

Integration of Pharmacists' Clinical Services in the Patient-Centered Primary Care Medical Home

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Introduction:

The potential promise and value of the “patient-centered primary care medical home” has been increasingly promoted both by medical organizations and some patient and consumer groups as an appropriate platform upon which to build a reformed health services delivery system in the United States¹. Advocacy for such an approach pre-dates the current health care reform debate, but has become more visible over the past two years. This has occurred because of a changed political environment for health reform, the unrelenting escalation in health care costs, and the underperformance of the existing, highly fragmented system in delivering care that is effectively coordinated, higher in quality, safer, more cost-effective, and more efficient in achieving desired health care outcomes.

While evidence for the clinical efficacy, quality improvement, and cost-effectiveness of this practice structure remains to be fully demonstrated, the intuitive logic of such an approach has attracted the support of a wide range of policymakers and other interested stakeholders. One of the most attractive features to many policymakers and analysts is its emphasis on the use of a physician-led team of patient care providers that works in an integrated and collaborative system of care that promotes evidenced-based practices, enhanced coordination of care, greater safety, and more complete and effective use of the specialized knowledge and skills of those professionals working as part of the medical home patient care team.

The composition of the medical home provider team is likely to vary based on a range of factors, including the specific needs of patients and the scope of services to be offered and/or coordinated by the medical home. In addition to physicians, providers in such models may include physician assistants, nurse practitioners, clinical social workers, patient educators, and pharmacists, among others.

¹See Patient-Centered Primary Care Collaborative (www.PCPCC.net)

However, despite the nearly universal role of medications in the care of patients with both chronic and acute disease, the incorporation of pharmacists' clinical services within the medical home is rarely mentioned explicitly in current policy discussions. Given the experience of many long-standing integrated delivery systems that have demonstrated the success of pharmacists' clinical services in enhancing the safety and effectiveness of medication use in both the private sector (Kaiser Permanente) and public sector (Veterans Administration, Indian Health Services, HRSA Patient Safety/Clinical Pharmacy Services Collaborative), their absence from the national medical home "conversation" represents a significant omission. The patient-centered primary care medical home offers a logical framework to incorporate these services for the benefit of all patients who are to be cared for within the medical home.

This document presents seven principles for the incorporation of pharmacists' clinical services within the framework of a patient-centered primary care medical home. These principles should be seriously considered by policymakers and those who will be engaged in the design, operation, and evaluation of medical homes to enhance their capability to further improve patient care quality, safety, and outcomes related to the use of medications.

The Imperative for Optimal Medication Use Outcomes, Quality, and Safety

Over the last decade, the clinical consequences and economic costs of medication misuse, and medication-related problems, including patient non-adherence and suboptimal therapeutic outcomes, have become more fully recognized by clinicians, policymakers, and health care economists.^{2 3} The transformational changes in health care resulting from the dramatic shifts from acute to chronic care and from hospital to ambulatory care services have contributed substantially to this recognition. When combined with the explosive growth in the number and complexity of available prescription medications, this underperformance of the current medication use system should not be particularly surprising.

² Ernst FR, Grizzle AJ. Drug-related morbidity and mortality: updating the cost of illness model. JAPhA 2001;41:192-199.

³ Johnson JA, Bootman JL. Drug-related morbidity and mortality and the economic impact of pharmaceutical care. Am.J.Health Syst.Pharm. 1997;54:554-558.

At the same time, the beneficial impact of pharmacists' clinical services in addressing these problems and achieving improved medication use quality, safety, and outcomes has also become more fully appreciated.^{4 5} Pharmacists possess substantial education, knowledge, and skills in the clinical application of medications in the care of patients, and are among the most readily accessible of all health care professionals. This positions them to serve patients and their other health care providers in optimizing medication use, reducing/preventing medication-related problems, and improving health outcomes by providing medication therapy management and other pharmaceutical care services, as well as certain health promotion, wellness education, and disease prevention services.

Throughout this decade, the Institute of Medicine's "Quality Chasm" report series has consistently articulated the role of pharmacists in promoting and assuring the quality and safety of medication use. In its 2000 report, the IOM states that "...because of the immense variety and complexity of medications now available...the pharmacist has become an essential resource...and thus access to his or her expertise must be possible at all times."

However, the "siloe" nature of health care services delivery, particularly in the ambulatory care environment, serves to isolate the various providers of ambulatory care services and makes such access, and collaboration, a challenge under even the best of circumstances. And while the promise of electronic health records and functional interoperability of health information technology across the health care system offers some hope for the future, the traditional practice structures of both physicians and pharmacists continue to serve as a substantial barrier to effective and efficient clinical collaboration.

This barrier can be effectively addressed by innovative thinking and planning NOW on the part of the national pharmacist organizations and the leaders and advocates of the medical home concept to develop an explicit framework for the integration of pharmacists' clinical services. These services would represent a truly distinguishing feature of the medical home compared to traditional ambulatory care practices. Indeed, the medical home structure could offer an ideal framework within which to achieve the recommendations for access to pharmacists' expertise that are advocated by the IOM.

⁴ Perez A, Doloresco F, et.al. Economic evaluation of clinical pharmacy services: 2001-2005. *Pharmacotherapy* 2008;28(11):285e-323e.

⁵ Altavela JL, Jones MK, Ritter M. A prospective trial of a clinical pharmacy intervention in a primary care practice in a capitated payment system. *J Manag Care Pharm.* 2008;14(9):831-843.

Principles for Inclusion of Pharmacists' Clinical Services in the Patient-Centered Primary Care Medical Home

Consistent with the perspective and recommendations of the IOM, pharmacists' clinical services that enhance the quality, safety, and effectiveness of medications -- the principal treatment modality for the vast majority of chronic diseases -- should be considered an integral component of the patient centered primary care medical home. The effective integration of pharmacists' clinical services within the patient-centered primary care medical home should be based on the following essential principles:

- **Access to pharmacists' clinical services:** provision of pharmacists' clinical services should be a fundamental component of the patient-centered primary care medical home;
- **Patient-focused collaborative care:** development, implementation, and monitoring of medication treatment plans, including an effective system for medication reconciliation that supports patients in their transitions among care settings, should be accomplished through a patient-focused, collaborative process of clinical consultation and decision making that incorporates the synergistic and complementary knowledge and skills of the prescribing professional(s) and pharmacists within the medical home practice;
- **Flexibility in medical home design:** innovative and flexible practice structures that integrate pharmacists' clinical services should be encouraged to meet the needs of individual patients being cared for within the medical home. Incorporation of pharmacists and their services either by their physical presence within the practice or through the design of effective "community linkages" should be considered to meet geographic and practice setting needs and variations;
- **Development of outcome measures:** objective measures for assessing the clinical outcomes, safety, and cost-effectiveness of medication use in the population being served by the patient-centered medical home must be a component of the practice's broader quality performance measurement system;

- **Access to relevant patient information:** all members of the medical home patient care team, including pharmacists, must have access to necessary and appropriate patient health and medical records to support and inform their clinical service and decision-making functions. This access must also include the authority and responsibility to input information into these records to facilitate enhanced team-based knowledge and information support for the respective clinical and decision-making responsibilities of team members;
- **Effective health information technology:** expansion and effective use of health information technology must be promoted to support more complete integration of pharmacists as care providers within the medical home practice structure;
- **Aligned payment policies:** payment policies should be aligned to (1) effectively support the medical home, (2) provide reasonable and adequate payment for pharmacists' clinical services as an element of the scope of services that are eligible for payment to either the providers or the practice, and (3) promote the achievement of higher quality, safer, and more effective therapeutic outcomes from medication use through enhanced provider collaboration.

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