The New Model of Primary Care:

Knowledge Bought Dearly

Official Policy of the American Academy of Family Physicians
Acknowledgement
This document reflects a synthesis of the literature and new analyses done by the Robert Graham Center: Policy Studies in Family Medicine and Primary Care to support a variety of policy options that could advance the ability of primary care practices to deliver on their potential for health and healthcare in America. The paper and specific policy recommendations were adopted by the AAFP Board of Directors as Academy policy on March 12, 2004. We wish to acknowledge the efforts of the original paper authors:

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The transformation of frontline medical practice from the industrial models of the past two centuries to the new models of the information age is underway. The aims of health care and the general strategies necessary to achieve them have been clearly articulated by the U.S. Institute of Medicine (IOM) and embraced by many of the health professions, specifically family medicine. We know that primary care is underperforming and not meeting the needs of most Americans. The new model of practice envisioned by family physicians is an intelligent practice, delivering a reliable basket of services to people of all ages and both genders, depending on systems of care enabled by information technologies. Possibly for the first time, the ambitious aspirations of family medicine and the other primary care fields are actually achievable in day-to-day practice in communities across America. This transformation is still based on a strong, ongoing doctor-patient relationship and scientific evidence, but enabled by a fundamental redesign. It cannot be a tweaking of old practice. Such a change would be expected to require other changes in the overall health care system, widely perceived to be failing to achieve important health objectives, such as improved care for people with chronic diseases and full implementation of proven health promotion and disease prevention strategies. Among the necessary changes is the way family physicians are paid.

The current payment system rewards doing more things as often as possible and punishes spending time with patients to understand them in their particular situations. There is almost no compensation for assuring care is organized correctly and integrated in a way that makes sense to patients. In fact, proven models of care organization have lain fallow for lack of financial and technical support. This is the case with successful efforts like those at Lovelace Health Systems in New Mexico and an innovative community health center, both of which were chronic care model pioneers. Medicare, among other healthcare financers, has a robust mechanism for proposing financing of new interventional technologies and medications, but no clear path for proposing funding for new care processes or evidence-based redesign. There are no advocacy armies dedicated to making the economic case for changing primary care functions or technology. It is no surprise then, that despite decades of annual increases in overall health care expenditures, a vast majority of expenditures occur in sectors other than primary care. Consequently, there is insufficient revenue in family medicine and primary care to cover costs, attract medical students into the field, and capitalize the additional costs of transformation—specifically the costs of new roles in practice and sufficient information systems. A new approach to financing family medicine is necessary.

The urgency to transform the design, delivery, and financing of family medicine converges well with interest in more broadly implementing a model of chronic care that demonstrates improved quality and cost-effectiveness. The international Cochrane Collaboration, and subsequently, Bodenheimer and colleagues, have provided strong evidence that the Chronic Care Model, as articulated by Dr. Ed Wagner, does produce both. The six components of this model—self-management, decision support, delivery system design, clinical information systems, health care organizations, and community resources—have been tested in more than 39 studies and demonstrated their value. Bodenheimer et al. suggest that the implementation of the chronic care model can reduce unnecessary specialty referrals and lead to increased patient satisfaction. These components are not specific to chronic care though, they are generally applicable to the needed redesign of primary care for all people. Most of these components could fit within the context of primary care and its interfaces with community and public health, but are not currently financed in a way that supports their inclusion. So, how can primary care be financed to enable the achievement of important objectives, such as caring for all Medicare people with chronic diseases?

A blended model of payment is a promising option. Bodenheimer et al. suggest that through blended payments Medicare, specifically, could...
best make the business case to primary care for taking on chronic care management by paying for chronic care start-up costs (including IT); reimbursing nonphysician personnel provision of chronic care services; and paying for performance through reimbursement enhancements. Others have made similar recommendations to Medicare for blended payments that support additional coordination responsibilities, electronic communication and documentation, and community-based care, as well.5

Nearly a decade ago the Institute of Medicine went on record as saying that fee-for-service payments do not favor primary care services and that alternative payment options were needed.6 Recognizing the improbability of overhauling the financing system, they suggested partial capitation combined with fee for service; that is, a per-member fee in addition to payments for services. The basic ingredients of a blended model could be a capitation fee based on numbers of patients served designed to support the components needed to redesign primary care as suggested by the Chronic Care Model.3 Until such a comprehensive revision can be made, it is possible that the creation and implementation of an additional fee in existing payment systems could help bridge old and new model practice. A specific option could be a patient management fee intended to reward the integrative function that family medicine and primary care more generally are known to fill in effective, sustainable health care systems.

The following items reveal a buffet of rationales for a chronic care patient management fee. Most of these rationales are based on evidence derived from national data sets collected at the direction of the US Congress expressly to guide such policy development.
I. The Special Relationship That People Have With Primary Care And Family Physicians

A. The ecology of medical care confirms, for more than 40 years and despite major changes in health care, the physician’s office as the single largest platform of formal health care and that the majority of visits to the doctor’s office are to primary care physicians, with family physicians being the dominant medical specialty (Figure 1). For Medicare-eligible patients the number of visits to all settings increases (compared to younger people), but outpatient care remains ten to twenty times larger than hospitalizations in an average month (Table 1). These population-based patterns appears to be grounded in something fundamental about human beings given its sustainability over time despite major changes in healthcare financing, technology and workforce. The ecology model also shows the complex interactions across other care settings that require coordination and integration by someone, logically the physician considered by a patient to be his/her “main” doctor. It now matters a great deal that the right care be delivered in the right place at the right time, and that someone, such as a personal physician who knows and cares for particular individuals help navigate the dangerous interfaces of care. Assuring such care is a complex, highly intellectual function of great value, worthy of physicians.

Figure 1. The Ecology of Medical Care, 1996

- 1000 persons
- 800 report symptoms
- 327 consider seeking medical care
- 217 visit a physician’s office
- (113 visit a primary care physician’s office)
- 65 visit a complementary or alternative medical care provider
- 21 visit a hospital outpatient clinic
- 14 receive home health care
- 13 visit an emergency department
- 8 are hospitalized
- <1 is hospitalized in an academic medical center
Table 1. Estimates for Number of Older Adults/1000 Participating in Health Care in a Typical Month, for Medicare-eligible Patients (SE Mean)*

<table>
<thead>
<tr>
<th>Demographic Characteristic</th>
<th>Physician's Office</th>
<th>Outpatient Clinic</th>
<th>Emergency Department</th>
<th>Home Health Care Services</th>
<th>Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-74</td>
<td>363.9 (9.0)</td>
<td>52.6 (3.2)</td>
<td>11.5 (0.9)</td>
<td>32.8 (3.7)</td>
<td>15.3 (1.2)</td>
</tr>
<tr>
<td>75-84</td>
<td>416.6 (11.3)</td>
<td>54.2 (4.5)</td>
<td>15.2 (1.5)</td>
<td>98.8 (8.7)</td>
<td>25.9 (2.1)</td>
</tr>
<tr>
<td>85+</td>
<td>384.3 (22.7)</td>
<td>25.1 (4.5)</td>
<td>25.8 (3.9)</td>
<td>245 (31.0)</td>
<td>28.6 (5.1)</td>
</tr>
<tr>
<td>65+</td>
<td>384.1 (7.4)</td>
<td>50.9 (2.6)</td>
<td>14.0 (0.8)</td>
<td>73.7 (4.6)</td>
<td>20.1 (1.1)</td>
</tr>
</tbody>
</table>

Source: Medical Expenditure Panel Survey, National Health Interview Survey, Hospice data

B. Family physicians and other primary care physicians provide a disproportionately large amount of care. Primary care physicians not only take care of more individuals than specialists, despite comprising less than one-third of the physician workforce, they also take care of many people who never see anyone else (Figure 2). 9 To clarify, the IOM focuses its definition of primary care on general internists, general pediatricians and family physicians.10 Primary care physicians cared for 67 percent of all American adults (138,386,031), and 80 percent of all American children (57,986,158) in 2002 (weighted 2002 National Health Interview Survey analysis). Only 27 percent of American adults (53,631,633), and 13 percent of American children (9,638,254) saw a subspecialist. Meaning, in 2002, 48 percent, or nearly half of Americans received care without seeing a subspecialist. Americans with chronic disease are no exception. Many more people with chronic diseases see a subspecialist, however many more also see a primary care physician (Table 2).

Figure 2. Number of Office Visits Compared to Number of Office-based Physicians From 1980-1999

Source: The National Ambulatory Medical Care Surveys 1980-1999
<table>
<thead>
<tr>
<th>Chronic Health Condition</th>
<th>Have Seen a Primary Care Physician last 12 Months</th>
<th>Have Seen a Subspecialist Physician last 12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (% with condition)</td>
<td>N (% with condition)</td>
</tr>
<tr>
<td>Hypertension</td>
<td>33,789,664 (88%)</td>
<td>16,539,514 (43%)</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>4,486,817 (88%)</td>
<td>3,833,819 (75%)</td>
</tr>
<tr>
<td>Emphysema</td>
<td>2,369,158 (90%)</td>
<td>1,454,591 (55%)</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>1,987,625 (88%)</td>
<td>1,668,538 (74%)</td>
</tr>
<tr>
<td>Asthma</td>
<td>11,071,335 (80%)</td>
<td>5,193,898 (38%)</td>
</tr>
<tr>
<td>Multiple Sclerosis</td>
<td>474,150 (77%)</td>
<td>355,982 (58%)</td>
</tr>
<tr>
<td>Parkinson’s Disease</td>
<td>523,109 (90%)</td>
<td>410,398 (71%)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>11,617,388 (88%)</td>
<td>6,666,585 (50%)</td>
</tr>
<tr>
<td>Glaucoma</td>
<td>2,946,033 (87%)</td>
<td>1,541,678 (46%)</td>
</tr>
<tr>
<td>Macular Degeneration</td>
<td>1,810,840 (90%)</td>
<td>1,096,944 (55%)</td>
</tr>
<tr>
<td>Dementia/Alzheimer’s</td>
<td>425,781 (95%)</td>
<td>222,349 (50%)</td>
</tr>
<tr>
<td>Depression or Anxiety (identified by participant)</td>
<td>3,229,894 (81%)</td>
<td>1,702,103 (43%)</td>
</tr>
<tr>
<td>Arthritis</td>
<td>17,449,184 (86%)</td>
<td>9,866,450 (49%)</td>
</tr>
</tbody>
</table>

Source: 2002 National Health Interview Survey
C. Having a usual source of care is extremely influential in the care people receive. In fact, having a usual source of care, independent of other factors such as health insurance, is associated with a greater likelihood that people receive care in physician offices, hospital outpatient departments, hospitals, emergency departments, and in their own homes. This is true for children and adults. People who have a usual source of care are also more likely to receive preventive care services, independent of having insurance. More individuals who say they have a person, rather than a place, as their usual source of care say it is a family physician; this holds true for people with chronic conditions (Figure 3) and for Medicare-eligible Americans (Figure 4).

Figure 3. Family Physicians as Usual Source of Care for People with Chronic Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>56%</td>
</tr>
<tr>
<td>Stroke</td>
<td>56%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>63%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>67%</td>
</tr>
<tr>
<td>Cancer</td>
<td>60%</td>
</tr>
<tr>
<td>Emphysema/Chronic Bronchitis</td>
<td>62%</td>
</tr>
<tr>
<td>Asthma</td>
<td>58%</td>
</tr>
<tr>
<td>Anxiety/Depression</td>
<td>62%</td>
</tr>
</tbody>
</table>

Figure 4. Family Physicians are the Main Source of Primary Health Care for the Medicare Population
D. People want a regular doctor who they know and trust. People who become patients value relationship above all else, even tolerating poor service and considerable inconvenience to sustain relationships with their doctor. One study, in fact, found that of people who choose to enroll in and pay extra for health plans that allowed self-referral, more than half exercised this option to see a primary care physician—the implication being that they did so to retain their relationships with their regular doctor in a system permitting or promoting fragmentation instead of integration. The value of continuous patient-physician relationships is not only related to patient's perceptions, but to the quality of care they receive as well. The ability of primary care to create sustained clinician-patient partnerships and providing whole-person oriented care is already eroding according to Medicare beneficiaries. Without financing that specifically supports the integration care for people with chronic diseases into primary care, and that supports sustained integrative relationships, patients' experiences in the fragmented healthcare system are likely to grow worse, particularly for people with multiple conditions (Figure 5). For these millions of patients with chronic diseases, disintegration of their care is not good news.

Figure 5*

* Figure from Partnership for Solutions

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II. U.S. and International Evidence About the Importance of Having a Primary Care Physician

A. The salutary effects of primary care for people are established. More than two decades of accumulated evidence reveal that having a primary care-based health system matters. People and countries with adequate access to primary care realize a number of health and economic benefits18, including:

1. Evidence of Effectiveness
   • Reduced all-cause mortality and mortality due to cardiovascular and pulmonary diseases19
   • Less emergency department and hospital use20,21
   • Better preventive care22,23
   • Better detection of breast cancer, and reduced incidence and mortality due to colon and cervical cancer24-26

2. Evidence of Efficiency
   • Fewer tests, higher patient satisfaction, lower medication use, and less care-related costs27,28

3. Evidence of Equity
   • Reduced health disparities, particularly for areas with the highest income inequality, including improved vision, more complete immunization, better blood pressure control, and better oral health29-31

B. Learning From Abroad
   1. The poor performance of U.S. health care vs. other nations is directly associated with measurements of primary care, despite the highest per capita healthcare expenditures of any developed country (Figures 6 and 7).32-34

Figure 6. Primary-care Score Ranking vs. "Outcome" Indicators (rank 1 is best, rank 12 worst)

*Rank based on patient satisfaction, expenditures per person, 14 health indicators, and medications per person in Australia, Belgium, Canada, Denmark, Finland, Germany, Netherlands, Spain, Sweden, United Kingdom, United States
2. The U.K. lacks a coherent chronic care model or policy but they are modelling many of the functions described in the Chronic Care Model, particularly paying for IT and functions within primary care for patients with chronic diseases, including:

- Funding 100 percent of primary care computing including IT support
- Supporting integrated healthcare records that will allow patient information to be shared by all care providers
- Creating disease management templates for primary care information systems
- Providing training for primary care staff on use of information systems
- Creating regional disease and patient registries to permit extraction and analyses of patient care data
- Creating chronic care related quality measures and provided financial incentives for meeting them
- Piloting new practice arrangements that build primary healthcare teams for chronic care (advanced nurse specialists, primary care physicians with special interests, skilled pharmacists) and financing up to 70 percent of some of these staff within clinics
- Piloting new practice arrangements that provide better alignment between primary care and specialty care services.

Ed Wagner recently suggested that the U.K. National Health Service push to improve chronic care is on the right track, and is likely to have much to teach the United States.
III. The Current and Coming Burden of Chronic Disease

Caring for Americans with chronic conditions is not the only reason to develop new payment systems for primary care, but it is a compelling reason. This group is large, growing rapidly with the aging of the Baby Boom generation, and generates the overwhelming majority of health care costs.

A. Americans and Chronic Conditions

Nearly half of the U.S. population, 125 million people in 2000, had a chronic condition. About 60 million had multiple conditions, and over three million had more than five. By 2025, 164 million people are projected to have chronic conditions. In 1996, having one chronic health condition more than doubled average yearly health care costs, and health care spending for people with five or more conditions is six times that of those with just one (Figure 8).

Figure 8*

![Figure 8: Health Care Spending by Number of Chronic Conditions](image)

* Figure from Partnership for Solutions

B. Medicare Beneficiaries with Chronic Conditions

More than 80 percent of Medicare beneficiaries have one chronic condition and nearly two-thirds have two or more. Less than 20 percent of Medicare beneficiaries have five or more chronic conditions (Figure 9) yet, on average, they have 14 doctors, fill 50 prescriptions per year, and account for more than two-thirds of Medicare spending (Figure 10).
Figure 9*

Percent of People with Medicare by Number of Chronic Conditions

Source: Medicare Standard Analytic File, 1999

* Figure from Partnership for Solutions

Figure 10*

Percent of Medicare Spending by Number of Chronic Conditions

Source: Medicare Standard Analytic File, 1999

* Figure from Partnership for Solutions
IV. Potential To Improve Outcomes and Lower Costs For People With Chronic Disease

A. For people with chronic health conditions, there are reductions in expenditures with no significant differences in self-rated health status when people have a family physician as their usual source of care (2000 Medical Expenditure Panel Survey). For example, if the 21 million people with hypertension had a family physician or general physician as their usual source of care, it could save as much as $14.5 billion per year (Table 3). Patients with a primary care physicians as their personal physician have been shown to have reduced mortality and reduced expenditures when compared to specialists serving as usual source of care.42-43

B. Several studies have confirmed improved coordination of care and reduced expenditures by providing people with a primary care physician as a usual source of care. For example, in Colorado a study of costs and utilization comparing Medicaid enrollees with a primary care provider to those without found a slight increase in expenditures for physician services that was more than offset by decreases in inpatient and emergency department expenditures. Overall, there was a 15 percent decrease in costs for the group enrolled in the primary care physician program as compared to usual costs in the Medicaid program in which patients did not have access to a usual primary care physician.44 A study in Florida found that children with asthma but no primary care physician had reduced utilization in nearly every setting over the next two years and cost savings of nearly $2500/patient/year when they were assigned a primary care physician.45 Many studies in which interventions to increase primary care involvement or for which increasing use of primary care was measured for patients with chronic disease, have yielded cost savings, decreased utilization of urgent or emergency settings, increased satisfaction, and better preventative care.46-48 In fact, Bodenheimer et al. found that 18 of 27 studies concerning just three chronic conditions (congestive heart failure, asthma and diabetes) demonstrated reduced costs or lower use of health care services when the chronic care model was fully implemented, almost exclusively in primary care settings.3
## Table 3. Expenditures Associated with Usual Source of Care for Chronic Diseases

<table>
<thead>
<tr>
<th>Chronic Health Condition</th>
<th>#With FP/GP USC</th>
<th>Cost per person per year**</th>
<th>#With GIM USC</th>
<th>Cost per person per year</th>
<th>#With “other” USC</th>
<th>Cost per person per year</th>
<th>Difference</th>
<th>Potential Total Savings †</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension (Essential)</td>
<td>46,012,609</td>
<td>$4,964</td>
<td>21,135,883</td>
<td>$5,653</td>
<td>4,413,915</td>
<td>$7,367</td>
<td>$689</td>
<td>$14,559,694,586</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>3,011,869</td>
<td>$9,323</td>
<td>1,766,242</td>
<td>$10,885</td>
<td>447,149</td>
<td>$8,536</td>
<td>$1,562</td>
<td>$2,758,352,672</td>
</tr>
<tr>
<td>COPD/Emphysema</td>
<td>14,299,472</td>
<td>$4,288</td>
<td>4,552,614</td>
<td>$5,804</td>
<td>841,678</td>
<td>$6,719</td>
<td>$1,516</td>
<td>$6,922,767,131</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>1,652,290</td>
<td>$17,120</td>
<td>786,553</td>
<td>$18,320</td>
<td>408,922</td>
<td>$21,221</td>
<td>$1,199</td>
<td>$943,357,139</td>
</tr>
<tr>
<td>Asthma</td>
<td>8,858,387</td>
<td>$5,121</td>
<td>3,138,834</td>
<td>$6,742</td>
<td>735,287</td>
<td>$5,525</td>
<td>$1,621</td>
<td>$5,083,016,642</td>
</tr>
<tr>
<td>Multiple Sclerosis</td>
<td>313,823</td>
<td>$6,727</td>
<td>256,982</td>
<td>$7,105</td>
<td>100,428</td>
<td>$3,229</td>
<td>$379</td>
<td>$96,006,645</td>
</tr>
<tr>
<td>Parkinson’s Disease</td>
<td>529,984</td>
<td>$8,976</td>
<td>281,177</td>
<td>$21,323</td>
<td>86,962</td>
<td>$11,565</td>
<td>$12,347</td>
<td>$3,471,620,663</td>
</tr>
<tr>
<td>Diabetes (No Complications)</td>
<td>16,781,086</td>
<td>$6,960</td>
<td>7,036,742</td>
<td>$7,392</td>
<td>2,012,240</td>
<td>$9,572</td>
<td>$432</td>
<td>$3,040,106,888</td>
</tr>
<tr>
<td>Diabetes (With Complications)</td>
<td>535,759</td>
<td>$7,069</td>
<td>292,920</td>
<td>$15,804</td>
<td>91,178</td>
<td>$9,170</td>
<td>$8,755</td>
<td>$2,554,458,477</td>
</tr>
<tr>
<td>Glaucoma</td>
<td>4,696,982</td>
<td>$5,592</td>
<td>2,666,433</td>
<td>$6,218</td>
<td>418,132</td>
<td>$4,049</td>
<td>$626</td>
<td>$1,657,863,248</td>
</tr>
<tr>
<td>Blindness/Vision Defects</td>
<td>6,540,761</td>
<td>$3,780</td>
<td>2,707,381</td>
<td>$5,403</td>
<td>922,147</td>
<td>$7,127</td>
<td>$1,630</td>
<td>$4,411,905,301</td>
</tr>
<tr>
<td>Senility/Organic Mental Disorders</td>
<td>2,187,206</td>
<td>$11,338</td>
<td>866,820</td>
<td>$8,798</td>
<td>251,922</td>
<td>$7,119</td>
<td>-2,540</td>
<td>-$2,201,992,468</td>
</tr>
<tr>
<td>Affective Disorders</td>
<td>1,978,444</td>
<td>$4,210</td>
<td>603,652</td>
<td>$7,399</td>
<td>156,262</td>
<td>$5,703</td>
<td>$3,189</td>
<td>$1,984,899,963</td>
</tr>
<tr>
<td>Anxiety/Somatiform</td>
<td>12,394,747</td>
<td>$3,763</td>
<td>4,827,346</td>
<td>$6,550</td>
<td>1,010,891</td>
<td>$10,038</td>
<td>$2,786</td>
<td>$13,451,065,094</td>
</tr>
<tr>
<td>Rheumatoid Arthritis</td>
<td>1,768,936</td>
<td>$5,818</td>
<td>877,964</td>
<td>$6,807</td>
<td>361,864</td>
<td>$13,877</td>
<td>$989</td>
<td>$868,143,885</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>2,113,541</td>
<td>$8,635</td>
<td>1,385,984</td>
<td>$8,168</td>
<td>280,956</td>
<td>$9,918</td>
<td>-468</td>
<td>-$648,231,765</td>
</tr>
</tbody>
</table>

Source: 2000 Medical Expenditure Panel Survey
* Other will mostly be subspecialists; not facility, not surgery, not NP/PA, not Peds, not OB Gyn
** Mean Cost per Person per Year
† Difference ($) x GIM patients
V. Disturbing Primary Care Workforce Trends

A. Primary care physicians are compensated at a relatively low level for physicians. Primary care physicians work hard, but their compensation is not correlated to their work effort when compared to physicians in other specialties (Table 4). This disparity contributes to student disinterest in primary care specialties.

Table 4. Average Visits per Week and Annual Income for Select Physician Specialties

<table>
<thead>
<tr>
<th>Specialist</th>
<th>Average number of patient visits per week, 1999</th>
<th>Net income after expenses, before taxes, 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Physician</td>
<td>122.9</td>
<td>$144,700</td>
</tr>
<tr>
<td>General Pediatrician</td>
<td>120.5</td>
<td>$137,800</td>
</tr>
<tr>
<td>General Internist</td>
<td>106.5</td>
<td>$164,100</td>
</tr>
<tr>
<td>Gastroenterologist</td>
<td>89.9</td>
<td>$299,200</td>
</tr>
<tr>
<td>Cardiologist</td>
<td>92.4</td>
<td>$315,500</td>
</tr>
<tr>
<td>Orthopedic Surgeon</td>
<td>114.3</td>
<td>$335,800</td>
</tr>
</tbody>
</table>

The relatively poor compensation of family physicians and other primary care physicians is accompanied by declining student interest in entering the field, with major implications for the sustainability of health care systems (Figure 11).\textsuperscript{49} Physician workforce mix is likely to have a cyclical response to market forces, however the disparities in physician income, in prestige, and in other factors shown to affect students’ choice of specialty have grown. Despite cycles, the sustained result of these disparities is a steady growth of the subspecialist population relative to that of primary care (Figure 12).\textsuperscript{50-52}

Figure 11. Primary Care Positions Filled with U.S. Seniors in March 1996-2003

![Comparison of Primary Care Positions Filled with U.S. Seniors in March 1996 – 2003](image)

Figure 12. Relative Growth of the Physician Workforce 1980-1999

![Number of office-based physicians per 1,000 people in the United States](image)

VI. Case Management Fee Recommendations

This buffet of rationales reveals a real opportunity to improve the quality and cost-effectiveness of healthcare by developing payment options that improve the delivery of adequate primary care. There is a real convergence of two important events that may make this politically palatable: 1) The number of people with multiple chronic conditions is growing, and with them the costs of the healthcare system; 2) The AAFP is completing an objective analysis of the needed redesign of primary care to meet the needs and expectations of most people in the United States. This latter process will produce evidence and direction for retooling primary care and what that will cost. These two opportunities should overlap and include new ways of paying for and otherwise supporting the care delivered by family physicians and their teams. It should be understood that this effort is not just about caring for people with chronic conditions, and that new payments or fees would also enhance general care, health promotion, and disease prevention functions of primary care for all patients.

A. What Care to Purchase?

1. Community Resources—Family physicians and their offices will need links with a variety of community resources, including:
   - exercise programs
   - senior centers
   - social services
   - home health
   - patient support groups
   - disabled transport programs

Primary care physicians do currently interact with community resources on behalf of patients, but these interactions are not supported by any funding mechanism. A patient management fee could include a specific component to support physicians and their offices in having more of a role in developing or advising these programs to ensure that patients have access to them.

2. Self-Management Support — Primary care physicians will also need to identify links or create resources for patients to improve their self-management skills, perhaps even in a way that allows them to use their own health data interactively with web-based tools. The provision of patient self-management resources by physicians and their offices is even less common for the same reason. Primary care currently cannot afford significant involvement in developing patient self-management tools, and most clinical entities lack the capacity even if they had funding. New funding could support:
   - Office IT systems that permit patient access to records.
   - Office IT systems that allow patients to report home blood pressures, blood glucose levels, daily exercise, medication schedules directly to their healthcare records and physician.
   - Office developed websites or links to approved sites for patient support groups.
   - Email access to the physician's office regarding self-management issues.

A patient management fee could have an explicit component for office IT that performs these functions. A portion of such a fee or, perhaps a separate funding stream, could go to supporting local or virtual self-management tools that were approved by physicians for their patients.

3. Health Care Organization—Whether this is a real structure, such as an integrated delivery network model, or a virtual one of providers and purchasers, quality care must be a priority across functions and efforts. Improving the quality of care should be explicit in goals, in leadership, in the business plan, and in the rewards. The evidence from efforts like this in chronic care indicate that organizations can increase revenue or decrease expenses even as they improve quality. Medical errors research reveals that patients suffer from harms generated by poor communication and poor patient data exchange between providers (two Graham Center studies in press).

Improvements in these two key areas will prevent many harmful errors, but will require external support. Payors, like Medicare, are part of this “organization” and will share in these yields if they pay for it to happen and reward it. Specific options could include:
   - Collaboratives that can receive patient data or error reports, analyze quality of care, provide feedback, generate peer-comparisons, and offer quality improvement recommendations to providers and clinics.
• Office IT systems and/or patient continuity care record standards that permit better communication between provider offices.
• Supportive functions by existing CMS Quality Improvement Organizations (QIOs) or new structures that can consult with practices about incorporating new technologies, improving team functions, developing a culture of quality, and implementing other quality improvement efforts.

A patient management fee would have an “office technology” component that supported IT, quality collaborative participation, and on-site consulting. Some separate funding, not paid to practices, will likely be needed to maintain the “super-structures” that can accept data from multiple practices, analyze them, and provide feedback.

4. Delivery System Design—Family medicine practices will need to be redesigned to effectively provide chronic care management. Practice teams will need to be developed with members who have clear roles separate from acute care. These roles will support patient self-management, support group visits, help integrate care in other settings, extend or at least link into community and public health, and ensure that patients receive routine periodic care. These roles and staff will likely have overlapping functions with what has been proposed for case management, but they will be integrated into the patient’s primary care home and not focus on single diseases. The Practice Management and Quality arms of the Academy understand much of this evidence and could assist in integrating them, perhaps via the Future of Family Medicine Project, into a coherent design and business plan. Specific options could include:
• A “minimum redesign” model that uses evidence to identify the functions, roles, technologies, configuration, and financing necessary to deliver what patients need from primary care (FFM Task Force 6 or its successor).
• Pilot sites that can be used to study and model best practice design; potentially organized into a research network.
• Support for professional organizations or another organizing platform that cuts across practice settings to be change agents for practices.
• QIOs acting like Agricultural Extension Agents could also be helpful at the practice level in helping practices incorporate redesign and overcome financial hurdles to change.

This part of a patient management fee could support and sustain practice redesign. Separate funding would likely be needed to support the other functions.

5. Decision Support—Imbedding evidence-based decision support tools in practices will be critical to ensuring that patients receive care appropriate for their conditions. This element includes guidelines, but at its best will include point-of-care evidence that draws on patients’ clinical data (and perhaps, one day, values) to guide decision-making. It will also include the capacity to consult with specialists without making formal referrals. And there is building evidence that adequately integrating decision support tools requires recurrent expert guidance and reinforcement as well as internal team development. Explicit funding will be critical to this element. The Academy’s Center for Health Information Technology is a logical lead for the future. There are good examples of this in the U.K. (National Institute for Clinical Excellence, http://www.nice.org.uk/) and New Zealand (Best Practice Advocacy Centre and PREDICT, http://www.enigma.co.nz/framed_index.cfm?function=services_decision). This is likely to need support within practice, within larger organizations, and within specific developmental centers. Some specific options include:
• Office IT systems that have integrated decision support tools that can draw information from patient records.
• Office IT systems and/or external capacity to analyze the patient registry to look for opportunities to improve care for groups of patients.
• Communication and funding capacity to do real-time consultations with specialists while patients are in the office (this option may also fall under an organization above).

A patient management fee could directly support all of these functions.
6. Clinical Information Systems—Most provider organizations lack adequate clinical information systems (22 percent had two or more elements of a comprehensive IT system) and primary care is even farther behind (only 17 percent had an EMR). Primary care information systems adequate to deliver on the chronic care model will need to hold medical records, permit communication broadly, and deliver decision support while caring for the patient. We are woefully behind many other developed nations in this capacity (see U.K. lessons above). The Academy has taken the lead with Doctor Office Quality Information Technology project, in collaboration with the Centers for Medicaid and Medicare Services, and the Continuity Care Record standard. This would be directly supported by a patient management fee.

B. How to Pay for it
It is quite likely that using a fee for service framework is necessary at least temporarily until a blended or alternatively superior idea can be implemented. Constrained by law and grounded in indemnity insurance principles and concerns about moral hazard means, traditional Medicare faces difficulty evolving to support new model practice. However, because Medicare is so overwhelming in coherence, size and association with older patients with growing burden of morbidity, there is no other obvious leader for supporting improvements in primary care. Medicare and other payers could take immediate steps in the current payment systems, e.g. increase payment for office visits, pay a fee to particular physicians to accept responsibility for managing the care of a patient (this could be modelled directly from the primary care physician program from Medicaid), pay for additional services provided by others (e.g. a community health advisor) incident to physician care, pay for new or renewed services (e.g. IT support to monitor patient safety, audit practice performance, create registries and use them, revival of home visits for seniors and newborns, attendance at death). A side from a specific fee, Medicare could also provide more global support for some of the needed systems and superstructures mentioned above. For example, the Quality Improvement Organization functions of Medicare could adopt a role like the Agricultural Extension Agent and provide local IT and data management support to physician offices.

Summary
Because the integration of care is essential to people and the central function of family physicians, because the role of the usual source of care is so powerful, and because the opportunities to enhance healthcare are so large, immediate steps must be taken to assure this service to everyone. It is knowledge bought dearly, and an expense worth bearing. As a specific case and policy rationale, there is an opportunity to retool primary care to meet the healthcare needs of Americans. There are numerous cases of successful practice redesign that either disintegrated after research funding ended or that lost out to other financial priorities. A financial commitment from Medicare could sustain this superior care and lead other payors to follow suit. New investment in primary care should come in the form of a specific, capitated fee in addition to fee-for-service payments, and this fee should be drawn from new funding.

It is the policy of the American Academy of Family Physicians that the following strategies should be implemented:

1. The AAFP supports a patient management fee that is capitated (per-member-per-month) in addition to fee for service payments for any physician whom a patient designates as their personal physician. This fee would be paid to the physician to support the following types of functions and technology necessary in the primary care practice: tracking and monitoring all aspects of patients' care; acting as referral agent; coordinating clinical reports from others involved in patients' care; maintaining a robust (preferably electronic) medical record; providing greater time to care as needed; and having appropriate staff and administrative capabilities.

(Note: This would be evidence driven and could become a platform for payment update advocacy before the PPAC and CMS, just as other specialties promote payment adjustments for technology advancements.)
2. The AAFP supports a **chronic care management fee** that is capitated (per-member-per-month) in addition to fee-for-service payments. This fee would be paid to the physician to support the following types of functions and technology necessary in the primary care practice: tracking and monitoring all aspects of patients’ care; acting as referral agent; coordinating clinical reports from others involved in patients’ care; maintaining a robust (preferably electronic) medical record; providing greater time to care as needed; and having appropriate staff and administrative capabilities.

(Note: This fee could be tied to quality outcomes and specifically support information systems designed to national patient safety standards and that automatically, transparently provide outcome assessments. This would be evidence driven and could become a platform for payment update advocacy before the PPAC and CMS, just as other specialties promote payment adjustments for technology advancements.)

3. The AAFP supports the position that **new fees for patient management and chronic care management** should be **new money allocated** to support new, needed functions and technology in primary care. This should not result in a reduction in existing utilization fees paid to primary care physicians.

4. The AAFP supports **funding streams, separate from management fees, that would specifically support** virtual organizations, patient self-management superstructures, pilot/research networks, and safety/quality data analysis and feedback functions.

(Note: Separating funding would prevent reduction in the management fees, dedicate support, and appear less self-serving.)
Reference List


