease PCMH-N.