

***Patient-Centered,
Physician-Guided Care for
the Chronically Ill:
The American College
of Physicians
Prescription for Change***

**A Policy Paper of the
American College of Physicians
October 2004**

Patient-Centered, Physician-Guided Care for the Chronically Ill: The American College of Physicians Prescription for Change

A Policy Paper of the
American College of Physicians

This policy paper was authored by Mark S. Gorden, Senior Associate, Regulatory and Insurer Affairs, and John P. DuMoulin, Director, Regulatory and Insurer Affairs. This paper was developed under the direction of the Medical Service Committee: Joseph W. Stubbs, MD, FACP, Chair; Janelle Rhyne, MD, FACP; Peter Basch, MD; Dimitri C. Cassimatis, MD, Associate; N. Thomas Connally, MD, FACP; David L. Elson, MD, FACP; Patricia Hale, MD, PhD, FACP; B. Mark Hess, MD, FACP; J. Leonard Lichtenfeld, MD, FACP; Glenn Littenberg, MD, FACP; Anna C. Maio, MD; and Stephen G. Pauker, MD, FACP. This paper was approved by the Board of Regents, October 2004.

How to cite this paper:

American College of Physicians. Patient-Centered, Physician-Guided Care for the Chronically Ill: The American College of Physicians Prescription for Change. Philadelphia: American College of Physicians; 2004: Public Policy Paper. (Available from American College of Physicians, 190 N. Independence Mall West, Philadelphia, PA 19106)

Copyright ©2005 American College of Physicians.

All rights reserved. Individuals may photocopy all or parts of Position Papers for educational, not-for-profit uses. These papers may not be reproduced for commercial, for-profit use in any form, by any means (electronic, mechanical, xerographic, or other) or held in any information storage or retrieval system without the written permission of the publisher.

For questions about the content of this Position Paper, please contact ACP, Division of Governmental Affairs and Public Policy, Suite 800, 2011 Pennsylvania Avenue NW, Washington DC 20006-1813. Telephone 202-261-4500. To order copies of this Position Paper, contact ACP Customer Service at 800-523-1546 extension 2600, or 215-351-2600.

Table of Contents

Executive Summary	Page 1
Introduction	Page 3
Why Coordinated Care Is Needed for Medicare's Chronically Ill	Page 5
The Difference Between Disease Management (DM) and Chronic Care Management (CCM)	Page 6
The Chronic Care Model Developed by Ed Wagner, MD	Page 7
How Economic Factors Have Hindered Widespread Adoption of Chronic Care Programs/The Potential Value of Physician Performance Incentives	Page 9
Seeking a Solution: Congress Enacts The Voluntary Medicare Chronic Care Improvement Program Under Section 721 of the Medicare Modernization Act of 2003 (MMA)	Page 13
Ways the CCIP Can Help Strengthen and Improve the Value of the Physician-Patient Relationship	Page 16
ACP Recommendations	Page 17
Conclusion	Page 19
References	Page 20
Appendices	Page 21
A—Description of ACP Physician Information and Education Resource (PIER)	Page 21
B—Description of Wagner Chronic Care Model	Page 23
C—Summary of Medicare Coordinated Care and Disease Management Demonstrations	Page 27
D—Description of CMS Doctors Office Quality—Information Technology Demonstration	Page 28
E—ACP Health Information Technology Refs	Page 29

Executive Summary

While the U.S. health care system can boast some of the world's greatest and most abundant technological and human resources, getting this care to those most in need, timely and efficiently, still remains a major challenge. Unless enrolled in an organized health system, most Americans receive their care on an episodic, as needed basis, with little incentive for physicians to track and provide oversight of all patient care needs. This lack of care integration and coordination is costly, leading to unnecessary utilization and duplication of services, potentially dangerous drug interactions, and easily avoidable morbidity and mortality.

This conclusion is supported throughout the literature, including a March 2000 report commissioned by the Centers for Medicare and Medicaid Services (CMS):

Current health care often fails to meet the needs of chronically ill people. Treatment regimens for chronic illness often do not conform to evidence-based guidelines. Care is frequently rushed and overly dependent on patient-initiated follow-up. Providers typically devote little time to assessing function, providing instruction in behavior change or self care, or addressing emotional or social distress. Care is fragmented, with little communication across settings and providers. (1)

A landmark 2003 Rand study showed that American patients, on average, only received about half of the clinically recommended care they required, based on tallying physician performance of 439 quality indicators covering 30 acute and chronic conditions as well as preventive care. (2) For chronic care patients, the situation was no better, with only 56.1 percent of recommended care being delivered. (2) Similarly poor results were found for Medicare fee-for-service (FFS) beneficiaries, who failed to receive 24 clinically needed elements of care related to six chronic conditions a median of 31 percent of the time, with one key element of care omitted 89 percent of the time. (3) This study, performed by CMS, showed enormous inconsistencies in the rates the 24 process of care elements were performed, varying widely according to State as well as individual care elements. (3)

The conclusion to be drawn from these studies is that the health care system can and must do a better job in providing care to patients with chronic disease. In the words of the Rand study authors: "The deficits we have identified in adherence to recommended process for basic care pose serious threats to the health of the American public. Strategies to reduce those deficits in care are warranted." (2)

The result of such fragmented care is a health care system that is too expensive, that exposes patients to unnecessary risk, and that results in physicians being asked to make critical decisions for their patients without full and complete information, or the invaluable guidance real time, online clinical decision support can provide.

All the above problems are greatly amplified and exacerbated for our nation's elderly under Medicare, where one out five beneficiaries suffer with 5 or more chronic diseases and consume two thirds of all Medicare dollars. This imbalance is confirmed in the above report: "A small proportion of chronically ill persons also incur the large majority of health care costs. Furthermore, many unplanned hospitalizations of chronically ill persons appear preventable. Thus, preventive interventions targeted to this group might yield sizeable savings in health care." (1)

Chronic disease is not just a Medicare problem. According a September 2004 Issue Brief from the Center for Studying Health System Change, “57 million working age Americans—18-64 years old—live with chronic conditions...In 2003, more than one in five, or 12.3 million people with chronic conditions, lived in families with problems paying medical bills...For the 6.6 million uninsured, chronically ill Americans, the financial consequences are especially grave—nearly half reported medical bill problems, making them much more likely to forego or delay needed medical care.” (4)

Clearly, our health care system has the capacity and resources to do a much better job of caring for our nation’s elderly. The key is establishing an optimal chronic care model supported with physician payment and performance incentives that have buy-in from the entire medical and health insurer community. Underpinning this new approach, it is vital our medical education system strive to assure physicians, particularly internists, acquire and retain the skills needed to manage patients with multiple chronic diseases. Also critical will be the development of new current procedure terminology (CPT) codes that allow physicians to bill for care management under fee-for-service, and payors’ provision of financial assistance to physicians incentivizing use of electronic health records and online clinical decision support software—requisite tools for effective patient care oversight.

Congress has made fixing how Medicare’s chronically ill are cared for a top priority, passing into law several demonstration programs (displayed in Appendix C), aimed at testing better models of chronic care coordination and delivery, as well as how to set physician reimbursement and performance incentives to produce better care outcomes and patient satisfaction. The most recent and promising of these demonstrations is the Chronic Care Improvement Program, Section 721 of the Medicare Modernization Act of 2003, which should enter its pilot phase in 2005.

ACP is a strong supporter of a *patient-centered, physician-guided* model of chronic care management that gives the patient a “medical home” from which all care needs are coordinated and overseen by a physician team leader. Based on the Chronic Care Model developed by Ed Wagner, MD (5), this approach puts the patient’s needs first and, when integrated with well designed physician performance incentives, holds great potential for optimizing quality of care and patient outcomes, while squeezing out unnecessary costs.

This policy paper’s goal is to shed light on why it is critical that a new paradigm of chronic care management and physician performance incentives be fairly tested, with the best elements put into play for the benefit of all Medicare beneficiaries, as well as other chronically ill populations covered by Medicaid or private health insurance. This has led ACP to make the following four recommendations aimed at ensuring any initiative aimed at chronic care improvement produces results of universal value to the U.S. health care system at large:

- 1. Care for Chronically Ill Patients with One or More Co-Morbid Conditions is Fragmented and Unduly Costly Due to Lack of Coordination Under Fee-for-Service, Making Large Scale Testing of a Patient-Centered, Physician-Guided Chronic Care Model Crucial for the Nation’s Health and the Health System’s Financial Viability.**
- 2. Due to Their Specialized Training and Expertise, Internists Are Particularly Well Suited to Lead and Oversee the Care of Chronically Ill Patients.**

- 3. A *Patient-Centered, Physician-Guided* Chronic Care Model Should Include a Physician Case Management Fee and Incentives for Physician Performance that are Linked to Improved Quality of Care and Patient Outcomes and Satisfaction.**
- 4. Use of Information Technology, Online Real-Time Clinical Decision Support, and Incentives for Their Adoption and Use Should be an Essential Element of *All Patient-Centered, Physician-Guided* Models of Chronic Care Improvement.**

Introduction

The complex needs of America's chronically ill are rarely being met, resulting in sub-par quality care and unnecessarily bloated health care costs that hurt every American, according to the Institute of Medicine in its March 2001 report: *Crossing the Quality Chasm—A New Health System for the 21st Century*. The report warns that, unless something dramatic is done to unify America's highly fragmented health system and, in particular, bring coordination to care of the chronically ill, things will only get worse, threatening the viability of our health infrastructure:

The health system as currently structured does not, as a whole, make the best use of its resources. There is little doubt that the aging population and increased patient demand for new services, technologies, and drugs are contributing to the steady increase in health care expenditures, but so, too, is waste. Many types of medical errors result in the subsequent need for additional health care services to treat patients who have been harmed. A highly fragmented delivery system that largely lacks even rudimentary clinical information capabilities results in poor designed care processes characterized by unnecessary duplication of services and long waiting times and delays. And there is substantial evidence documenting overuse of many services—services for which the potential risk of harm outweighs the potential benefits.

What is perhaps most disturbing is the absence of real progress toward restructuring health care systems to address both quality and cost concerns, or toward applying advances in information technology to improve administrative and clinical processes....

For several decades, the needs of the American public have been shifting from predominantly acute, episodic care to care for chronic conditions. Chronic conditions are now the leading cause of illness, disability, and death; they affect almost half of the U.S. population and account for the majority of health care expenditures...Yet there remains a dearth of clinical programs with the infrastructure required to provide the full complement of services needed by people with heart disease, diabetes, asthma, and other common chronic conditions. The fact that more than 40 percent of people with chronic conditions have more than one such condition argues strongly for more sophisticated mechanisms to communicate and coordinate care. Yet physician groups, hospitals, and other health care organizations operate as silos,

often providing care without the benefit of complete information about the patient's condition, medical history, service provided in other settings, or medications prescribed by other clinicians. For those without insurance, care is often unobtainable except in emergencies. It is not surprising then, that studies of patient experience document that the health system for some is a "nightmare to navigate." (6)

This crisis is even worse for Medicare FFS beneficiaries most of whom, because of their age, "have one or more chronic conditions," according to the Medicare Payment Advisory Commission (MedPAC), adding in its June 2004 *Report to the Congress*, that "too often their care is fragmented and poorly coordinated." (7) The report continues:

If care coordination services were directed toward all Medicare enrollees with a chronic condition, the potential number of participants in the program would be very large. As estimated from Medicare claims data, about 78 percent of the Medicare population had at least one chronic condition in 1999, and 63 percent had two or more. Self reported statistics put that number even higher, with over 70 percent reporting two or more conditions. (7)

Clearly, Medicare's chronically ill consume an inordinate share of Medicare resources. According to an April 20, 2004 press statement by Tommy G. Thompson, Secretary of the Department of Health and Human Services:

Chronic conditions are a leading cause of illness, disability, and death among Medicare beneficiaries and account for a disproportionate share of health care expenditures. For example, about 14 percent of Medicare beneficiaries have congestive heart failure but account for 43 percent of Medicare spending. About 18 percent of Medicare beneficiaries have diabetes, accounting for 32 percent of Medicare spending. (8)

The purpose of this policy paper is to propose a model for caring for this nation's chronically ill which will not only improve the quality of care for this highly vulnerable population, but literally transform the way care is practiced. ACP terms this new model of care *patient-centered, physician-guided*, giving every patient a "medical home" from which all care needs/coordination are provided, directed by a physician care team leader.

A patient-centered access model, as defined by Berry et al in an October 2003 *Annals of Internal Medicine*, "would help patients secure appropriate and preferred medical assistance when and where it is needed." (9) *Physician-guided* means having all of a patient's health care needs supervised, monitored, and overseen by a physician care team leader/coordinator, presumably the patient's primary care physician, a role doctors of internal medicine are best qualified to fill.

Doctors of internal medicine are particularly well trained and experienced in both providing and guiding the care of chronically ill adults, and thus would fit quite naturally into the care team leader role. This position, and the need for a new approach to physician reimbursement, is affirmed in a January 2004 report entitled *The Future of General Internal Medicine*: "Wherever they practice, general internists should be able to lead teams and be responsible for the care their teams give, embrace changes in information systems, and aim to provide

most of the care their patients require. Current financing of physician services, especially fee-for-service, must be changed to recognize the value of services performed outside the traditional face-to-face visit and give practitioners incentives to improve quality and efficiency, and provide comprehensive, ongoing care.” (10)

ACP’s *patient-centered, physician-guided* approach is based largely on the Chronic Care Model (5) developed by Ed Wagner, MD, MPH, FACP, described in more detail in Section V, underpinned by the latest advances in health information technology, clinical decision support, payment for care team management, and performance-based provider incentives. ACP’s believes Medicare’s Chronic Care Improvement Demonstration program (CCIP) could provide an outstanding opportunity to put its *patient-centered, physician-guided* model to a full and fair test, leading it to offer its participation to bidders who agree to use a close proximity to this model.

Why Coordinated Care Is Needed for Medicare’s Chronically Ill

Under Medicare’s current fee-for-service (FFS) structure, the chronically ill are forced to shop and pay for care on an episodic and often disjointed basis. No one physician has complete control or awareness of where the patient may go, as Medicare only reimburses for covered direct care services, but not for care oversight and coordination. Regrettably, this places the burden of finding and getting to needed care on a population least able to do so. Beset by age-related frailty, mobility limitations, and weakened memory and decision-making faculties, these patients are poorly equipped to shoulder the burdens of accessing and complying with the care they truly need. This can be both costly and clinically dangerous, as medically unsupervised patients often either under- or over-utilize services, while care compliance goes unmonitored and may be sub-optimal. Physicians are frequently left to prescribe treatments based on incomplete and/or inaccurate patient information, often relying on patient memory alone. The sad result of these gaps in patient information and care coordination is costly and preventable increases in patient morbidity and mortality, adverse drug events, emergency room visits, and hospitalizations.

Without care coordination and oversight, Medicare’s chronically ill (or a responsible family member) must remember every physician and therapist they have seen, as well as every diagnosis, treatment, test, and medication they have received. These challenges are further exacerbated by the demands of getting back and forth to appointments, and complying with what may be a very complex care regimen. The bottom line is, more than any other type of patient, elderly chronic disease sufferers need a physician champion/care team leader to make sure their all their needs are met, a service that is sorely absent under Medicare FFS, but which hopefully will be remedied by the CCIP.

According to Robert A. Berenson, MD, Senior Fellow of the Urban Institute, the need for effective chronic care management is crucial, with great potential for improving the lives of our nation’s elderly while cutting Medicare costs:

Policymakers are just beginning to realize the implications for Medicare of beneficiaries living longer with chronic illness, particularly multiple chronic diseases. About 20 percent of beneficiaries have five or more chronic conditions, account for over two-thirds of Medicare spending, see about 14 different physicians in a year, and have almost 40 office visits. The chances of an otherwise unnecessary hospitalization—for conditions that can and should be managed effectively on an outpatient basis—

increase from about 1 percent for a beneficiary with just one condition to about 13 percent for a beneficiary with five conditions and about 27 percent for a person with eight chronic conditions. It would seem then that beneficiaries with multiple chronic conditions have unattended complications despite their high health care use. It also would appear that the number of chronic conditions has more influence than age on health care spending in the Medicare population. (11)

The Difference Between Disease Management (DM) and Chronic Care Management (CCM)

DM programs are not involved in the practice of medicine, but rather focus on supporting patients' self-care efforts for a specific disease, utilizing standardized protocols generally administered by nurses to provide patients with clinical guidance, education, and care compliance reminders, without any direct physician involvement. CM is much more encompassing, and includes direct patient care and self-care support, as well as care oversight for one or more chronic conditions plus all existing co-morbid conditions. This paper focuses on CCM, since the vast majority of chronically ill Medicare patients suffer from more than one chronic illness, and need the comprehensive care oversight and self-care support only CCM provides.

The Medicare Payment Advisory Commission provided the following June 2004 synopsis of the key Differences between DM and CCM: (7)

	Disease Management	CCM
Target population:	People diagnosed with a specific disease	People at high risk for costly, adverse medical events and poor health outcomes
Reliance on Evidence-Based Treatment Guidelines:	High	Low to medium
Reliance on protocols and standardized approaches	High	Low
Use of nonmedical social support services	Low	High

ACP believes strongly that physicians and chronically ill patients must work together in a partnership to achieve optimal care outcomes. In ACP's *patient-centered, physician-guided* model of CCM, the patient's primary care physician serves as the patient's medical home as well as care team leader/coordinator for all required services, optimally using the latest health information technology (HIT) to track a patient's care and medications, regardless of setting, while the patient is actively involved in managing his/her health, through self-education

and self-care. This model ensures all medical decision-making is retained by the treating physician who is supported by real-time point-of-care clinical decision support (CDS) tools in the physician's office, such as ACP's highly regarded Physician Information and Education Resource (PIER), see Appendix A for more detailed description). Such CDS tools are designed to assist the physician in delivering the medical care that the patient needs and help assure that clinical best practices are followed, fostering improved clinical outcomes, higher quality of care, increased patient satisfaction, and reduced overall costs to the health care system.

The Chronic Care Model Developed by Ed Wagner, MD

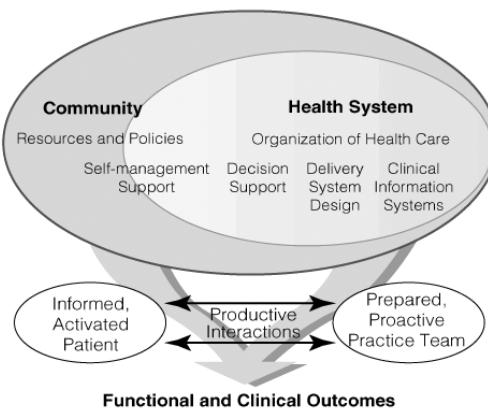
As noted above, ACP's *patient-centered, physician-guided* model of chronic care management is based largely on Dr. Ed Wagner's Chronic Care Model (5) which is summarized below. A more detailed description is provided in Appendix B.

According to the May 2004 background paper entitled *Will Care Management Improve the Value of U.S. Health Care?*, Dr. Wagner's model is the most recognized one in the field, and recognizes that a "substantial portion of chronic care takes place outside of formal health delivery settings....The chronic care model has been used successfully in staff model HMOs, large group practices, and community health clinics." (12)

However, the paper cites many barriers to adoption of the chronic care model which are primarily economic in nature and are discussed in the next section on the important role financial incentives can play in achieving optimal patient care outcomes.

Overview of the Chronic Care Model

The Chronic Care Model identifies the essential elements of a health care system that encourage high-quality chronic disease care. These elements are the community, the health system, self-management support, delivery system design, decision support and clinical information systems. Evidence-based change concepts under each element, in combination, foster productive interactions between informed patients who take an active part in their care and providers with resources and expertise. The model can be applied to a variety of chronic illnesses, health care settings and target populations. The bottom line is healthier patients, more satisfied providers, and cost savings.



The Development of the Chronic Care Model

The staff at the MacColl Institute for Healthcare Innovation developed the model drawing on available literature about promising strategies for chronic illness management, and organizing that literature in a new more accessible way. The model was further refined during a nine-month planning project supported by The Robert Wood Johnson Foundation (RWJF), and revised based on input from a large panel of national experts. It was then used to collect data and analyze innovative programs recommended by experts. RWJF then funded the MacColl Institute to test the model nationally across varied health care settings: the national program being “Improving Chronic Illness Care” (ICIC).

Refinements to the Chronic Care Model

In July of 2003, ICIC and a small group of experts updated the Chronic Care Model to reflect advances in the field of chronic care both from the research literature and from the scores of health care systems that implemented the model in their improvement efforts.

We list more specific concepts under each of the six elements. Based on more recent evidence, five new themes have been incorporated into the Chronic Care Model:

- Patient Safety (in Health System);
- Cultural competency (in Delivery System Design);
- Care coordination (in Health System and Clinical Information Systems);
- Community policies (in Community Resources and Policies); and
- Case management (in Delivery System Design).

The model element pages have been redesigned to reflect these updates. Each page describes the overall strategy for each element, and the health system change concepts necessary to achieve improvement in that component. The new themes have been emphasized in bold typeface for ready identification.

Factors Which Have Hindered Widespread Adoption of Chronic Care Programs/The Potential Value of Physician Payment-for-Performance Incentives

Robert Mechanic, author of *Will Care Management Improve the Value of U.S. Health Care?*, provides a valuable historical perspective insight into why chronic care programs have not been more widely adopted in the medical marketplace:

The chronic care model has been used successfully in staff model HMOs, large group practices, and community health clinics. However, relatively few provider settings are fully prepared to execute the chronic care model. In fact, a majority of large care management programs originate outside of provider systems and are managed by health plans and disease management firms. Existing programs vary widely in scope and effectiveness. Despite limited published evidence on outcomes, purchasers now invest substantial resources in care management. Anecdotal reports suggest that many initiatives achieve positive financial and clinical results.

The economic incentives for care management are complex and vary across provider organizations, health insurance plans, employers, and government purchasers. One reason so few providers implement care management programs is that current reimbursement structures lack financial incentives for them to do so. For example, one academic medical center recently reported that a pilot project reduced annual expenses for patients with congestive heart failure from \$23,000 to \$14,000 – but had strongly negative financial consequences because it reduced profitable inpatient care while increasing use of poorly reimbursed preventive services.

In the mid-1990s, full-risk capitation was a common form of reimbursement in some U.S. markets. Provider groups with substantial volume of full-risk contracts began to develop care management systems. As capitation has become less common, many of these groups have scaled back investment in care management. Under most reimbursement systems today, providers lack a strong business case for quality. Paying providers for performance relative to defined quality goals is a concept with widespread appeal and could lead to expansion of care management processes within the delivery system. Some health plans and purchasers now experiment with pay-for-performance systems, but these efforts are mostly small and highly diverse – with different quality measures and incentive structures. A major impediment to effective pay for performance is that most health plans are a relatively small percentage of any provider's total revenue. Unless payers can agree on consistent quality measures, reimbursement systems designed to reward quality may have little impact for all but the largest purchasers.

Health plans have stronger financial incentives to invest in care management than do providers. However, their investments in

enrollee health are diminished when accounts switch to competitors during the annual open enrollment process. Therefore, health plans focus on programs thought to deliver a financial return within six to twelve months, such as congestive heart failure management or targeted high cost patient management. Many health plans also offer a broad spectrum of wellness and preventive care programs in response to demand from customers that view these initiatives through a longer-term lens. But customers are price sensitive and risk selection has a much bigger impact on premiums than care management. Therefore, most plans do not want to be known publicly as the best program for patients with complex chronic illness.

Purchasers that fund employee health benefits have a broader business case for quality improvement and care management than do health plans. Employers must consider such factors as employee productivity and long-term disability in addition to health care costs. However, developing data to accurately evaluate the combined financial impact of care management on health spending and productivity is difficult. Firms with older workers and relatively low turnover have stronger incentives to invest in long-term prevention and wellness programs. The federal government has the clearest economic case for investing in care management.

Medicare and Medicaid recipients have high rates of chronic illness and disability. Medicare can afford to take a long-term view since recipients are in the program for life. Political pressure from the recent announcement that the Medicare Trust Fund is projected to go broke in 2019 also creates short run urgency for solutions. The Center for Medicare and Medicaid Services (CMS) is a complex government agency and executing care management on a large scale will be a tremendous challenge. CMS will soon be put to the test as it implements Phase One of the chronic care improvement program recently authorized by Congress. (12)

The key problem for health care insurers and the federal government is to construct financial incentives that encourage behavior change in physicians that leads to higher quality and higher patient satisfaction. A 2000 article in the *New England Journal of Medicine* concludes that:

High quality care is unlikely to flourish in an environment that leaves physicians demoralized and leads many to believe that the standards of care have been compromised. Our results suggest that the goal of providing high quality care may be better approached by the use of limited financial incentives based on the quality of care and patients' satisfaction than incentives that reward physicians for restricting access to specialty care or for squeezing in a greater number of visits per day. Policies that emphasize the former approach may enhance satisfaction with the U.S. health care system on the part of both patients and their physicians. (13)

In a January 2004 article entitled: “Paying Physicians for High Quality Care,” the authors provide a precise goal for why physician financial incentives for quality should be established:

The underlying goal of incorporating financial incentives for quality into physicians’ payments is not simply to reward “good” physicians or punish “bad” ones. The goal is to change the status quo by stimulating both immediate and long term improvements in performance. (14)

The article goes on to describe the wide array of payment-for-performance systems being developed which vary widely in their approaches to incentivizing better physician performance and patient outcomes. Major impediments to successful implementation of payment-for- performance systems are then discussed:

Another challenge in designing and implementing these programs is getting the right mix of criteria for quality. Incentives based on a handful of measures of quality may encourage physicians to focus their efforts on improving quality in the areas targeted by the programs, neglecting other important aspects of care. In contrast, incentives based on too many measures may overwhelm physician practices.

Another consideration is that physicians may resist efforts to implement payment incentives for financial reasons. Medicare cut physicians’ payments by nearly 5.4 percent in 2002 and held the increase in 2003 to 1.6 percent. With competition in the marketplace, the overall pool of money going to physicians from the private sector is also unlikely to increase substantially. Thus, bonus payments for physicians who achieve quality goals are likely to translate into lower base payments for those who do not achieve these goals.

Furthermore, payment-for-performance systems may unfairly penalize physicians caring for patients who are at a socioeconomic disadvantage and may motivate the physicians to reduce the number of patients for whom they provide care. Delivering high quality care to patients in low socioeconomic brackets can be relatively difficult, and the physicians who serve them often receive less reimbursement and have less capital available for investment in new systems than do physicians providing care for patients in higher socioeconomic brackets. Rewards for quality could therefore help make the rich richer and the poor poorer.

...Finally, financial incentives for performance may also threaten the sense of professionalism, autonomy, and job satisfaction among physicians, especially when purchasers make the rules and decisions that affect priorities in providing care. (14)

Yet, the authors conclude pursuit of “well crafted payment-for-performance initiatives are worth pursuing and may lead to substantial improvements in the quality of care” offering the following five major provisos: (bolding added)

First and foremost, we need to expand efforts, substantially increase the size of incentives, and stay the course. Physicians are likely to respond to financial incentives if the dollar figures are large enough. This is a time when broad scale experimentation would serve us well, although it must be coupled with evaluations and rapid dissemination of models that are effective.

Second, the impact of financial incentives depends critically on the efforts of large purchasers, such as CMS, or collaborative efforts by health plans or purchasers...Individual purchases or health plans with small market shares that implement their own programs may gain a marketing advantage, but they are unlikely to have a substantial effect on the quality of care if they act alone. Such efforts should not be confused with serious efforts to improve quality.

Third, directing financial incentives at a small number of individual indicators of clinical quality is unlikely to yield broad scale improvement in the quality of care. Rotating measures and expanding over time the battery of performance indicators that are tied to financial payments will probably be more successful as strategies.

Fourth, the current systems for measuring quality are technically imperfect. Continued investment in systems for measuring and tracking quality in an affordable way remains important. Unfortunately, quality incentive programs alone are unlikely to provide sufficient impetus for attaining the highest achievable quality of care. Programs to pay physicians for high quality should be combined with an array of other efforts to foster high quality care, such as educational programs, computerized decision aids, and incentives for patients.

Finally, the most pragmatic hope for improving the quality of care lies in efforts that implicitly or explicitly call for investment in information infrastructure and the fundamental redesign of office practice. Realistically, this restructuring will be easier to achieve in large physician practices with economies of scale and a natural grouping of physicians on which to measure performance. Additional strategies to improve the quality of care will be particularly important to pursue in solo and small group practices. (14)

Seeking a Solution: Congress Enacts The Voluntary Medicare Chronic Care Improvement Program Under Section 721 of the Medicare Modernization Act of 2003 (MMA)

Case management of the care of chronically ill Medicare patients is a vital, high level service which, until now, has not been duly recognized and compensated under Medicare fee-for-service (FFS). According to the Urban Institute's Dr. Robert A. Berenson:

The financial underpinnings of a typical medical practice do not support physicians who actually do recognize the need to be more fully engaged in the components of chronic care coordination. These include: teaching patient self- management; communicating more often with patients outside of face-to-face office visits; managing polypharmacy; coordinating care among many other professionals and providers to avoid redundancy and errors; developing and maintaining more appropriate medical information summaries, preferably inside an electronic health record; and more forthrightly helping prepare patients and their families for death and dying. Simply stated, the Medicare payment system does not pay for these activities, so physicians either do not deliver these services directly or go unpaid when trying to do so. (11)

Yet, there is slowly accruing, though not universally embraced, evidence that case management of the chronically ill can have a significant positive impact on the quality of patient care and reduce costs, when compared to receiving care in a fragmented, hit-or-miss fashion under Medicare FFS.

In a January 2004 Issue Brief, Georgetown University's Center on an Aging Society concludes that "disease management programs can reduce health care use and expenditures" by being "successful at improving self-care practices and reducing use of various health care services, including hospital admissions and emergency room visits. As a result, health care expenditures for certain populations with chronic conditions have decreased." (15)

The Disease Management Association of America (DMAA), in a paper titled, "The Benefits of Disease Management in Medicare and Medicaid," cites evidence of how disease management improves quality of care and lowers cost. These findings led to DMAA's statement that it "fully supports and commends the Congress and CMS for promoting the expansion of disease management programs in its efforts to modernize and revitalize Medicare+Choice and through coordinated care provisions of the Medicare, Medicaid, SCHIP Benefits Improvement and Protection Act of 2000 (BIPA), and other demonstration projects." (16) (A summary of all Medicare care coordination and disease management demonstrations prior to the MMA, prepared by the Medicare Payment Advisory Commission, is provided in Appendix C).

Though these findings are encouraging, they are not necessarily translatable to the Medicare population—case managing the care of a person with one disease and no other complicating factors is far simpler and more likely to produce a positive outcome than a person with multiple chronic and co-morbid conditions—the type of patient typically found in Medicare. Particularly challenging for physicians treating Medicare's chronically ill are: (a) patients who suffer from one or more chronic illnesses and lack mobility (to get to appointments) due to extreme frailty and/or vision problems; (b) patients whose ability to provide self-care is greatly diminished by memory loss and/or dementia (partic-

ularly dangerous related to the taking of medications); and, (c) patients whose illness has entered the terminal stage.

With so many personal health, provider, and medication variables to control, it is not surprising that there is a lack of clear and compelling evidence of how to best achieve optimal outcomes for Medicare's sickest and most needy individuals. The lack of such data and peer consensus on what works best makes the CCIP a timely step in the right direction according to the Urban Institute's Dr. Berenson:

In recent years, there has been growing dissonance between the evolving use of disease management by private health plans, convinced of its utility in improving patient care, and the continuing dearth of peer-reviewed evidence of its cost-effectiveness. One desirable aspect of the CCIP is that the technique will be tested in formal trials that should help provide data to better assess the cost-effectiveness of disease management for the Medicare population in the context of the traditional Medicare program. (11)

Congress's enactment of the CCIP under Section 721 of the MMA, was a clear recognition that, to effectively manage such complex and costly patients, and reduce their worrisome taxing of the Medicare budget, novel approaches for care delivery and incentivizing physician participation and improved patient outcomes had to be found. Unlike a number of other CMS chronic care demonstration programs which are relatively small scale experiments with no statutory requirement for later adoption (see Appendix), the CCIP's goal is to identify new approaches for coordinating and paying for CCM that will ultimately become a permanent part of Medicare nationally. According to Dr. Berenson, these other chronic care demonstrations have serious design issues which limit their applicability to medically complex individuals: "Several projects target specific diseases, rather than beneficiaries with multiple conditions. And the demonstration models typically ignore addressing the crucial role of the treating physician in care management." (11)

The ambitious, ground-breaking nature of the CCIP is echoed in a May 2004 report entitled: Chronic Care Improvement in Medicare FFS: Cosmetic or Transforming?

Mandating this new CCIP initiative was a bold move by Congress, especially given that no population-based program of this type has ever been tried under the Medicare FFS plan.

The CCIP initiative is fundamentally different from any previous Medicare FFS disease management, case management or care coordination initiative. For the first time, the federal government will use its Medicare FFS claims data to identify subgroups of beneficiaries whose health risks are significant and modifiable. Eligible beneficiaries will be contacted directly by Medicare and encouraged to participate in the CCI programs in their areas. Medicare will provide the CCI organizations with historical claims data on eligible beneficiaries to use in assessing beneficiary health risks. Also, for the first time, Medicare and the CCI organizations will set performance improvement goals for the target populations, including population-based measures of clinical quality, costs, and

beneficiary and provider satisfaction. If a CCI organization fails to meet its agreed-upon goals, it will be required to repay some or all of its CCI fees. (17)

By including medically complex individuals, the CCIP has obviated a key design issue of its earlier CMS chronic demonstrations summarized in Appendix C.

The author of the above report, Sandra M. Foote, Director of the Health Insurance Reform Project at the George Washington University concludes that, at this early stage, “the prospects for CCIP success seem favorable”, due to “strong support from federal health officials” and strong interest in participating in the program amongst private sector organizations. (17) She concludes:

The target populations selected for the pilot programs appear to have health risks and claims costs that could be modified within the 3-year timeframe set by Congress for program evaluation, and the CCI programs will have flexibility to customize their interventions to individual participants’ support needs. The area of least clarity and possibly greatest opportunity seems to be the extent to which physicians will make use of CCI programs to support and improve their chronic care practices. (17)

Phase I of the CCIP will be launched in 2005 in 10 areas of the United States where at least 10 percent of more of the overall Medicare population reside, with approximately 150,000 to 300,000 beneficiaries expected to enroll. Organizations which submit winning proposals to CMS for a given area must coordinate and oversee all aspects of enrollees’ care, including all co-morbid conditions, and must use a clinical decision support tool. Winning bidders will be paid an administrative fee which will be derived from savings generated by effectively case managing their assigned enrollees; should a contractor not meet its savings targets, CMS will deduct the shortfall from the contractor’s administrative fee. The minimum savings target must be 5% of projected FFS expenditures for the target population; bidders have the option of stipulating a higher savings target, of up to 9%, providing them with greater potential to provide payment bonuses to successful physician case managers.

After a CMS contracted independent evaluator determines which elements of the CCIP’s Phase I three year trial period have worked best, CMS will then implement these best practices nationally as a formal part of Medicare in Phase II of the CCIP.

Ways the Chronic Care Model (CCM) Can Help Strengthen and Improve the Value of the Physician-Patient Relationship in Chronic Care Improvement (CCI) Programs

ACP feels strongly that the CCM's greatest potential lies in its ability to support and encourage a strong physician-patient relationship, committed to achieving optimal patient outcomes and satisfaction. ACP believes the best results will occur when a dedicated physician case manager acts in tandem with patients actively involved in their own care, an approach which is a cornerstone of the CCM.

The American College of Cardiology echoed just how essential this relationship is when its Disease Management (DM) Committee Chair, Janet Wright, MD, wrote in a *Cardiosource* editorial: "As DM models evolve to support and enhance the patient-physician relationship, and as physicians embrace opportunities to contribute to the design of DM programs, this approach to chronic care delivery becomes not only acceptable, but possibly indispensable." (18)

Though the above report by Sandra M. Foote states that, historically, "DM programs have not had great success in integrating and coordinating their services with treating physicians...Physician leaders may determine that helping to shape the CCI programs is worth their effort given the volume and regional concentration of Medicare beneficiaries to be served." (9) She concludes there are many ways CCI programs could add value for physicians and patients, including:

- Helping beneficiaries understand and comply with their care plans
- Prompting patients to seek needed medical services
- Reducing schedule interruptions related to urgent care
- Alerting physicians when patient problems require their attention, and
- Giving physicians access to more integrated and timely data on patient health status and treatment by other providers. (17)

Relative to the last bullet, ACP is a very strong proponent of bringing the many benefits of health information technology to the office-based physician, issuing several policy papers and congressional testimony on this topic (listed in the ACP References at the end of this policy paper, and available online at: http://www.acponline.org/hpp/menu/med_tech.htm).

One very crucial element of CMS's CCI pilot program is its statutory mandate for a clinical decision support tool (CDS), a tool which ACP believes should be an integral component of all CCI programs. CDS tools support physicians' care decisions and can greatly enhance the quality of care if its requirement for a clinical decision support tool, ensuring physicians' treatment decisions are based on the latest evidence-based, clinical data and care guidance. ACP's highly regarded, easy to use Physician Information and Education Resource (PIER), covering over 325 diseases and conditions and described in greater detail in Appendix A, is a perfect fit for this crucial program component.

ACP Recommendations Related to Chronic Care Management and Physician Payment Incentives

ACP makes the following four recommendations aimed at solving the care coordination and economic issues which undermine the quality of care provided to our nation's chronically ill, and drastically drive up the costs of providing that care, placing a great strain on the U.S.'s health care resources:

- 1. Care for Chronically Ill Patients with One or More Co-Morbid Conditions is Fragmented and Unduly Costly Due to Lack of Coordination Under Fee-for-Service, Making Large Scale Testing of a Patient-Centered, Physician-Guided Chronic Care Model Crucial for the Nation's Health and the Health System's Financial Viability.**

Studies by the Institute of Medicine, Rand, and CMS cited in this report make clear that Americans receive very fragmented, sub-par quality care which is duplicative, costly, and can even threaten their health and well being. This is particularly problematic for persons who suffer from one or more chronic conditions, as the number of factors, providers, services, medications, and costs incident to their illnesses increases exponentially, making *patient-centered, physician-guided* oversight of their care crucial. These studies show that such patients consume inordinate levels of the nation's health care resources, placing the nation's health care system at grave financial risk.

For our nation's elderly, the impact of chronic illness is even more dramatic, according to HHS, with chronic conditions being a leading cause of illness, disability, and death among Medicare beneficiaries and accounting for a disproportionate share of health care expenditures. For example, about 14 percent of Medicare beneficiaries have congestive heart failure but account for 43 percent of Medicare spending. About 18 percent of Medicare beneficiaries have diabetes, accounting for 32 percent of Medicare spending. 32 percent of Medicare spending. (8)

Clearly, something must be done to reverse the unnecessary health risks and resource waste that the U.S. populace and health care system are being exposed to every day, for lack of a better, more organized way of providing care. ACP believes a major part of the solution lies in widespread adoption of patient-centered, physician guided care, based on the tenets of the Wagner Chronic Care Model.

- 2. Due to Their Specialized Training and Expertise, Internists Are Particularly Well Suited to Lead and Oversee the Care of Chronically Ill Patients**

ACP believes strongly that a physician skilled in the management of multiple chronic adult illnesses should lead the care management team. Thus, it is critical the U.S. medical education system provide a heightened emphasis on managing such complex patients, as well as expanded geriatric training to improve care of the frail elderly, with a sharpened focus on performing cognitive and functional assessments for this population.

Doctors of internal medicine are specially trained and experienced in caring for these complex patients. By using a *patient-centered, physician-guided* approach to care, all elements of care are supervised and monitored by a single responsible medical expert, who places the patient's well being at the heart of care. Not only does this permit much tighter coordination of a patient's care than is possible

with a disease management (DM) organization, the physician team leader is free to make the best choices for high quality efficient care for their patients, without profit motives which impact clinical decision making.

3. *A Patient-Centered, Physician-Guided Chronic Care Model Should Include a Physician Case Management Fee and Incentives for Physician Performance that are Linked to Improved Quality of Care and Patient Outcomes and Satisfaction.*

It is ACP's position that the heightened responsibility of this physician team leader position, as well as its potential to produce better patient outcomes at lower cost, clearly warrant an augmented payment (per enrollee per month fee) to physicians for the extra coordination work this entails, as well as an additional incentive payment for improved patient outcomes and lowered costs.

ACP's position on the importance of using a patient-centered, physician-guided model which is linked to payment incentives is echoed in the testimony of Robert A. Berenson, M.D., Senior Fellow at the Urban Institute, provided to the Subcommittee on Health on May 11, 2004:

Among other areas that need attention is the overlooked issue of physician payment policy. Simply put, the incentives inherent in most fee-for-service payment systems, including Medicare's and those of most private payers, penalize primary care physicians who would alter their professional interactions with patients to respond to the challenge posed by the reality of patients with multiple complex conditions. Yet, the Medicare Modernization Act mostly ignores alternative payment approaches affecting physician behavior. These payment approaches should go hand in hand with the new chronic care program to ensure the kind of change needed to improve care for Medicare beneficiaries. (11)

ACP agrees that Medicare's CCIP pilot represents an opportunity to prove the value of physician case management fees and performance incentives, and has urged CMS to ensure their inclusion in the models being tested.

4. *Use of Information Technology, Online Real-Time Clinical Decision Support, and Incentives for Their Adoption and Use Should be an Essential Element of All Patient-Centered, Physician-Guided Models of Chronic Care Improvement.*

ACP is a strong advocate of bringing the advances of information technology (IT) to enhance the quality of patient care, as reflected in two major papers released in 2004 (see references at end of this testimony), and participation in CMS's Doctors Office Quality-Information Technology (DOQ-IT) demonstration program, detailed in Appendix D. ACP believes optimal case management of chronic care patients cannot occur without instantly accessible electronic information from all sources of care, the goal of an interoperable national health care information system—a goal ACP supports and is actively pursuing. Medicare's CCIP pilot represents an ideal opportunity to provide incentives for adoption of quality enhancing IT (also a major feature of the DOQ-IT demonstration). Having rapid electronic access to all vital patient information, as well as clinical decision support software such as ACP's Physician Information and Education Resource, will be crucial in assuring the physician case manager can optimally serve his/her patients, which is why incentives for IT adoption are so important.

Conclusion

The U.S. health care system's general failure to address the complex needs of the nation's costliest, chronically ill patients has resulted in quality problems and untoward cost burdens which threaten every American, both in terms of patient safety and affordability of health care coverage. In fact, the entire U.S. health care enterprise, and Medicare in particular, is being strained to the point of collapse by these skyrocketing resource demands and costs. Yet, the economic incentives of the current FFS system clearly favor episodic and uncoordinated treatment of patients, rather than the integrated care team approach provided for in the Wagner Chronic Care Model. (5)

The above problems are greatly amplified for our nation's elderly, where this population's age structure translates to high levels of chronic illness and comorbid conditions, exponentially increasing the number of health variables, providers, services, and medications which must be carefully monitored and controlled. An astounding 66 percent of Medicare's resources are consumed by 20 percent of its population who have multiple chronic conditions. (8)

Without the expert chronic care management internists are trained to provide, patient well being is placed at great risk, as the opportunities for providing duplicative or unnecessary (and possibly harmful) services propagate out of control, not to mention the even more immediate risks associated with medically unsupervised polypharmacy, which studies show results in substantial rates of avoidable morbidity and mortality.

Through Congress's passage of the Medicare CCIP pilot, an opportunity now exists to demonstrate the full value of *patient-centered, physician guided* chronic care management. It is thus vital CMS ensure that at least one pilot site fully and fairly test this model of care, underpinned with the latest advances in health information technology, real-time, online clinical decision support, and appropriate physician financial incentives including a case management fee and bonuses for achieving quality improvement objectives.

ACP believes that the American health care system has the resources needed to deliver a much higher level of care to the nation's chronically ill; the challenge is reorienting the way care is managed, overseen, and reimbursed. Through its advocacy efforts and direct participation in pioneering efforts such as the CCIP pilot, ACP is displaying its commitment to change the way medicine is practiced in this country for our nation's sickest and most vulnerable chronically ill. It is hoped this policy paper has shed substantial light on what challenges lie in the way of providing optimal, cost-effective care to this high risk population, and why ACP believes a *patient-centered, physician-guided* approach to chronic care management is the best way to achieve this most worthy goal.

References

1. Chen et al, "Best Practices in Coordinated Care, Mathematica Policy Research, Inc., March 2000.
2. McGlynn et al, "The Quality of Health Care Delivered to Adults in the United States," *New England Journal of Medicine*, Vol. 348, No. 26, June 26, 2003.
3. Jencks et al, "Quality of Medical Care Delivered to Medicare Beneficiaries," *Journal of the American Medical Association*, Vol. 284, No. 13, October 4, 2000.
4. Tu, "Rising Health Costs, Medical Debt and Chronic Conditions," Issue Brief No. 88, Center for Studying Health System Change, September 2004.
5. "The Chronic Care Model," described on the website of Improving Chronic Illness Care, a National Program of the Robert Wood Johnson Foundation, available at: [dhttp://www.improvingchroniccare.org/change/index.html](http://www.improvingchroniccare.org/change/index.html)
6. "Crossing the Quality Chasm: A New Health System for the 21st Century, Institute of Medicine, March 2001.
7. "Report to the Congress: New Approaches in Medicare," Medicare Payment Advisory Commission, June 2004.
8. "HHS Announces New Initiative to Improve Quality of Care for Medicare Beneficiaries with Chronic Illness," HHS News, April 20, 2004.
9. Berry et al, "Innovations in Access to Care: A Patient-Centered Approach," *Annals of Internal Medicine*, Volume 139 Issue 7, pp. 568-574, October 7, 2003.
10. Larson et al, "The Future of General Internal Medicine," *Journal of General Internal Medicine*, Volume 19, Issue, January 2004.
11. Testimony of Robert A. Berenson, M.D. Senior Fellow, Urban Institute, before House Ways and Means Committee, Subcommittee on Health, May 11, 2004.
12. Mechanic, R., "Will Care Management Improve the Value of U.S. Health Care?", Background paper for the 11th Annual Princeton Conference, May 20-21, 2004.
13. Grumbach et al, "Primary Care Physicians' Experience of Financial Incentives in Managed Care Systems," *New England Journal of Medicine*, Vol. 339, No. 21, November 19, 1998.
14. Epstein et al, "Paying Physicians for High-Quality Care," *New England Journal of Medicine*, Vol. 350, No. 4, January 22, 2004.
15. "Disease Management Programs: Improving Health While Reducing Costs?", Issue Brief, Center on an Aging Society, Georgetown University, January 2004.
16. "The Benefits of Disease Management in Medicare and Medicaid," Disease Management Association of America, available at: www.dmaa.org
17. Foote, Sandra M., "Chronic Care Improvement in Medicare FFS: Cosmetic or Transforming?", Health Insurance Reform Project, George Washington University, May 20, 2004.
18. Wright, Janet MD, *Cardiosource* editorial, found at: cardiosource.com.

APPENDICES

APPENDIX A—Description of ACP’s Physician Information and Education Resource (PIER)

PHYSICIANS’ INFORMATION AND EDUCATION RESOURCE (PIER)—Clinical Guidance from ACP

WHAT IS PIER?

- PIER is evidence-based clinical guidance presented electronically in a unique layered and telegraphic format designed for rapid access to clinical information at the point of care by physicians and other health care providers.
- PIER was initially introduced to the membership of the American College of Physicians at their Annual Session in April 2002 with modules on 125 topics. At the present time there are more than 320 modules in the PIER interface.

CONTENT:

- PIER covers not only individual diseases but also topics in legal medicine and ethics, complementary/alternative medicine, common procedures, as well as screening and prevention. A new section on undifferentiated problems entitled Clinical Presentations is under development.
- PIER is richly linked to the College’s extensive body of clinical content, including selections from its *Clinical Guidelines*, *Annals of Internal Medicine*, *ACP Journal Club*, the Bioterrorism Resource Center, many of its books and the *Medical Knowledge Self-Assessment* program. Extensive links are also made to the PubMed abstracts of articles from internationally recognized general medicine and subspecialty journals. In addition, web technology allows the integration of other high quality material useful to practice.
- A comprehensive drug database is included in PIER. Links from PIER text and tables allow users to go directly to more detailed information in the drug resource.
- PIER rates its guidance by strength of recommendation based upon the underlying evidence and each literature citation by evidence level. It draws upon evidence of all levels, from RCT through consensus and expert opinion, but identifies what level applies to what piece of evidence.
- All content in PIER is rigorously peer reviewed in a process very much like that used by the College’s *Annals of Internal Medicine* and other major medical journals.
- PIER is updated by editorial consultants continually with the support of periodic searches and rating of medical literature by top quality academic leaders in evidence-based medicine. PIER’s electronic format allows for rapid updating on an ongoing basis.

STRUCTURE AND FORMAT:

- The overall design of a module is meant to mirror the way a physician thinks through a problem. In the disease modules, for example, there is a logical flow of information from diagnosis through management.
- Each individual section of a module is designed to allow the user to “drill down” from general to more specific information. From a given guidance statement, one can easily navigate to bulleted specific recommendations, then to bulleted supporting evidence and finally to bibliographic material in the form of abstracts and, in some cases, full text versions of related clinical material.
- In addition to its present freestanding web-based platform, ACP members can subscribe to PIER on Pocket PC, PalmOS, and wireless devices. Users can also easily print out modules from PDF files.
- The structure of PIER allows intuitive browsing and multimode searching. We are continually refining the powerful search engine, which has thesaurus capabilities.
- The structure and format of PIER allows its content to be readily atomized or “chunked” for easy integration into other applications such as electronic medical records.

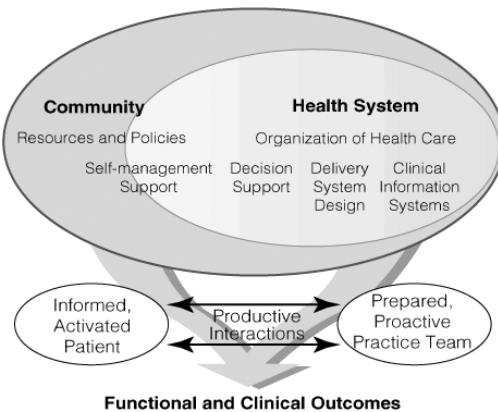
APPLICATIONS:

- PIER will continue to build content consistent with maintaining immediate relevance in the clinical setting and will expand into other specialty areas such as pediatrics. Hence, PIER is not intended to be an electronic textbook or take the place of one. We view PIER and other electronic resources as complementary.
- PIER will be integrated with a number of different electronic medical record and order entry systems for use in the hospital, in the office or on wireless PDAs, anywhere. Evidence-based order sets derived from PIER modules and applications of “infobutton” technology facilitating integration between electronic medical records and PIER content are under development.
- Use of PIER in conjunction with electronic medical records and other patient care applications in the context of patient care can be tracked to measure performance and document real-time, clinically relevant continuing medical education.
- PIER technology, including XML markup and use of tagging systems, including the College’s own Clinical Content Map, will enable complete integration of ACP and other content into PIER. This will facilitate seamless focused search and browsing capabilities to access still more information for patient care and educational purposes.

APPENDIX B—Wagner Chronic Care Model

“Promoting effective change in provider groups to support evidence-based clinical and quality improvement across a wide variety of health care settings.”

OVERVIEW OF THE CHRONIC CARE MODEL



COMPONENTS OF THE CHRONIC CARE MODEL

1. The Community—Resources and Policies

Mobilize community resources to meet needs of patients

- Encourage patients to participate in effective community programs
- Form partnerships with community organizations to support and develop interventions that fill gaps in needed services
- **Advocate for policies to improve patient care (2003 refinement)**

By looking outside of itself, the health care system can enhance care for its patients and avoid duplicating effort. Community programs can support or expand a health system's care for chronically ill patients, but systems often don't make the most of such resources. A health system might form a partnership with a local senior center that provides exercise classes as an option for elderly patients. State departments of health and other agencies often have a wealth of helpful material available for the asking – wallet cards with tips for controlling diabetes, for example. National patient organizations such as the American Diabetes Association can help by promoting self-help strategies.

Local and state health policies, insurance benefits, civil rights laws for persons with disabilities, and other health-related regulations also play a critical role in chronic illness care. Advocacy by medical organizations on behalf of their patients can make a difference.

2. Health System—Organization of Health Care

Create a culture, organization and mechanisms that promote safe, high quality care

- Visibly support improvement at all levels of the organization, beginning with the senior leader
- Promote effective improvement strategies aimed at comprehensive system change
- **Encourage open and systematic handling of errors and quality problems to improve care (2003 refinement)**
- Provide incentives based on quality of care
- **Develop agreements that facilitate care coordination within and across organizations (2003 refinement)**

A system seeking to improve chronic illness care must be motivated and prepared for change throughout the organization. Senior leadership must identify care improvement as important work, and translate it into clear improvement goals and policies that are addressed through application of effective improvement strategies, including use of incentives, that encourage comprehensive system change. Effective organizations try to prevent errors and care problems by reporting and studying mistakes and making appropriate changes to their systems. Breakdowns in communication and care coordination can be prevented through agreements that facilitate communication and data-sharing as patients navigate across settings and providers.

3. Self-Management Support

Empower and prepare patients to manage their health and health care

- Emphasize the patient's central role in managing their health
- Use effective self-management support strategies that include assessment, goal-setting, action planning, problem-solving and follow-up
- Organize internal and community resources to provide ongoing self-management support to patients

All patients with chronic illness make decisions and engage in behaviors that affect their health (self-management). Disease control and outcomes depend to a significant degree on the effectiveness of self-management.

But effective self-management support means more than telling patients what to do. It means acknowledging the patients' central role in their care, one that fosters a sense of responsibility for their own health. It includes the use of proven programs that provide basic information, emotional support, and strategies for living with chronic illness. But self-management support can't begin and end with a class. Using a collaborative approach, providers and patients work together to define problems, set priorities, establish goals, create treatment plans and solve problems along the way.

4. Delivery System Design

Assure the delivery of effective, efficient clinical care and self-management support

- Define roles and distribute tasks among team members
- Use planned interactions to support evidence-based care
- **Provide clinical case management services for complex patients (2003 refinement)**
- Ensure regular follow-up by the care team
- **Give care that patients understand and that fits with their cultural background (2003 refinement)**

Improving the health of people with chronic illness requires transforming a system that is essentially reactive – responding mainly when a person is sick – to one that is proactive and focused on keeping a person as healthy as possible. That requires not only determining what care is needed, but spelling out roles and tasks for ensuring the patient gets care using structured, planned interactions. And it requires making follow-up a part of standard procedure, so patients aren't left on their own once they leave the doctor's office. More complex patients may need more intensive management (care or case management) for a period of time to optimize clinic care and self-management. Health literacy and cultural sensitivity are two important emerging concepts in health care. Providers are increasingly being called upon to respond effectively to the diverse cultural and linguistic needs of patients.

5. Decision Support

Promote clinical care that is consistent with scientific evidence and patient preferences.

- Embed evidence-based guidelines into daily clinical practice
- Share evidence-based guidelines and information with patients to encourage their participation
- Use proven provider education methods
- Integrate specialist expertise and primary care

Treatment decisions need to be based on explicit, proven guidelines supported by clinical research. Guidelines should also be discussed with patients, so they can understand the principles behind their care. Those who make treatment decisions need ongoing training to stay up-to-date on the latest evidence, using new models of provider education that improve upon traditional “continuing medical education.” To change practice, guidelines must be integrated through timely reminders, feedback, standing orders and other methods that increase their visibility at the time that clinical decisions are made. The involvement of supportive specialists in the primary care of more complex patients is an emerging educational modality.

6. Clinical Information Systems

Organize patient and population data to facilitate efficient and effective care

- Provide timely reminders for providers and patients
- Identify relevant subpopulations for proactive care
- Facilitate individual patient care planning
- **Share information with patients and providers to coordinate care**
(2003 refinement)
- Monitor performance of practice team and care system

Effective chronic illness care is virtually impossible without information systems that assure ready access to key data on individual patients as well as populations of patients. A comprehensive clinical information system can enhance the care of individual patients by providing timely reminders about needed services and summarized data to track and plan care. At the practice population level, they identify groups of patients needing additional care as well as facilitate performance monitoring and quality improvement efforts.

7. The Patient Level

When informed patients take an active role in managing their health and providers feel prepared and supported with time and resources, their interaction is likely to be much more productive. This interaction leads to better glycemic control for patients with diabetes, fewer emergency room visits for patients with asthma and reduced symptoms among those with depression. In short, it leads to healthier patients, more satisfied providers and lower costs.

“Productive interactions” between providers and patients need not be restricted to face-to-face visits, nor necessarily to one-on-one encounters. Self-management support using group visits and telephone follow-up are evidence-based examples of how a system might find new methods of making communication between patients and providers both more efficient and more useful to the patient.

APPENDIX C—MedPAC Summary of Medicare Chronic Care and Disease Management Demonstration Programs Prior to the Medicare Modernization Act of 2003

Title and Dates	Payment	Goals	Target Population
Medicare coordinated care demonstration (BBA, 1997) 2/2001 – 6/2006	Test models of coordinated care to improve quality of services and manage Medicare expenditures.	Controlled trial design for 14,500 beneficiaries FFS with CHF, cardiac and other conditions at 15 sites.	All-inclusive monthly rate for coordinated care services.
Medicare disease management demonstration (2000) 11/2003 – 11/2006	Test disease management for beneficiaries with advanced-stage CHF, diabetes or CAD	Controlled trial design. Will enroll up to 30,000 beneficiaries in four states	All-inclusive monthly rate for disease (BIPA, management services and prescription drug costs. DMOs must accept performance risk.
Capitated disease management demonstration. Awards expected by summer 2004	Test capitated payments for case management of specific conditions. Contractors to provide all Medicare-covered services plus disease management services.	Enrollees must have a chronic disease such as stroke, CHF, or diabetes, or qualify as a dual eligible or frail elderly.	Full capitation with risk-sharing option. Payment greater of MA rate or 99 percent of risk-adjusted county FFS rate.
Physician group practice demonstration (BIPA, 2000) Not awarded yet, to run 3 years	Encourage coordination of care and investment in administrative structures among physician group practices	CMS will assign 250,000 beneficiaries to physician group practices based on where they receive evaluation and management services	Combines FFS payment with a bonus pool of savings from improved management of care.
Intensive case management 11/2001 – 11/2004	Test whether case management improves clinical outcomes, quality of life and satisfaction	Controlled trial design: 500 beneficiaries at one site. High-risk patients with CHF and diabetes.	All-inclusive monthly rate for coordinated care services.
ESRD managed care demonstration (OBRA, 1993) 2/1998 – 9/2001	Enroll ESRD patients in managed care settings. Health outcomes generally the same or better than in FFS Medicare. Provision of additional benefits such as prescription medicine found to be cost effective.	Demo enrolled 2,500 beneficiaries with ESRD at two sites.	Two M+C plans were paid 100 percent of risk-adjusted FFS spending.
ESRD disease management demonstration (OBRA, 1993) Not yet awarded, will run 4 years.	Three models: FFS (expanded bundle), health plan, and PACE-like plan (Interdisciplinary team).	Beneficiaries with ESRD.	FFS includes add-on for expanded bundle. Five percent of payment being withheld for quality incentive.
Social health maintenance organization demonstration (DEFRA, 1984) 1985-12/2004	Test S/HMO model MedPAC reviewed performance of S/HMOs and recommended they be converted to M+C plans.	Enrolled 122,000 frail beneficiaries in four plans.	Risk-adjusted MA county payment rate.

Source: MedPAC report to Congress, June 2004

APPENDIX D—Description of Doctors Office Quality—Information Technology (DOQ-IT) Demonstration Implementing Section 649 of the MMA

Section 649 — Medicare Care Management Performance Demonstration

The Secretary is required to conduct a three-year demonstration program where physicians will be paid to adopt and use health information technology and evidence-based outcome measures to promote continuity of care, stabilize medical conditions, prevent or minimize acute exacerbations of chronic conditions, and reduce adverse health outcomes. The statute limits the program to four sites meeting eligibility criteria. Payment can vary based on performance, however total payments must be budget neutral. Quality Improvement Organizations (QIOs) could help enroll physicians, evaluate their performance, and provide technical assistance. The Secretary is required to submit a Report to Congress with appropriate recommendations, not later than one year after projects conclude.

Section 649 is being implemented by CMS in four states as the “Doctors Office Quality—Information Technology (DOQ-IT) program—California, Utah, Arkansas, and Massachusetts. DOQ-IT is being administered locally by each state’s respective QIO, which will provide volunteering practices with technical assistance on practice redesign and adoption of electronic health records and health information technology. Lumetra, the lead QIO for the DOQ-IT program, describes the project as follows:

Doctors’ Office Quality Information Technology (DOQ-IT) promotes the adoption of electronic health record (EHR) systems and information technology (IT) in small-to-medium sized physician offices with a vision of enhancing access to patient information, decision support, and reference data, as well as improving patient-clinician communications.

The DOQ-IT project offers an integrated approach to improving care for Medicare beneficiaries in the areas of diabetes, heart failure, coronary artery disease, hypertension, osteoarthritis, and preventive care.

By educating physician offices on EHR system solutions and alternatives, as well as providing implementation and quality improvement assistance, we aim to assist physician offices in migrating easily from paper-based health records to EHR systems that suit the needs of their office. DOQ-IT does not endorse any particular vendor product or service.

Physician performance data collection, analysis, and feedback will be performed by the Iowa QIO. Participating practices will be required to report physician performance data on the above conditions, in exchange for which they will receive a monthly financial payment for each eligible patient. ACP’s California chapter is already actively participating in the state’s DOQ-IT program which is being administered by the California QIO, Lumetra.

APPENDIX E—ACP References Pertaining to Adoption of Health Information Technology, Interoperability of Electronic Healthcare Information, Electronic Prescribing, Physician Performance Measurement, and Chronic Care Improvement

1. ACP Testimony, Letters, and Policy Papers Related to Health Information Technology, including Interoperability and Electronic Prescribing

All available at: http://www.acponline.org/hpp/menu/med_tech.htm

- Statement of the American College of Physicians on Health Information Technology: Improving Quality and Value of Patient Care to the House Committee On Energy and Commerce Subcommittee on Health (22-Jul-04)
- ACP Makes Recommendations to Congress on E-prescribing, Statement for the Ways and Means Health Subcommittee Hearing on Electronic Prescribing (22-July-04)
- ACP Makes Recommendations to Congress on Incentives to Promote Health Information Technology, Statement for the Record of the House Ways and Means Health Subcommittee Hearing on Health Care Information Technology (17-July-04)
- ACP Recommendations to CMS on Implementing its Doctors' Office Quality-Information Technology Demonstration Program (7-July-04)
- ACP Testimony on Electronic Prescribing Standards to the National Committee on Vital and Health Statistics Subcommittee on Standards and Security (May 2004)
- Enhancing the Quality of Patient Care Through Interoperable Exchange of Electronic Healthcare Information (April 2004)
- The Paperless Medical Office: Digital Technology's Potential for the Internist (March 2004)
- The Changing Face of Ambulatory Medicine—Reimbursing Physicians for Computer-Based Care (March 2003)

2. ACP Policy Paper on “The Use of Performance Measurements to Improve Physician Quality of Care”

Available at: http://www.acponline.org/hpp/performance_measure.pdf

3. ACP Letter and Testimony on the Medicare Chronic Care Improvement Program (CCIP)

a. Letter to CMS on the CCIP—Available at:
http://www.acponline.org/hpp/cms_letter.pdf (June 2004)

b. Written Testimony on the CCIP to the Subcommittee on Health, House Ways and Means Committee—Available at:
http://www.acponline.org/hpp/cms_cc.pdf



Product #500700140