

# The Missing Link: Improving Quality With a Chronic Disease Management Intervention for the Primary Care Office

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## ABSTRACT

Bold steps are necessary to improve quality of care for patients with chronic diseases and increase satisfaction of both primary care physicians and patients. Office-based chronic disease management (CDM) workers can achieve these objectives by offering self-management support, maintaining disease registries, and monitoring compliance from the point of care. CDM workers can provide the missing link by connecting patients, primary care physicians, and CDM services sponsored by health plans or in the community. CDM workers should be supported financially by Medicare, Medicaid, and commercial health plans through reimbursements to physicians for units of service, analogous to California's Comprehensive Perinatal Services Program. Care provided by CDM workers should be standardized, and training requirements should be sufficiently flexible to ensure wide dissemination. CDM workers can potentially improve quality while reducing costs for preventable hospitalizations and emergency department visits, but evaluation at multiple levels is recommended.

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## INTRODUCTION

A crisis in primary care and chronic disease management (CDM) is looming. We need a CDM strategy that improves quality, supports primary care physicians and patients, and is applicable in a diverse range of clinical settings. It is possible to achieve these multiple objectives by allocating dedicated health care assistants to work directly with patients who have chronic diseases at the point of care. Office-based CDM workers can offer self-management and case management services for these patients and be the missing link that connects patients, families, and physicians with CDM services available through health plans or in the community. A practical way to pay for and target CDM activities is to reimburse physicians for units of service delivered by their CDM workers. California's well-established Comprehensive Perinatal Services Program (CPSP) is a good example of a payment mechanism that supports health education and case management services through payments to physician employers.

Office-based CDM workers can potentially improve quality, enhance primary care physician satisfaction and productivity, promote self-management strategies, and reduce or control long-term costs related to poor patient outcomes, but their actual impact should be assessed at multiple levels. Wide dissemination of point-of-care CDM workers is practical and achievable, and it should occur before the primary care infrastructure so vital to our good health crumbles.

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## THE CRISIS IN PRIMARY CARE AND CHRONIC DISEASE MANAGEMENT

Primary care is in a crisis, and that it may not survive<sup>1,2</sup> is particularly troubling, because primary care physicians supply the bulk of care to an increasing number of aging Americans with chronic diseases.<sup>3</sup> Managing the daunting needs of patients with multiple comorbid chronic conditions is perhaps the greatest challenge confronting primary care physicians.<sup>4-8</sup> Meanwhile, physician payments tied to clinical and patient satisfaction metrics in pay-for-performance or value-based purchasing reimbursement formulas are raising the stakes by rewarding high-quality care for these complex patients.<sup>9-15</sup>

Many health plans support CDM programs. The tendency to segregate care into discrete disease entities, such as diabetes, heart failure, or emphysema, however, is not consistent with how patients with multiple overlapping chronic conditions are cared for in primary care practices. Furthermore, CDM evaluations generate additional reports requiring a physician response.<sup>16</sup>

A range of other disease management strategies have been developed to reduce barriers to care.<sup>17</sup> Many strategies incorporate self-management concepts and behavioral interventions; integrate care teams; use nonphysician personnel, such as nurses, community health workers, promotoras, and community health outreach workers; and provide services in homes, the community, or in primary care offices.<sup>18-23</sup> The Chronic Care Model, a CDM strategy incorporated into the American Academy of Family Physicians' new models of care,<sup>24-29</sup> emphasizes office redesign and the use of nonphysician staff to accomplish disease management tasks. The Future of Family Medicine report predicted that implementation of the Chronic Care Model would have a positive impact on office costs after making assumptions regarding time required and reimbursement for providing high-quality care.<sup>30</sup>

## A CHRONIC DISEASE MANAGEMENT MODEL

A CDM strategy is needed that jump starts improvements in quality of care, supports primary care physicians and patients, and is applicable in a diverse range of clinical settings. A model to consider is California's Comprehensive Perinatal Services Program (CPSP).<sup>31-33</sup> The California Medicaid program, MediCal, established CPSP in the 1980s after studies showed cost savings through reductions in newborn complications. CPSP provides reimbursable health education, nutrition, psychosocial, and case management services to prenatal patients. Guidelines for CPSP workers have evolved from requiring highly specialized health educators, social workers, and registered dietitians, to permitting comprehensive perinatal health workers, with a mini-

um of 1 year of perinatal experience and a high school degree, to provide the range of CPSP-authorized services while operating under approved protocols.

Given the complex needs of chronic disease patients, it can be argued that the need for a CPSP-type intervention for chronic disease patients is greater than it is for prenatal patients. Dedicated health care assistants working directly with chronic disease patients through primary care offices could improve quality through a number of mechanisms. By coordinating and facilitating information and communication, an office-based CDM worker could become the missing link connecting patients, families, and physicians, with CDM services available through health plans or in the community. Just as CPSP workers educate prenatal patients, CDM workers could do the counseling that harried primary care physicians are hard pressed to provide for patients with diabetes, hypertension, heart disease, and asthma and emphysema. The CDM worker could be responsible for a broad range of tasks that could include ensuring consultations and services are scheduled; following up on recommended clinical interventions, such as diagnostic studies and prescriptions; and maintaining tracking systems and disease registries. CDM workers can also be expected to ensure that patients receive recommended routine (mammograms, Papanicolaou smears, etc), as well as chronic disease-specific, preventive services.<sup>34</sup>

A key advantage of point-of-care CDM workers is the potential for replication in a range of primary care settings. Solo practitioners, group practices, and rural practitioners could all use point-of-care CDM workers. The decentralized nature of the CDM worker model would also have major implications for cultural and linguistic access. One would expect primary care offices to hire staff who reflect the ethnic diversity of their communities and who speak their patient's language to a greater degree than would be found in centralized CDM programs.

### Structural Issues

Structural issues must be addressed before an office-based CDM network can be established. These issues include eligibility, financing, worker payment, and CDM worker qualifications.

Disease management standards for specific conditions such as diabetes can help define what patients are eligible and what services are covered.<sup>35</sup> A straightforward approach would be to include all patients aged 50 years and older or patients who have any chronic condition or major risk factor. This approach is justified because of the prevalence of chronic diseases and risk factors and the range of preventive services recommended in these populations.

Public programs including Medicaid and Medicare, as well as commercial health plans, are the most appropriate entities to pay for office-based CDM services. If CDM workers improve control of chronic diseases, cost savings would result from reductions in emergency department visits and hospitalizations for such conditions as uncontrolled diabetes, asthma attacks, stroke, and heart failure. Because savings will accrue to these same public programs and health plans, it is reasonable to expect health plans and payers to be the principal funders of an office-based CDM network. Public programs and health plans could defray some costs by diverting a portion of funding allocated to centralized health plan-level CDM programs toward primary care, office-based CDM services.

The CPSP reimbursement system can be adapted to finance office-based CDM workers. Physicians with CPSP workers in their offices are paid on a fee-for-service basis for defined units of service. The CPSP experience with more than 1,500 physicians in California suggests that a fee-for-service reimbursement model based on units of service would be readily accepted by physicians in diverse settings. Reimbursement for physicians who currently receive capitated payments could be handled in several ways. Health plans and payers could mandate use of CDM workers contractually, or they could argue that pay-for-performance programs offer physicians the flexibility to allocate resources to develop quality-improvement strategies best suited for their practices. Public programs and health plans, however, could promote specific CDM services in office-based settings by reimbursing for services most likely to be beneficial. This approach would permit public programs and health plans to target high-priority services, such as the clinical interventions that make up Health Plan and Employer Data Information Set (HEDIS) measures. Billing imperatives would ensure that relevant clinical encounters are properly captured and submitted at the point of care by supervising physicians.

Requirements for CDM workers should be designed to be expansive rather than restrictive to best meet the diverse needs of rural and underserved communities. It is certainly reasonable to insist that health professionals providing CDM services be properly trained and credentialed to provide high-quality care. Careful thought should be given to the content and structure of a training program for CDM workers to ensure key patient care concepts are taught and interpersonal and communication skills are stressed. Well-designed protocols and educational materials are needed to support and guide CDM workers in their office settings. The health care system is more likely to improve access and control cost if a broad range of health care professionals can become CDM workers rather than creating a network

based on individuals with advanced degrees and limited availability. As noted above, CPSP eventually adopted this broad-based approach. We can also expect primary care offices to select their most competent individuals to receive the requisite CDM worker training.

It is possible to estimate the cost of a point-of-service CDM network by making assumptions about what patients and services will be covered. If the target population is anyone aged 50 year or older or who has a chronic condition or major risk factor, 25% to 50% of all patients would be eligible. In a practice with 24 patients per day, a .5 full-time-equivalent CDM worker could spend 30 minutes with 8 patients, or 33% of those visiting a practice. Using CPSP as an example, physicians are reimbursed \$33 per hour for 4, 15-minute units of service provided in their offices in addition to reimbursement for professional fees or other office charges. This level of reimbursement is considerably less than physicians are paid to provide the same services but is adequate to cover the cost of a medical assistant at \$35,000 a year. With these assumptions, the cost of 1 medical assistant-level CDM worker for each of 200,000 full-time primary care physicians (1 for every 1,500 patients, or enough for 300,000,000 Americans) would be \$7,000,000,000. Billing and 1-time training costs would also need to be considered, but these costs would be offset to an unknown degree by potential savings from averted emergency department visits or hospitalizations. If a CDM model replaced a pay-for-performance program, savings on incentive payouts for improvements in quality measures could also help offset CDM costs. Other financial benefits could accrue from improved primary care physician workflow.

The impact of a network of CDM workers can and should be assessed at various levels. Costs and outcomes should be monitored for personnel; physician productivity; utilization measures such as primary care visits, laboratory, radiology, and pharmacy activity; consultants; emergency department visits; and preventable hospitalizations. The impact on quality measures such as HEDIS and both patient and primary care physician satisfaction should be tracked.

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## BOLD STEPS

With the crisis in primary care and chronic disease care looming, bold steps are necessary. A broadly disseminated network of CDM workers can be the missing link that facilitates care and coordination among primary care physicians, patients, and health care organizations. It is convenient for physicians to weave CDM services into the fabric of the office visit. It is also convenient for patients, who can combine visits to their doctor with ongoing self-management support offered during a

teachable moment. We should reimburse primary care offices for providing defined CDM services with a payment mechanism similar to that of California's CPSP system. Office-based CDM workers can improve primary care physician satisfaction, productivity, and quality of care; can personalize care for patients; and can reduce or control long-term costs related to poor patient outcomes. This intervention is practical and achievable, and it should be implemented before the primary care infrastructure so vital to our good health crumbles.

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**Key words:** Chronic disease/therapy; disease management; primary health care; physician's practice patterns; practice management; quality assurance, health care; quality improvement; office practice issues; office redesign/practice redesign

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