ANNALS OF FAMILY MEDICINE

## Online Supplementary Material

Alexander JA, Paustian M, Wise CG, et al. Assessment and measurement of patient-centered medical home implementation: the BCBSM experience. *Ann Fam Med*. 2013;11(Suppl 1):S74-S81.

http://www.annfammed.org/content/11/Suppl_1/S74

### Supplemental Appendix 1. PCMH Domains and Capabilities

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| **1. Patient-Provider Partnership** | Degree to which the PCMH domain has been implemented |
| Capability 1.1 | Practice unit has developed PCMH-related patient communication tools, has trained staff, and is prepared to implement patient-provider partnership with each established patient, which may consist of a signed agreement or other documented patient communication process to establish patient-provider partnership |
| Capability 1.2 | Process of reaching out to established patients is under way, and practice unit is using a systematic approach to inform patients about PCMH, including patients who do not visit the practice regularly |
| Capabilities 1.3-1.8 | Patient-provider agreement or other documented patient communication process is implemented and documented for at least 10% to 90% of current patients |
| **2. Patient Registry** | Degree to which the PCMH domain has been implemented |
| Capability 2.1 | A paper or electronic all-payer registry is being used to manage all established patients in the practice unit with diabetes |
| Capability 2.2 | Registry incorporates patient clinical information, for all established patients in the registry, for a substantial majority of health care services received at other sites that are necessary to manage chronic care and preventive services for the population |
| Capability 2.3 | Registry incorporates evidence-based care guidelines |
| Capability 2.4 | Registry information is available and in use by the practice unit team at the point of care |

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| Capability 2.5 | Registry contains information on the individual attributed practitioner for every patient currently in the registry who has a medical home in the practice unit |
| Capability 2.6 | Registry is being used to generate routine, systematic communication to patients regarding gaps in care |
| Capability 2.7 | Registry is being used to flag gaps in care for every patient currently in the registry |
| Capability 2.8 | Registry incorporates information on patient demographics and key clinical parameters for all patients currently in the registry |
| Capability 2.9 | Registry is fully electronic, comprehensive, and integrated, with analytic capabilities |
| Capability 2.10 | Registry is being used to manage all patients with asthma |
| Capability 2.11 | Registry is being used to manage all patients with CAD |
| Capability 2.12 | Registry is being used to manage all patients with CHF |
| Capability 2.13 | Registry is being used to manage patients with at least 2 other chronic conditions for which there are evidence-based guidelines and the need for ongoing population and patient management, and which are sufficiently prevalent in the practice to warrant inclusion in the registry based on the judgment of the practice leaders |
| Capability 2.14 | Registry incorporates preventive services guidelines and is being used to generate routine, systematic communication to all patients in the practice regarding needed preventive services |
| Capability 2.15 | Registry incorporates patients who are assigned by managed care plans and are not established patients in the practice |
| Capability 2.16 | Registry is being used to manage all patients with CKD |
| Capability 2.17 | Registry is being used to manage all patients with pediatric obesity |
| Capability 2.18 | Registry is being used to manage all patients with pediatric ADHD |
| **3. Performance Reporting** | Degree to which the PCMH domain has been implemented |
| Capability 3.1 | Performance reports that allow tracking and comparison of results at a specific point in time across the population of patients are generated for diabetes |
| Capability 3.2 | Performance reports are generated at the PO/sub-PO, practice unit, and individual provider level |

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| Capability 3.3 | Performance reports include patients with at least 2 other chronic conditions for which there are evidence-based guidelines and the need for ongoing population and patient management, and which are sufficiently prevalent in the practice to warrant inclusion in the registry based on the judgment of the practice leaders |
| Capability 3.4 | Data contained in the performance reports have been fully validated and reconciled to ensure accuracy |
| Capability 3.5 | Trend reports are generated, enabling physicians and their POs/sub-POs to track, compare, and manage performance results for their population of patients over time |
| Capability 3.6 | Performance reports are generated for the population of patients with pediatric obesity |
| Capability 3.7 | Performance reports include all current patients in the practice, including well patients, and include data on preventive services |
| Capability 3.8 | Performance reports include patient clinical information for a substantial majority of health care services received at other sites that are necessary to manage chronic care and preventive services for the population |
| Capability 3.9 | Performance reports include information on services provided by specialists |
| Capability 3.10 | Performance reports are generated for the population of patients with asthma |
| Capability 3.11 | Performance reports are generated for the population of patients with CAD |
| Capability 3.12 | Performance reports are generated for the population of patients with CHF |
| Capability 3.13 | Performance reports are generated for the population of patients with pediatric ADHD |
| **4. Individual Care Management** | Degree to which the PCMH domain has been implemented |
| Capability 4.1 | Practice unit leaders and staff have been trained/educated and have comprehensive knowledge of the PCMH model, the chronic care model, and practice transformation concepts |
| Capability 4.2 | Practice unit has ability to deliver coordinated care management services with an integrated team of multidisciplinary clinicians, and a systematic approach is in place to deliver comprehensive care that addresses patients' full range of health care needs |
| Capability 4.3 | Systematic approach is in place to ensure that evidence-based care guidelines are established and in use at the point of care by all team members of the practice unit |

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| Capability 4.4 | At least 1 chronic condition has been identified for initial focus, and practice has assembled and is monitoring all key clinical data, clinical outcomes measures, process measures, and patient satisfaction/office efficiency measures |
| Capability 4.5 | Development of a written action plan and self-management goal setting is systematically offered to all patients with the chronic condition selected for initial focus, with patient-friendly documentation provided to the patient |
| Capability 4.6 | A systematic approach is in place for appointment tracking and generation of reminders for all patients with the chronic condition selected for initial focus |
| Capability 4.7 | A systematic approach is in place to ensure that follow-up for needed services is provided for all patients with the chronic condition selected for initial focus |
| Capability 4.8 | Planned visits are offered to all patients with the chronic condition selected for initial focus |
| Capability 4.9 | Group visit option is available for all patients in the practice unit with the chronic condition selected for initial focus |
| Capability 4.10 | Medication review and management is provided at every visit for all patients with chronic conditions |
| Capability 4.11 | Action plan development and self-management goal setting is systematically offered to all patients with chronic conditions or other complex health care needs prevalent in practice's patient population |
| Capability 4.12 | A systematic approach is in place for appointment tracking and generation of reminders for all patients |
| Capability 4.13 | A systematic approach is in place to ensure follow-up for needed services for all patients |
| Capability 4.14 | Planned visits are offered to all patients with chronic conditions prevalent in practice population |
| Capability 4.15 | Group visit option is available to all patients with chronic conditions prevalent in practice population |
| **5. Extended Access** | Degree to which the PCMH domain has been implemented |
| Capability 5.1 | Patients have 24-hour access to a clinical decision maker by telephone, and clinical decision maker has a feedback loop within 24 hours or next business day to the patient's PCMH |
| Capability 5.2 | 24-Hour patient access to clinical decision maker is enhanced by enabling clinical decision maker to access and update patient's EHR or registry information during the telephone call |

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| Capability 5.3 & 5.5 | Clinician has made arrangements for patients to have access to non-ED after-hours clinician for urgent care needs during at least 8 to 12 after hours per week and, if different from the primary care physician office, after-hours clinician has a feedback loop within 24 hours or next business day to the patient's PCMH |
| Capability 5.4 | A systematic approach is in place to ensure that all patients are fully informed about after-hours care availability and location, at the PCMH site as well as other after-hours care sites, including urgent care facilities, if applicable |
| Capability 5.6 | After-hours care clinician is enhanced by enabling non-ED after-hours clinician for urgent care needs to access and update the patient's EHR or patient's registry record during the visit |
| Capability 5.7 & 5.8 | Advanced access scheduling is in place, reserving at least 30% to 50% or appointments for same-day appointments for acute and routine care |
| Capability 5.9 | Practice unit has telephonic or other access to interpreters for all languages common to practice's established patients |
| **6. Test Results Tracking & Follow-up** | Degree to which the PCMH domain has been implemented |
| Capability 6.1 | Practice has test tracking process/procedure documented, which requires tracking and follow-up for all tests and test results, with identified time frames for notifying patients of results |
| Capability 6.2 | Systematic approach and identified time frames are in place for ensuring patients receive needed tests and practices obtains results |
| Capability 6.3 | Process is in place for ensuring patient contact details are kept up to date |
| Capability 6.4 | Mechanism is in place for patients to obtain information about normal test results |
| Capability 6.5 | Systematic approach is used to inform patients about abnormal test results |
| Capability 6.6 | Systematic approach is used to ensure that patients with abnormal results receive the recommended follow-up care within defined time frames |
| Capability 6.7 | Systematic approach is used to document all test-tracking steps in the patient's medical record |

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| Capability 6.8 | All clinicians and appropriate office staff are trained to ensure adherence to the test-tracking procedure; all training is documented either in personnel file or in training logs or records |
| Capability 6.9 | Practice unit has computerized order entry integrated with automated test-tracking system |
| **7. E-Prescribing** | Degree to which the PCMH domain has been implemented |
| Capability 7.1 | Full e-prescribing system in place and used by physician champions |
| Capability 7.2 | Full e-prescribing system in place and used by all physicians |
| **8. Preventive Services** | Degree to which the PCMH domain has been implemented |
| Capability 8.1 | Primary prevention program is in place that focuses on identifying and educating patients about personal health behaviors to reduce their risk of disease and injury |
| Capability 8.2 | A systematic approach is in place to providing preventive services |
| Capability 8.3 | Strategies are in place to promote and conduct outreach regarding ongoing well-care visits and screenings for all populations, consistent with guidelines for such age- and sex-appropriate services promulgated by credible national organizations |
| Capability 8.4 | Practice has process in place to inquire about a patient's outside health encounters and has capability to incorporate information in patient-tracking system or medical record |
| Capability 8.5 | Practice has a systematic approach in place to ensure the provision/documentation of tobacco use assessment tools and advice regarding smoking cessation |
| Capability 8.6 | Written standing order protocols are in place allowing practice unit care team members to authorize and deliver preventive services according to physician-approved protocol without examination by a clinician |
| Capability 8.7 | Secondary prevention program is in place to identify and treat asymptomatic persons who have already developed risk factors or preclinical disease, but in whom the disease itself has not become clinically apparent |
| Capability 8.8 | Staff receives regular training and/or communications in health promotion and disease prevention and incorporates preventive-focused practices into ongoing administrative operations |
| **9. Linkage to Community Services** | Degree to which the PCMH domain has been implemented |

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| Capability 9.1 | PO has conducted a comprehensive review of community resources for the geographic population that they serve, in conjunction with practice units |
| Capability 9.2 | PO maintains a community resource database based on input from practice units that serves as a central repository of information for all practice units |
| Capability 9.3 | PO in conjunction with practice units has established collaborative relationships with appropriate community-based agencies and organizations |
| Capability 9.4 | All members of a practice unit care team involved in establishing care treatment plans have received training on community resources so that they can identify and refer patients appropriately |
| Capability 9.5 | Systematic approach is in place for educating all patients about community resources and assessing/discussing need for referral |
| Capability 9.6 | Systematic approach is in place for referring patients to community resources |
| Capability 9.7 | Systematic approach is in place for tracking referrals of high-risk patients to community resources made by the care team, and making every effort to ensure that patients complete the referral activity |
| Capability 9.8 | Systematic approach is in place for conducting follow-up with high-risk patients regarding any indicated next steps as an outcome of their referral to a community-based program or agency |
| **10. Self-Management Support** | Degree to which the PCMH domain has been implemented |
| Capability 10.1 | Member of clinical care team or PO is educated about and familiar with self-management support concepts and techniques and regularly works with appropriate staff members at the practice unit to ensure they are educated in and able to actively use self-management support concepts and techniques |
| Capability 10.2 | Self-management support is offered to all patients with the chronic condition selected for initial focus |
| Capability 10.3 | Systematic follow-up occurs for all patients with the chronic condition selected for initial focus who are engaged in self-management support to discuss action plans and goals, and provide supportive reminders |

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| Capability 10.4 | Regular patient experience/satisfaction surveys are conducted for patients engaged in self-management support, to identify areas for improvement in the self-management support efforts |
| Capability 10.5 | Self-management support is offered to patients with all chronic conditions prevalent in the practice's patient population |
| Capability 10.6 | Systematic follow-up occurs for patients with all chronic conditions prevalent in the practice's patient population who are engaged in self-management support to discuss action plans and goals, and provide supportive reminders |
| Capability 10.7 | Support and guidance in establishing and working toward a self-management goal is offered to every patient, including well patients |
| Capability 10.8 | At least 1 member of PO or practice unit is formally trained through completion of a nationally or internationally accredited program in self-management support concepts and techniques, and regularly works with appropriate staff members at the practice unit to educate them so they are able to actively use self-management support concepts and techniques |
| **11. Patient Web Portal** | Degree to which the PCMH domain has been implemented |
| Capability 11.1 | Available vendor options for purchasing and implementing a patient Web portal system have been evaluated |
| Capability 11.2 | PO or practice unit has assessed liability and safety issues involved in maintaining a patient Web portal at any level and developed policies that allow for a safe and efficient exchange of information |
| Capability 11.3 | Ability for patients to request and schedule appointments electronically is activated and available to all patients |
| Capability 11.4 | Ability for patients to log and/or graph results of self-administered tests |
| Capability 11.5 | Clinicians are automatically alerted by system regarding self-reported patient data that indicate a potential health issue |
| Capability 11.6 | Ability for patients to participate in e-visits is activated and available to all patients |
| Capability 11.7 | Clinicians are using patient portal to send automated care reminders, health education materials, links to community resources, educational Web sites, and self-management materials to patients electronically |
| Capability 11.8 | Patient portal system includes capability for patient to create personal health record, and is activated and available to all patients |

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| Capability 11.9 | Ability for patients to review test results electronically is activated and available to all patients |
| Capability 11.10 | Ability for patients to request prescription renewals electronically is activated and available to all patients |
| Capability 11.11 | Ability for patients to graph and analyze results of self-administered tests for self-management support purposes is activated and available to all patients |
| Capability 11.12 | Ability for patients to have access to view registries and/or electronic medical records online that contain patient personal health information that has been reviewed and released by the clinician and/or practice is activated and available to all patients |
| **12. Coordination of Care** | Degree to which the PCMH domain has been implemented |
| Capability 12.1 | For every patient with chronic condition selected for initial focus, mechanism is established for being notified of each patient admission and discharge or other type of encounter, at facilities with which the PCMH physician has admitting privileges or other ongoing relationships—initial focus, all chronic, all patients |
| Capability 12.2 | Process is in place for exchanging necessary medical records and discussing continued care arrangements with other providers, including facilities, for all patients with chronic condition selected for initial focus—initial focus, all chronic, all patients |
| Capability 12.3 | Approach is in place to systematically track care coordination activities for each patient with chronic condition selected for initial focus—initial focus, all chronic, all patients |
| Capability 12.4 | Process is in place to systematically flag for immediate attention any patient issue that indicates a potentially time-sensitive health issue for all patients with chronic condition selected for initial focus—initial focus, all chronic, all patients |
| Capability 12.5 | Process is in place to ensure that written transition plans are developed, in collaboration with patient and caregivers, where appropriate, for patients with chronic condition selected for initial focus who are leaving the practice—initial focus, all chronic, all patients |
| Capability 12.6 | Process is in place to coordinate care with payer case manager for patients with complex or catastrophic conditions—initial focus, all chronic, all patients |
| Capability 12.7 | Practice has written procedures and/or guidelines on care coordination processes, and appropriate members of care team are trained on care coordination processes and have clearly defined roles within that process—initial focus, all chronic, all patients |

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| Capability 12.8 | Care coordination capabilities as defined in 13.1-13.7 are extended to all patients with chronic conditions who need care coordination assistance |
| Capability 12.9 | Coordination capabilities as defined in 13.1-13.7 are extended to all patients who need care coordination assistance |
| **13. Specialist Referral Process** | Degree to which the PCMH domain has been implemented |
| Capability 13.1 | Documented procedures are in place to guide each phase of the specialist referral process—including desired time frames for appointment and information exchange—for preferred or high-volume clinicians |
| Capability 13.2 | Documented procedures are in place to guide each phase of the specialist referral process—including desired time frames for appointment and information exchange—for other key clinicians |
| Capability 13.3 | Directory is maintained listing specialists to whom patients are routinely referred |
| Capability 13.4 | PO or practice unit has developed specialist referral materials supportive of process and individual patient needs |
| Capability 13.5 | Practice unit or designee routinely makes specialist appointments on behalf of patients |
| Capability 13.6 | Each facet of the interaction between preferred/high-volume specialists and the primary care physicians at the practice unit level is automated by using electronically based tools and processes to avoid duplication of testing and prescribing across multiple care settings |
| Capability 13.7 | For all specialist and subspecialist visits deemed important to the patient's well-being, process is in place to determine whether or not patients completed the specialist referral in a timely manner, reasons they did not seek care if applicable, additional subspecialist visits that occurred, specialist recommendations, and whether patients received recommended services |
| Capability 13.8 | Appropriate practice unit staff is trained on all aspects of the specialist referral process |
| Capability 13.9 | Practice unit regularly evaluates patient satisfaction with most commonly used specialists, to ensure physicians are referring patients to specialists that meet their standards for patient-centered care |

PCMH = patient-centered medical home; PO = physician organization; CHF = congestive heart failure; CAD = coronary artery disease; CKD = chronic kidney disease; ADHD = attention deficit hyperactivity disorder; EHR = electronic health record; ED = emergency department.