The National Residency Exchange: A Proposal to Restore Primary Care in an Age of Microspecialization

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Healthcare deficiencies in the United States have long been perpetuated by a shortage of primary care providers. A core purpose of the Patient Protection and Affordable Care Act (PPACA) is to provide health insurance for America’s approximately fifty million uninsured. Implementation of universal health insurance, however, does not mean sufficient healthcare access for all, since the supply of physicians does not and will not meet demand. For reasons reviewed in this Article, the current physician shortage mainly impacts primary care providers. This shortage is particularly troubling because increased provision of primary care relative to specialty care has been associated with improvement in health outcomes, disease prevention, cost effectiveness, and coordination of care. This Article highlights provisions in the PPACA that impact primary care physicians. Finally, this Article proposes the creation of a universal primary care loan repayment program and a national residency exchange designed to alleviate the U.S. primary care crisis by facilitating optimal distribution of resident physicians in each medical specialty based on community need.
I. INTRODUCTION

The failures of the U.S. healthcare system have been lamented for decades. In a revealing 2000 World Health Organization (WHO) report, the United States’s national health system ranked thirty-seventh worldwide in overall health system performance, just ahead of Slovenia and Cuba. The U.S. healthcare system managed to place so poorly notwithstanding the fact that the United States spends more dollars and the highest percentage of gross domestic product (GDP) of any nation on healthcare. The Centers for Medicare and Medicaid Services (CMS) reports that “[o]ur nation’s total health care bill (already $2.1 trillion in 2006) is expected to more than double by 2017 to an estimated $4.3 trillion. By 2017, our nation would be spending almost one of every five dollars on health care.”

The financial pressures on the U.S. healthcare system have led to several cycles of attempted solutions, followed by costly system abuses engendering further attempted solutions. The problems inherent in a fee-for-service reimbursement system, including the lack of quality control and the unbridled ability of providers to determine their own salary, were a significant factor in the rise of managed care organizations and the era of regulated healthcare expenditures. The passage of the Health Maintenance Organization Act of 1973 coincided with the beginning of the era of increasing specialization. While managed care allowed for cost containment in

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1 Cf. Barack Obama, U.S. President, Remarks at the Annual Conference of the American Medical Association (June 15, 2009) (transcript available at http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-to-the-Annual-Conference-of-the-American-Medical-Association/) (“[T]he other day, a friend of mine, Congressman Earl Blumenauer, handed me a magazine with a special issue titled, ‘The Crisis in American Medicine.’ One article notes ‘soaring charges.’ Another warns about the ‘volume of utilization of services.’ Another asks if we can find a ‘better way than fee-for-service for paying for medical care.’ It speaks to many of the challenges we face today. The thing is, this special issue was published by Harper’s Magazine in October of 1960 . . . .”).


5 MEDICARE PAYMENT ADVISORY COMM’N, REPORT TO THE CONGRESS: IMPROVING INCENTIVES IN THE MEDICARE PROGRAM, at xi (2009) (“[T]he health care delivery system we see today is not a true system: Care coordination is rare, specialist care is favored over primary care, and quality of care is often poor. . . . Medicare’s fee-for-service (FFS) payment systems reward more care—and more complex care—without regard to the quality or value of that care.”).


healthcare,\(^8\) it also resulted in greater infringement on doctors’ autonomy and livelihood. Doctors have responded in part by specializing to preserve medical demand and maintain financial independence.\(^9\) Since the 1970s, significant financial incentives have prompted a movement toward greater utilization of unprecedentedly expensive diagnostic tools, medicines, and surgical procedures, particularly by specialist physicians.\(^10\) Public health studies, however, have repeatedly shown that the lack of primary care physicians has significant negative effects on morbidity and mortality.\(^11\)

Major health system reforms should be adopted to revitalize primary care and achieve an optimal distribution of generalist and specialist physicians in the United States. A major goal of the Patient Protection and Affordable Care Act (PPACA)\(^12\) is to provide health insurance for America’s approximately fifty million uninsured.\(^13\) Importantly, however, provision of universal health insurance does not mean sufficient healthcare access for all, since the supply of physicians does not and will not meet demand.\(^14\) There is “wide agreement that the current U.S. primary care system is failing,” and “near-unanimity” that healthcare reform will require primary care revitalization.\(^15\)

The Accreditation Council on Graduate Medical Education (ACGME) reports that primary care “currently comprises 35% of all practicing physicians and is rapidly declining,” since less than twenty percent of U.S. medical students now enter into primary care fields.\(^16\) Many medical organizations recognize the need for


\(^13\) Initially, proposed bills envisioned a government-run insurance plan (the “public option”) that would compete with private insurance companies, in addition to a requirement that all Americans have health insurance. See America’s Affordable Health Choices Act of 2009, H.R. 3200, 111th Cong. (2009).

\(^14\) One example of this lack of healthcare access is the effect that universal healthcare legislation in Massachusetts had on primary care physician wait times. See Kevin Sack, *Universal Coverage Strains Massachusetts Care*, *N.Y. Times*, Apr. 5, 2008, at A1 (noting wait times of up to one year for new patients to see a family physician).

\(^15\) Bruce E. Landon et al., *Prospects for Rebuilding Primary Care Using the Patient-Centered Medical Home*, 29 *Health Aff.* 827, 827, 833 (2010).

preferential recruitment of primary care physicians. Beginning in 1999, the Council on Graduate Medical Education (COGME) has repeatedly recommended a significant increase in the number of generalist physicians and the number of physicians trained in ambulatory settings.

To ensure an optimal distribution of primary care physicians in the United States, this Article proposes that federal funding for residency training positions should be allocated based on community need. Part II describes the importance of primary care to the U.S. healthcare system. Part III reviews the reasons why an increasingly vanishing fraction of U.S. medical students enter into primary care specialties. Part IV highlights provisions in the PPACA that affect primary care providers. One of the most promising provisions to correct the current physician maldistribution is the PPACA’s grant of exponentially increased funding to the National Health Service Corps (NHSC), the principal federal program that incentivizes primary care physician service in areas of medical need in the United States. Part V proposes that the PPACA’s ambitious funding of the NHSC program should be used to extend medical loan repayment to all U.S. medical graduates entering primary care. This restructuring of U.S. medical education costs would allow for the implementation of a national residency exchange that will facilitate optimal distribution of new medical graduates to residency training programs in each medical specialty based on community need. Because the current need is greatest for primary care physicians, the national residency exchange would initially be tasked with preferential appointment of medical graduates to primary care residency programs.

II. WHY PRIMARY CARE?

The Institute of Medicine defines primary care as “the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.” Primary care practitioners are generally understood to be those who practice in the fields of “family medicine, general internal medicine, general pediatrics, and obstetrics and gynecology.” Increased provision of primary care relative to specialty care has

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17 See Comm. on Improving the Org. of the U.S. Dep’t of Health and Human Servs. to Advance the Health of Our Population, Inst. of Med., HHS in the 21st Century: Charting a New Course for a Healthier America 107 (Leonard D. Schaeffer et al. eds., 2008) (observing the need for 16,261 additional primary care physicians to meet demand in currently underserved areas in the U.S.); Gregory C. Kane et al., The Anticipated Physician Shortage: Meeting the Nation’s Need for Physician Services, 122 Am. J. Med. 1156, 1157 (2009) (reporting similar findings by the Alliance for Academic Internal Medicine, which represents internal medicine physicians in teaching hospitals).


19 Comm. on the Future of Primary Care, Inst. of Med., Primary Care: America’s Health in a New Era 31 (Molla S. Donaldson et al. eds., 1996).

20 Id. at 27 (citation omitted). The Institute of Medicine’s study on healthcare further noted that “[s]ome experts and groups have included nurse practitioners and physician assistants” in the definition of primary care. Id. Studies have demonstrated that nurse practitioners are able to deliver certain primary care services with similar efficacy to primary care physicians. See Mary O. Mundinger et al., Primary Care Outcomes in Patients Treated by Nurse Practitioners or Physicians: A Randomized Trial, 283 JAMA 59, 62-68 (2000); M. Laurant et al., Substitution of Doctors by Nurses
been associated with improvement in health outcomes, disease prevention, cost
effectiveness, and coordination of care.

A. IMPROVEMENT IN HEALTH OUTCOMES

An increasing body of literature shows that areas with higher generalist-to-
specialist ratios experience better health outcomes. Primary care is associated with
prevention of illness and death, as well as improvement in equitable distribution of
healthcare services. Higher ratios of primary care physicians have been associated
with improvement in both patient self-reported health ratings, and morbidity and
mortality. Longevity is demonstrably increased in areas of greater primary care
physician presence. Primary care physicians are “significantly associated with lower
total mortality . . . , lower death rates because of stroke . . . , postneonatal
mortality . . . , and longer life expectancy . . . .” There is an increasing demand for
more primary care providers to meet the needs of the steadily rising number of
patients with chronic conditions.

A 2010 study from the Dartmouth Institute (the “2010 Dartmouth Study”) highlights the interdependence between primary care and specialist physicians in
achieving optimal health outcomes. For example, the study demonstrates that despite
visiting a primary care physician in the past year, diabetic patients were no less
likely to undergo leg amputation, a significant morbidity resulting from poorly
controlled diabetes. Furthermore, having a primary care visit was not associated
with fewer hospitalizations for “ambulatory care-sensitive conditions,” conditions
which should generally be more responsive to outpatient treatment by primary care


in Primary Care (Protocol), Cochrane Database Syst. Rev. CD001271 (2005). But see Gary L.
Freed et al., All Primary Care Trainees Are Not the Same: The Role of Economic Factors and Career
Choice, 125 Pediatrics 574, 576 (2010) (arguing that there may be important differences in the
primary care disciplines that could preclude generalization of observations from one discipline to the
others). General surgery, as a generalist field, is also closely associated with primary care. Cf. Letter
from Joseph W. Stubbs, President of Am. Coll. of Physicians, to Bill Nelson, U.S. Senator (May 15,
2009), http://www.acponline.org/advocacy/physician_shortageact.pdf (expressing the support of the
American College of Physicians (ACP), the largest national group of internal medicine physicians, for
a bill preferentially providing for the increase of residency positions in both internal medicine and
general surgery).

21 Barbara Starfield et al., Contribution of Primary Care to Health Systems and Health, 83
22 Barbara Starfield et al., The Effects of Specialist Supply on Populations’ Health: Assessing the
Evidence, W5 Health Aff. 97, 98-99 (2005) (analyzing mortality data from 1996-2000 for 99.9% of
U.S. counties, and demonstrating significantly lower rates of all-cause mortality and heart disease-
specific mortality for counties with higher ratios of generalist physicians to specialist physicians);
Leiyu Shi, Primary Care, Specialty Care, and Life Changes, 24 Int’l J. Health Servs. 431, 431
(1994) (showing significant positive association between availability of primary care and decreased
mortality, but no similar association for availability of hospital beds or specialist physicians).
23 Leiyu Shi et al., Income Inequality, Primary Care, and Health Indicators, 48 J. Fam. Pract.
275, 277-279, 278 fig.1, tbl.1 (1999).
24 See M. Renee Zerehi, Am. Coll. of Physicians, How is a Shortage of Primary Care
Physicians Affecting the Quality and Cost of Medical Care? 3 (2008) [hereinafter Zerehi,
Physician Shortage] (citing Shin-Yi Wu & Anthony Green, Projection of Chronic Illness
where_we_stand/ policy/primary_shortage.pdf).
25 David C. Goodman et al., Dartmouth Inst. for Health Pol’y & Clinical Prac.,
Regional and Racial Variation in Primary Care and the Quality of Care Among Medicare
Beneficiaries 10, 11 figs.8 & 9 (Kristen Bronner ed., 2010).
26 Id. at 10, 11 fig.10.
physicians. This data suggests that primary care providers, without more, cannot serve as a panacea for each of our health system’s ailments. In particular, primary care providers who treat large numbers of low-income patients often have difficulty securing necessary specialty care for their patients. When assisted by a healthcare infrastructure that facilitates coordination of care for complex diseases among specialist physicians, however, primary care providers have a vital role to play in improving population health and ensuring that evidence-based preventive recommendations are followed.

B. DISEASE PREVENTION

Consistent with their focus on the whole health of patients, primary care physicians provide demonstrably better preventive care than specialists in several different clinical areas. For example, primary care physicians are more likely to counsel patients on safe health habits, such as smoking cessation, exercise, responsible alcohol use, and seat belt use. They are more likely to adhere to best practices recommendations for breast cancer screening; immunization rates are also higher for patients who have a primary care physician than for those with a specialist as their usual physician.

The 2010 Dartmouth Study confirms that patients who have had at least one visit to a primary care physician receive more preventive screening in certain categories, such as mammograms for women in the recommended breast screening age and hemoglobin A1c tests for diabetic patients. The study also highlights areas for improvement in following certain screening recommendations, particularly those requiring the involvement of specialist physicians. For example, the study fails to find an association between primary care access and diabetic patients’ receiving recommended annual eye examinations, which require the participation of ophthalmologists or optometrists. This finding highlights the need for a healthcare infrastructure that facilitates and incentivizes coordination of care.

C. COST-EFFECTIVENESS

Areas with higher ratios of primary care physicians to specialist physicians experience greater cost savings. These cost savings are due in part to primary care

27 Id. at 12 fig.11.
29 See id. at 12; Landon et al., supra note 15, at 827.
31 Barbara J. Turner et al., Breast Cancer Screening: Effect of Physician Specialty, Practice Setting, Year of Medical School Graduation, and Sex, 8 AM J. PREVENTIVE MED. 78, 78 (1992) (“We conclude that all physicians need to improve their screening rates. However, intervention programs should first target those physicians with the greatest deficiencies in breast cancer screening performance and knowledge; these include medical specialists and older physicians in primary care specialties.”).
33 GOODMAN ET AL., supra note 25, at 10-11 figs.6 & 7.
34 Id. at 10, 11 figs.8 & 9.
35 See STARFIELD, supra note 6, at 120-28; W. Pete Welch et al., Geographic Variation in Expenditures for Physicians’ Services in the United States, 328 NEW ENG. J. MED. 621, 623, 626 tbl.4
providers’ greater focus on preventive medicine, continuity of care, and a holistic approach to care, which lowers total healthcare costs for patients. Primary care physicians are uniquely positioned to ensure that patients receive the right screening services and treatments, the right diagnostic services (without unnecessary duplication of care), and the right referrals for specialized care. Primary care physicians have been shown to provide similarly effective care for many conditions at a significantly lower cost than specialists. Specialists are adept at providing care within their areas of specialization for patients with complex or rare clinical conditions.

Cost decisions in healthcare necessarily involve rationing of limited finances, human resources, and medical equipment. While healthcare rationing is unavoidable, rationing decisions should be made on the basis of medical effectiveness and cost-benefit analyses of medicines and surgical procedures, with participation from both healthcare experts and the public. As one scholar notes:

(1993). Domestically, the areas of greatest cost-effectiveness are in the Midwestern states, which have the highest domestic generalist-to-specialist ratio of physicians. See SOLUCIENT 100 TOP HOSPITALS: NATIONAL BENCHMARKS FOR SUCCESS (2006); John R. Holdenried, Healthcare Reform: A Discussion with Thomas A. Daschle and Thomas A. Scully, 2 J. HEALTH & LIFE SCI. L. 29, 45 (2009) (testimony of Thomas Scully) (“[T]he lowest costs in the [U.S. healthcare] system are in North and South Dakota. It’s because they have a culture of primary care and taking care of patients.”); Thompson Healthcare, Hospitals in the Midwest Lead the Nation in Performance, According to Solucient Study, http://www.solucient.com/news_press/news20070312.shtml (last visited Feb. 10, 2011) (noting that of the Solucient 100 Top Hospitals in 2006, over half of the winning hospitals were from the Midwest region, which has the highest proportion of primary care physicians).

See Jan M. De Maeseneer et al., Provider Continuity in Family Medicine: Does it Make a Difference for Total Health Care Costs?, 1 ANNALS FAM. MED. 144, 146-48, 148 tbl.3 (2003) (“[P]rovider continuity in family medicine remains one of the most important explaining variables of total health care costs.”).

See, e.g., Sheldon Greenfield et al., Outcomes of Patients with Hypertension and Non-insulin-dependent Diabetes Mellitus Treated by Different Systems and Specialties: Results from the Medical Outcomes Study, 274 JAMA 1436, 1436 (1995) (demonstrating that outcomes for patients with diabetes and hypertension were similar between primary care providers and specialists).

See, e.g., Theodore L. Schreiber et al., Cardiologist Versus Internist Management of Patients with Unstable Angina: Treatment Patterns and Outcomes, 26 J. AM. C. CARDIOLOGY 577, 579-80 (1995) (“Clinical outcome appeared nonsignificantly enhanced among cardiologist-treated patients . . . [again eliminating the statistical significance].”).

There are several different methods of evaluating healthcare rationing. See generally A. Atherly et al., The Role of Cost Effectiveness Analysis in Health Care Evaluation, 44 Q.J. NUCLEAR MED. 112 (providing an overview of different cost-effectiveness analyses). A commonly used valuation is based on the concept of cost per quality-adjusted life year, which is designed to measure the number of healthy years lived for individuals. See Dan Greenberg, The Use of Quality Adjusted Life Year (QALY) as an Outcome Measure in Cost-Effectiveness Studies - An Overview, 16 INT’L SOC. TECH. ASSESSMENT HEALTH CARE 18, 18 (2000).

See Leonard M. Fleck, Just Health Care Rationing: A Democratic Decisionmaking Approach, 140 U. PA. L. REV. 1597, 1603-04 (1992); Symposium, Health Reform in America: Getting Beyond Ideology to True Reform, 5 IND. HEALTH L. REV. 463, 467 (2008) (testimony of Dr. Aaron Carroll, Assistant Professor of Pediatrics in the Children’s Health Service Research Program, University of Indiana School of Medicine) (“[I]f you don’t think we’re rationing healthcare in this country already, you’re really putting the blinders on. We ration by whether or not you have insurance. Forty-seven million Americans have no access to the system.”).

See Fleck, supra note 40, at 1617-34 (arguing for a democratic model of healthcare rationing); Symposium, supra note 40, at 467-68.
At this time, health care rationing in the United States is based on the exclusion of the poorest people, through a health care system that runs on perverse incentives for physicians and increasingly transforms their profession into a business that is driven by an unsustainable proportion of the nation’s GDP.\textsuperscript{42}

Individuals in the United States face significant lack of access in terms of both healthcare financing and physician wait times. According to a 2008 survey by the Commonwealth Fund, fifty-four percent of chronically ill adults in the United States reported “at least one cost-related access problem, including not filling a prescription or skipping doses, not visiting a doctor when sick, or not getting recommended care.”\textsuperscript{43} As for long wait times, the survey found that chronically ill adults in the United States were most likely to report lack of rapid (same- or next-day) access to healthcare providers, as compared to chronically ill adults in countries with national health insurance programs, such as the Netherlands, the United Kingdom, and France.\textsuperscript{44}

The WHO found that among countries at a similar level of economic development, those in which healthcare was “organized around primary care” experienced better health outcomes for the same investment.\textsuperscript{45} For example, the effectiveness of the British National Health Service has been attributed to its primary care providers, who improve health outcomes by “focusing on the health of the whole person, rather than on a single organ; emphasizing prevention and health screening; . . . and providing continuity and coordination of care and being patients’ constant companions in the domain of health care.”\textsuperscript{46} Furthermore, primary care physicians “act[] as gatekeepers, who control costs by referring only patients who truly require a specialist’s opinion, since 86% of medical needs can be managed in the community . . . .”\textsuperscript{47}

Preventive care delivered by primary care physicians has also been demonstrated to prevent costly emergency room visits and hospital admissions. Areas with larger numbers of individuals who have regular access to primary care physicians have been shown to have fewer emergency room visits for the same symptoms, even after correction for socioeconomic and demographic factors.\textsuperscript{48}

\begin{thebibliography}{99}
\bibitem{42} Kerr & Scott, supra note 10, at 3.
\bibitem{43} Cathy Schoen et al., \textit{In Chronic Condition: Experiences of Patients with Complex Health Care Needs, in Eight Countries, 2008}, 28 \textit{HEALTH AFF. w1, w5, w6 exhibit 2} (2008).
\bibitem{44} \textit{Id}. The survey confirmed that thirty-three percent of U.K. adults surveyed had to wait up to two months or more to see a specialist. \textit{Id.} at \textit{w6 exhibit 2}, \textit{w7}. One reason that healthcare rationing in other countries leads to long lines and poor healthcare is that many countries keep their systems underfunded. Since the United States spends so much of its GDP on healthcare, well-implemented reform of the U.S. healthcare system could lead to world-class excellence in healthcare delivery and health outcomes. \textit{See Symposium, supra note 40, at 467 (testimony of Dr. Aaron Carroll).}
\bibitem{45} \textit{WORLD HEALTH ORG.}, supra note 11, at 50-52.
\bibitem{47} Kerr & Scott, supra note 10, at 2.
\bibitem{48} \textit{P'SHIP FOR MEDICAID, REDUCING INAPPROPRIATE EMERGENCY ROOM USE AMONG MEDICAID RECIPIENTS BY LINKING THEM TO A REGULAR SOURCE OF CARE} 2, available at \textit{www.mphca.com/ literature_43606/Reducing_Inappropriate_ER_Use_Among_Medicaid_Recipients_ _Partnership_for_Medicaid}; Marilyn Falik et al., \textit{Ambulatory Care Sensitive Hospitalizations and
Emergency room visits are considerably costlier than outpatient office visits, even when the same treatment is provided in both settings.49 Preventive care has an even greater impact on cost savings in the context of inpatient hospital admissions. According to a 2000 study by the Agency for Healthcare Research and Quality (AHRQ), five million admissions to U.S. hospitals could have been prevented, and over $26.5 billion saved, if individuals had received high-quality primary and preventive care.50 Based on an average cost of $5300 per hospital admission in 2000, reducing preventable hospitalizations by just five percent can reduce inpatient costs by more than $1.3 billion.51

Health plans that include preventive services are more cost-effective than those that do not implement prevention.52 A 2009 Urban Institute report estimates that if the United States invested $10 per person in prevention, the return would be a savings of $16.543 billion in five years and $18.451 billion over ten years.53

D. CONTINUITY AND COORDINATION OF CARE

Patients tend to see physicians more regularly as the supply of family physicians in a community increases.54 Over the past two decades, hospitals have increasingly relied on internal medicine inpatient-care specialists, or hospitalists, to provide care

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51 KRUZIKAS ET AL., supra note 50, at 4. Due to inflation and rapidly increasing healthcare costs, the potential savings are likely higher today than in 2000. While the precise per-patient cost savings of outpatient therapy versus hospitalization varies based on both the nature of the medical condition at issue and on individual outpatient and hospital pricing practices, economists confirm that outpatient management of medical conditions is invariably less expensive than hospitalization. See Karen Davis & Louise B. Russell, The Substitution of Hospital Outpatient Care for Inpatient Care, 54 REV. ECON. & STAT. 109, 109-19 (1972) (reporting that while increased primary care intervention for Veterans Health Affairs (VA) patients increased rehospitalization rates over the short six month study period, patients in the intervention group reported higher satisfaction with their care).


54 GOODMAN ET AL., supra note 25, at 8 fig.3 (showing a linear relationship between the availability of family physicians in the community and the percentage of patients who visit a doctor at least once per year). Note that the relationship between mere number of physicians board certified in a primary care field and percentage of patients in a community that see a primary care provider at least once per year was not clear. Id. at 8-9. For example, a negative correlation was seen as the supply of internal medicine physicians increased. Id. at 9 fig.4. This suggests that because internal medicine physicians have numerous practice opportunities available in non-primary care settings, notably in emergency rooms or full-time hospital inpatient care, mere quantization of internal medicine physicians will not yield an accurate assessment of the availability of preventive medicine or outpatient care in a given community. Id. at 9. While increased primary care visits will incur increased outpatient costs, overall healthcare expenditures are lessened due to fewer hospitalizations.
for inpatients. While hospitalists provide important benefits, this trend has become detrimental to the patient-doctor relationship, leading to disruption of continuity of care and to increased fragmentation in care coordination. Specialty care is more effective for patients who have ongoing relationships with their primary care physicians. In this increasingly complex era of evidence-based medicine and specialization, there is an ever greater need for primary care physicians to act as point persons: to implement preventive services, to coordinate care, and to act as patient advocates.

III. WHY MEDICAL STUDENTS DO NOT SELECT CAREERS IN PRIMARY CARE

The declining popularity of primary care began in the 1970s, when specialization became increasingly widespread. Particularly over the past decade, there has been an alarming drop in the number of students matching into primary care. A revealing 2008 study by Hauer and others reported that a mere two percent of 1177 graduating medical students from eleven different U.S. medical schools were planning careers in general internal medicine.

The American College of Physicians (ACP), the national professional organization for internal medicine physicians, identified three major challenges facing primary care: "high levels of educational debt; lifestyle concerns due to

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55 See Mary Beth Hamel et al., The Growth of Hospitalists and the Changing Face of Primary Care, 360 NEW ENG. J. MED. 1141, 1141 (2009).
56 Id. at 1142 (noting that the trend towards relying on hospitalists has relegated many primary care physicians to seeing patients solely in outpatient settings); see also Randal Cebul et al., Organizational Fragmentation and Care Quality in the U.S. Health Care System, in THE FRAGMENTATION OF U.S. HEALTH CARE: CAUSES AND SOLUTIONS 37, 46-53 (Einer Elhauge ed., 2010) (arguing that such fragmentation leads to significant healthcare waste and inefficiencies, and is exacerbated by current hospital organizational structures).
57 Studies suggest that primary care physicians are better suited than specialist physicians to properly refer patients to other specialists for specific diagnostic and treatment indications. See, e.g., Ravish J. Mahajan et al., Appropriateness of Referrals for Open-Access Endoscopy -- How Do Physicians in Different Medical Specialties Do?, 156 ARCHIVES INTERNAL MED. 2065, 2065 (1996) ("Primary care physicians were significantly more likely to schedule patients for open-access EGD and colonoscopy for appropriate indications than were non-primary care physicians."). But cf. DOTY ET AL., supra note 28, at 4 (noting that Federally Qualified Health Centers self-reported difficulty in getting sufficient access to specialty care for their patients).
59 See Perry A. Pugno et al., Results of the 2009 National Resident Matching Program: Family Medicine, 41 FAM. MED. 567, 571 (2009) ("O)ver the past 12 years, family medicine has lost 1,257 US seniors in the Match or 53.7% of the record number of US seniors matching in 1997."); id. at 567 ("[F]amily medicine still matched too few graduates through the 2009 NRMP to effectively address the nation’s needs for primary care physicians."); Edward Salsberg et al., US Residency Training Before and After the 1997 Balanced Budget Act, 300 JAMA 1174, 1176, 1177 tbl.2 (2008) (reporting a 2.8% decrease in family medicine and 24.6% decrease in preventive medicine during 2002-2007, when the majority of specialties experienced an increase in total residents).
60 Karen E. Hauer et al., Factors Associated with Medical Students’ Career Choices Regarding Internal Medicine, 300 JAMA 1154, 1157 (2008). Even within internal medicine, many more residents intend to subspecialize rather than practice general internal medicine. See Jack M. Colwill, Where Have All the Primary Care Applicants Gone?, 326 NEW ENG. J. MED. 387, 389-90 (1992). According to an ACP survey, only twenty-three percent of third-year internal medicine residents planned to practice general internal medicine in 2007, compared to fifty-four percent in 1998. The data was still more alarming for first-year internal medicine residents, only fourteen percent of whom planned to pursue careers in general medicine. ZEREHI, supra note 24, at 4 (citing ACP, Internal Medicine In-Training Exam Survey Data).
administrative hassles and practice design; and payment issues, including the
disparity in salaries between primary care providers and specialists, and payment
policies that do not appropriately recognize the care that primary care providers
provide.”61 Lack of coordinated, systemic support for preventive medicine is another
major factor contributing to both financial and administrative difficulties for primary
care providers. The various burdens placed on primary care providers and the
decreasing number of medical graduates entering into primary care foster
misconceptions regarding the level of prestige for primary care and specialty fields.

A. LOWER COMPENSATION

Medical school debt strongly influences people’s decisions about which field to
enter. In 2009, the Robert Graham Center reported “low average annual income” as
one of the primary reasons medical students choose not to enter primary care.62 The
average debt at graduation from a U.S. medical school is more than $155,000,63 with
nearly one in four medical students graduating with a debt of more than $200,000.64
One study estimates that “by 2031, loan payments for attending physicians will be
nearly 40% of a physician’s after-tax income for those who attended public schools,
and 60% . . . for those who attended private medical schools.”65 After graduation
from medical school, physicians enter into residency training where they earn a
small stipend for a number of years depending on which medical field they choose.
For medical students contemplating primary care, the financial pressure of student
debt can be insurmountable.66

61 M. RENEE ZEREHI, AM. COLL. PHYSICIANS, SOLUTIONS TO THE CHALLENGES FACING PRIMARY
CARE MEDICINE: COMPREHENSIVE STRATEGIES FROM THE AMERICAN COLLEGE OF PHYSICIANS 2
62 Robert Cardarelli, The Primary Care Workforce: A Critical Element in Mending the Fractured
ET AL., THE ROBERT GRAHAM CTR., SPECIALTY AND GEOGRAPHIC DISTRIBUTION OF THE PHYSICIAN
WORKFORCE: WHAT INFLUENCES MEDICAL STUDENT AND RESIDENT CHOICES? (2009)).
63 Pugno et al., supra note 59, at 573; Medical Student Debt, AM. MED. ASS’N, http://www.ama-
assn.org/ama/pub/about-ama/our-people/member-groups-sections/medical-student-section/advocacy-
policy/medical-student-debt.shtml (last visited Oct. 18, 2010). In New York, primary care physicians
currently can expect an average starting salary between $111,000 and $118,000. N.Y.
CHAPTER, AM. COLL. OF PHYSICIANS, THE FUTURE OF PRIMARY CARE: A REPORT ON PRIMARY CARE MEDICINE IN
NEW YORK STATE 10 (2006) [hereinafter NYACP REPORT].
64 Cardarelli, supra note 62, at 11 (citing Robert Steinbrook, Medical Student Debt--Is There a
Limit?, 359 NEW ENG. J. MED. 2629, 2630 fig.1 (2008)) (“The distribution of the 23% of students
with total debt of $200,000 or more was 15% with $200,000 to $249,999 in debt, 6% with $250,000 to
$299,999 in debt, and 3% with $300,000 or more in debt . . . .”). International medical graduates may
have less debt and/or have entered into the field sooner, so they may not be bound by the same
financial constraints. For example, postsecondary school training to receive a medical degree is only
six years in Japan and England, compared to eight years in the U.S. See Tadahiko Kozu, Medical
Education in Japan, 81 ACAD. MED. 1069, 1069 (2006); How to Get into UK Medical School, BRIT.
BROADCASTING CO., http://www.bbc.co.uk/dna/h2g2/A717527 (last visited Oct. 18, 2010); see also
medical school education in Tunisia consists of five years of training and is provided free of charge to
all students).
65 NYACP REPORT, supra note 63, at 10 (citing ASS’N AM. MED. COLLS., MEDICAL EDUCATION
COSTS AND STUDENT DEBT, A WORKING GROUP REPORT TO THE AAMC GOVERNANCE (2005)).
66 Cf. Pugno et al., supra note 59, at 574 (“The turbulence of the US health care environment and
increasing student debt support the appearance of medical students selecting careers that provide them
both economic and practice security.”).
This financial pressure increasingly causes students to elect to enter into fields such as diagnostic radiology, anesthesiology, and dermatology, which—compared to primary care—provide a significantly more lucrative income, in addition to more predictable workload and work hours.67 Tests and procedures are disproportionately compensated by U.S. healthcare payors, leading to over-utilization. To use radiology as an example, in 2006, the United States spent $100 billion on diagnostic imaging.68 As one article notes, “[t]here are now more [magnetic resonance imaging] units serving the 6.5 million residents of Massachusetts than there are for the 55 million residents of Australia and Canada combined.” Conversely, the tests and procedures involved in primary care do not generate a great deal of income. Studies have gone so far as to identify a precise linear association between specialty income and percentage of specialty spots filled by U.S. medical graduates.70

This system of disproportionate compensation, compounded by the high cost of medical education, has also had detrimental effects on the diversity of the physician pool. Minorities, students from disadvantaged backgrounds, and nontraditional students, such as students with previous careers, have historically been more likely to choose careers in primary care medicine.71 The increasing cost of medical school, however, may be driving these potential applicants away from a medical career altogether, resulting in decreased diversity in the workforce and greater healthcare disparities.72

The rapidly rising cost of medical malpractice also factors heavily in medical career decision-making. Medical malpractice has increased the costs of medical practice across all specialties, but has especially impacted obstetrics and gynecology, and the significant portion of family physicians that deal with maternal care and obstetrics.73 The costs of obstetrical professional liability insurance have caused large numbers of obstetrician/gynecologists and family physicians to abandon obstetrical practice.74

67 Id.
70 Sullivan, supra note 69; see also Letter from Mark H. Ebel, Future Salary and US Residency Fill Rate Revisited, 300 JAMA 1131, 1131 (2008) (noting “a strong direct correlation between higher overall salary and higher fill rates with US graduates” that has persisted since 1989).
71 Pugno et al., supra note 59, at 573.
72 Id.
73 See Roger K. Freeman, Thoughts on Medical Liability Costs and the Future of Health Care, 113 OBSTETRICS & GYNECOLOGY 576, 576-77 (2009) (noting that obstetric claims, the highest risk category of medical malpractice lawsuits, often amount to more than fifty percent of hospitals’ medical malpractice costs, and that “obstetricians in many states pay upwards of $200,000 per year for medical liability insurance”). In attempts to control malpractice liability, Virginia created a no-fault system for obstetrical injuries, followed by Florida. See Birth-Related Neurological Injury Compensation Act, Va. Code Ann. §§ 38.2-5000-2.5021 (2011); Florida Stat. Ann. § 408.02 (2003).
74 Summary of Conclusions and Recommendations, in 2 INST. MED., MEDICAL PROFESSIONAL LIABILITY AND THE DELIVERY OF OBSTETRICAL CARE: AN INTERDISCIPLINARY REVIEW 1, 5-9, (Victoria R. Rostow & Roger J. Bulger eds., 1989). The study notes that “the number of obstetrical providers in non-metropolitan areas has fallen by approximately 20 percent in the last five years” and
B. LACK OF REIMBURSEMENT FOR PREVENTIVE SERVICES

Prevention is central to primary care. As primary care physicians are the first line of contact for most patients, they typically bear primary responsibility for delivery of preventive care. Yet despite solid evidence for both the effectiveness and cost-effectiveness of preventive services, a paucity of healthcare dollars is being spent on preventive medicine. The Association of Schools of Public Health (ASPH) notes that “[a]t present, the United States invests less than 2% of each health care dollar on prevention while spending 75% of that dollar on treating preventable diseases.”

Some studies have disputed the notion that preventive interventions, as compared to medical treatment, save on healthcare costs. Though the effect of prevention in reducing raw health expenditures is debatable, the relevant metric for measuring effectiveness of preventive recommendations is not mere dollars saved, but impact of a healthcare dollar in reducing health risks and improving health outcomes. In these regards, prevention provides a significantly better return on investment than medical treatment.

Despite these findings, the current fee-for-service reimbursement schemes utilized by Medicare, Medicaid, and most private insurers provide few financial incentives for physicians to adopt preventive services compared to treatment services. For example, insurers pay significantly more for treatment of patients who have acute asthma exacerbations secondary to poorly-controlled asthma than they do for treatment of patients whose asthma is well-controlled by a proper treatment regimen.

C. PERCEIVED LOWER PRESTIGE

Specialty physicians are often held in higher esteem than primary care providers. Even students who selected internal medicine felt other fields that they had considered provided greater personal and professional satisfaction. As an American Academy of Family Physicians (AAFP) report notes, “[f]or many students, the level of compensation within a discipline may serve as a proxy for the.

that “[t]he delivery of obstetrical services in rural areas is seriously threatened by this development.”

Id. at 6.

See supra Parts II.B and II.C.

ASS’N SCH. PUB. HEALTH, supra note 53, at 5.


See supra notes 50-53 and accompanying discussion for studies asserting that prevention does in fact reduce overall health expenditures.

See Ron Z. Goetzel, Do Prevention or Treatment Services Save Money? The Wrong Debate, 28 HEALTH AFF. 37, 37-41 (2009).

See Michael V. Maciosek et al., Priorities Among Effective Clinical Preventive Services: Results of a Systematic Review and Analysis, 31 AM. J. PREVENTIVE MED. 52, 54-60, 56 tbl.2 (2006) (finding that aspirin chemoprophylaxis, childhood immunization series, tobacco-use screening, and brief intervention provided the greatest cost-effectiveness of all preventive methods surveyed).


G. Hoskins et al., Risk Factors and Costs Associated with an Asthma Attack, 55 THORAX 19, 21, 23 tbls.7 & 8 (2000) (reporting that the average total costs per patient who suffered an asthma attack were 3.53 times higher than for patients who did not suffer an asthma attack); Dominick E. Shaw et al., Asthma Exacerbations: Prevention is Better than Cure, 1 THERAPEUTICS & CLINICAL RISK MGMT. 273, 273 (2005).

Hauer et al., supra note 60, at 1159.
prestige and market demand for that specialty.

Because primary care providers earn lower salaries than specialist physicians, primary care is viewed as commanding a lower level of prestige than specialist fields. Due to the perceived lower level of prestige, there is less competition for primary care residency positions, which perpetuates the vicious cycle. Further contributing to the perceived lack of prestige is the fact that fewer primary care providers are associated with academic medical centers, especially in rural areas.

D. Too Many Responsibilities

The burden of caring for an aging U.S. population with an increasing proportion of chronic diseases has fallen on the shoulders of a decreasing population of primary care providers. It is not surprising that medical students who chose to specialize rather than enter primary care cited “lifestyle” as being “highly influential” in their decision to specialize.

The increasing body of medical research has led to greater complexity of treatments and recommendations for many diseases. Chronic diseases are often more complex than acute diseases, and their complexity intensifies over time as the illnesses of chronically ill patients continue to progress. Furthermore, chronically ill patients often have low incomes. Because a large proportion of chronically ill patients are treated by primary care physicians, and specialist care for low-income individuals is often very difficult to obtain, medical graduates are understandably concerned about the burden of treating complex diseases on their own. One prominent reason for the lack of interphysician coordination is the “culture of non-communication and non-coordination of ownership” among providers.

The problem is compounded by patient self-referral, misunderstanding of provider recommendations, and lack of incentives to coordinate care in the current fee-for-service payment scheme and the heavily fragmented insurance market.

The complexity of caring for chronic conditions and the difficulty of coordinating care between specialists are exacerbated by the increasing number of preventive medicine responsibilities placed on the decreasing proportion of primary care physicians. One commentator notes that “[t]he preventive services that a physician either ought to provide because there is evidence of their efficacy or might provide because of the patient’s preferences (which must therefore be discussed)

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84 Pugno et al., supra note 59, at 574.
86 McCarthy, supra note 85, at 120; Gordon et al., supra note 85, at 161.
87 Teitelbaum et al., supra note 85, at 720, 722 tbl.2.
89 See discussion supra note 28 and accompanying text.
90 INST. FOR HEALTH & AGING, supra note 88, at 2.
91 Id. at 2-3.
have multiplied.\textsuperscript{92} Studies have estimated that it would take 10.6 hours per working day to deliver all recommended care for patients with chronic conditions,\textsuperscript{93} plus 7.4 hours per day to provide evidence-based preventive care, to the average primary care physician panel size of 2500 patients.\textsuperscript{94} This estimated eighteen-hour work-day only covers the time required for primary care physicians to provide preventive care and care for chronic conditions, and does not factor in the considerable time required to provide care for acute conditions and routine examinations.\textsuperscript{95}

The difficulties mentioned above are compounded for those primary care physicians considering serving in rural areas. Location is a key factor for all new physicians beginning medical practice. A major consideration in choosing a practice location is the availability of a healthcare support network. Primary care physicians are often hesitant to serve in rural and underserved areas due to the reality of "hectic call schedules, heavy workloads, and lower salaries."\textsuperscript{96} Private health insurance is rare in rural areas, leaving insurance reimbursement mainly to Medicare and Medicaid.\textsuperscript{97} Likewise, primary care physicians also have little financial incentive to move to urban underserved areas. In fact, an increasing number of physicians are refusing to accept Medicare and Medicaid patients\textsuperscript{98} due to low reimbursement rates.\textsuperscript{99}

\begin{itemize}
\item Thomas Bodenheimer, \textit{Primary Care -- Will it Survive?}, 355 NEW ENGL J. MED. 861, 861 (2006). The trend toward tying physician reimbursement to health management and outcomes is a potential concern, given primary care providers' difficulties in implementing all recommendations for care and preventive management of chronic diseases. This difficulty will likely diminish over time if more medical graduates enter primary care. The testimony of Dr. Katharine Treadway is typical of primary care physicians:

6 years ago, I got a letter from a subspecialist, an oncologist, about my patient with breast cancer that was now 10 years old and inactive. And at the bottom of his note it said, “This visit took 30 minutes.” When I saw my 70-year-old patient, not only did I talk to her about her breast cancer, but we went through her neuropathic pain, her osteoarthritis, her hypertension, her hyperlipidemia, her grief over the recent loss of her husband, a complete physical exam including a Pap smear, arranging all of her labs, making sure I had done her prescriptions and arranged her screening colonoscopy. And he was reimbursed at a higher rate than I was.


\item Kimberly S. H. Yarnall et al., \textit{Primary Care: Is There Enough Time for Prevention?}, 93 AM. J. PUB. HEALTH 635, 637 (2003).

\item See Østbye et al., \textit{ supra } note 93, at 212 tbl.4.

\item Stephanie Gunselman, Note, \textit{The Conrad “State-30” Program: A Temporary Relief to the U.S. Shortage of Physicians or a Contributor to the Brain Drain?}, 5 J. HEALTH & BIO MEDICAL L. 91, 96 (2009) (citations omitted).


\item See Marc Siegal, \textit{When Doctors Opt Out}, WALL ST. J., Apr. 17, 2009, at A13, available at http://online.wsj.com/article/SB123993462778328019.html (“[T]he Medicare Payment Advisory Commission reported in 2008 that 28% of Medicare beneficiaries looking for a primary care physician had trouble finding one, up from 24% the year before. The reasons are clear: A 2008 survey by the Texas Medical Association, for example, found that only 38% of primary-care doctors in Texas took new Medicare patients . . . . A 2005 Community Tracking Physician survey showed that only 50% of physicians accept [Medicaid].”).

\item Gunselman, \textit{ supra } note 96, at 96 n.33 (citing JENNIFER O’SULLIVAN, CONG. RES. SERV., MEDICARE: PAYMENTS TO PHYSICIANS 23 (Jan. 17, 2008)) (noting “[i]n 2005, Medicare rates were about 82.6% of private insurance payment rates”); Symposium, \textit{ supra } note 40, at 470-71 (“Medicare . . . is paying about forty cents on the charged dollar. And other health insurers are paying sixty to seventy percent of the charged dollar.”).
\end{itemize}
IV. PRIMARY CARE IN LIGHT OF THE PATIENT PROTECTION AND AFFORDABLE CARE ACT

The first major U.S. health reform law in decades, the PPACA, provides political momentum and an important opportunity to focus public attention on healthcare system flaws in need of reform. The PPACA contains several important provisions designed to help revitalize primary care, including increased payments to primary care providers, incentives to explore different modes of primary care delivery—such as the patient-centered medical home, redistribution of residency positions to and increased funding for primary care residency programs, greater opportunities for primary care providers to qualify for federal loans and loan forgiveness, and expanded coverage of preventive care services.

This Part identifies important areas for improvement in primary care and analyzes portions of the PPACA that address these areas. This Part also seeks to highlight ways in which solutions presented in the PPACA should be bolstered in order to more directly address the U.S. primary care crisis.

A. BONUS PAYMENTS TO PRIMARY CARE PHYSICIANS

Primary care providers are scheduled to receive a ten percent bonus payment under the “Incentive Payment Program” for all primary care services provided in the years 2011 through 2015. The Act defines a “primary care practitioner” as one “for whom primary care services accounted for at least 60 percent” of the services provided. Though this benefit is a welcome bonus to primary care providers, it should be extended beyond 2015. A short-term compensation bonus is not likely to attract to primary care sufficient numbers of medical students, who after choosing their practice field will typically have to train for a minimum of three years before being able to practice independently.

The Health Care and Education Reconciliation Act of 2010 (HCERA) increases Medicaid payments to Medicare rates for primary care services provided by primary care physicians (defined as pediatrics, general internal medicine, or family medicine). However, this benefit exists only for the years 2013 and 2014. As with the PPACA’s Incentive Payment Program for primary care physicians, the HCERA benefit must be sustained for more than two years if it is to attract medical students into primary care.

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101 42 U.S.C.A. § 5501(a)(1) (West 2011). A similar incentive payment exists for general surgeons who provide “major surgical procedures” in Health Professions Shortage Areas between 2011 and 2015. See id. § 5501(b). “Major Surgical Procedures” are defined as “surgical procedures for which a 10-day or 90-day global period is used for payment under the fee schedule under section 1848(b) [of the Social Security Act, 42 U.S.C. 1395w–4(b)].” Id.
102 Id. § 5501(a)(1).
103 Id. § 5501(a)(1).
104 See John D. Goodson, Patient Protection and Affordable Care Act: Promise and Peril for Primary Care, 152 ANNALS INTERNAL MED. 742, 743 (2010).
106 See H.R. 4872, § 1202(a)(1)(C). Technically, section 1202 establishes a “floor” requiring that primary care services for Medicaid beneficiaries be reimbursed, at a minimum, at the same rate as if those services had been provided to Medicare beneficiaries. Id.
107 Id.
B. MAKING CARE COORDINATION EASIER

Because a major role of primary care is to coordinate care between specialists, emphasis on coordination strategies is needed to attract more medical graduates into primary care. Among those strategies recommended for coordination of care are: establishing service agreements between primary care providers and specialists, limiting referral networks, implementing referral tracking systems and linking electronic medical records systems.\(^\text{107}\)

The Patient-Centered Medical Home (PCMH) is a primary care-oriented method of reducing administrative burdens and coordinating care that has gained widespread support over the past decade.\(^\text{108}\) It is based around the principles of continuity with a primary physician, focus on the whole patient, coordination of care among specialists and hospitals, and restructured physician compensation.\(^\text{109}\) A notable advantage of the PCMH is its focus on primary care responsibility for patient care, which emphasizes preventive medicine, continuity of care, and follow-up on specialist referrals and interventions.\(^\text{110}\)

The PPACA includes grants to encourage specialists to provide support services for primary care providers operating within PCMHs.\(^\text{111}\) These grants are designed to provide support for PCMHs that deliver preventive care services,\(^\text{112}\) provide chronic

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\(^\text{109}\) See AM. ACADEMY OF FAMILY PHYSICIANS, supra note 108, at 1-3. A concept related to the PCMH is the accountable care organization (ACO), which is an organization of primary care physicians, specialists, and hospitals whose reimbursement is linked to the quality of care delivered to a defined population. KELLY DEVERS & ROBERT BERENSON, URBAN INST., CAN ACCOUNTABLE CARE ORGANIZATIONS IMPROVE THE VALUE OF HEALTH CARE BY SOLVING THE COST AND QUALITY QUANDARIES? 4 (2009), available at http://www.rwjf.org/files/research/acobrieffinal.pdf. One distinction between a PCMH and an ACO is the degree to which primary care is responsible for quality of patient care.


\(^\text{111}\) 42 U.S.C.A. § 3502(a) (West 2010).

\(^\text{112}\) Id. § 3502(c)(3), (8).
disease management, and create patient care plans in collaboration with specialists and primary care physicians. The primary care providers must meet regularly with the care team (which includes collaborating specialists), provide a plan of coordinated care for each patient, and provide access to the patient’s records. The PPACA envisions a capitation payment system for PCMHs.

C. INCREASED COVERAGE OF PREVENTIVE CARE SERVICES UNDER THE PPACA

Several provisions in the PPACA provide for increased coverage of preventive services. The PPACA significantly expands funding for the Public Health Service Act (PHSA), authorizing the appropriation of up to two billion dollars in Treasury funds for the use of “prevention, wellness, and public health activities” under the PHSA. Section 4103 of the PPACA requires that insurers provide a free annual wellness visit and complete coverage, without coinsurance, of services recommended in an insured’s “personalized prevention plan” created by his or her primary care provider.

Section 2713 of the PPACA requires health insurers to cover 100% of the costs of immunizations, pediatric preventive care services, and Grade A or B preventive services recommended by the United States Preventive Services Task Force (USPSTF), without imposing any cost-sharing obligations on their insured. This provision will proportionately benefit primary care providers, who offer the majority of preventive services.

Treatment and screening methods should be mandated if they are: (1) medically effective based on high quality evidence; (2) cost-effective relative to health impact; and (3) designed to address an essential medical need. Though the above provisions for coverage of preventive services are an improvement to the sparse preventive service regimens currently covered by insurance plans, insurance plans

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113 Id. § 3502(c)(3).
114 Id. § 3502(c)(4).
115 Id. § 3502(d)(1)-(3).
117 42 U.S.C.A. § 4002(a)-(c).
118 Id. § 4103(a). A “personalized prevention plan” includes (1) “a screening schedule for the next 5 to 10 years . . . based on recommendations of the [USPSTF],” and (2) “a list of risk factors and conditions for which . . . prevention interventions are recommended . . . and a list of treatment options and their associated risks and benefits.” Id. § 4103(b).
119 Id. § 2713(a)-(23). The cost of the preventive service will be reimbursed by Medicare. See § 4104(b); cf. Sylvia A. Law & Barry Ensminger, Negotiating Physicians’ Fees: Individual Patients or Society? (A Case Study in Federalism), 61 N.Y.U. L. REV. 1, 57 (1986) (exploring the pros and cons of forbidding “balance billing” and the legal impediments to negotiating with physicians to set reasonable and fair rates). Health and Human Services may opt to modify or eliminate coverage of preventive services that have received a USPSTF grade of C. § 4105(a); see also U.S. Preventive Services Task Force (USPSTF) Ratings, U.S. PREVENTIVE SERVICES TASK FORCE, http://www.uspreventiveservicestaskforce.org/uspstf07/ratingsv2.htm (last visited Nov. 19, 2011) (defining grade C preventive services as those for which “[t]here is at least moderate certainty that the net benefit is small”).
will likely continue to provide under-inclusive coverage of preventive services. A major reason for this is that the USPSTF is resource-limited in the number of services it can review.122 Exclusive reliance on the USPSTF to screen preventive services and issue recommendations may lead to inadequate coverage of preventive services, especially where experts disagree.123

Evidence-based preventive service recommendations from other medical professional societies, such as the ACP or the American College of Surgeons, should also be mandated for coverage where such recommendations are based on randomized controlled trials (RCTs) with narrow confidence intervals, or systematic reviews of RCTs.124 A statutory provision could be enacted allowing for judicial review of coverage for preventive services where the accuracy of the RCTs is contested. Indeed, such mandated coverage of additional preventive recommendations would be consistent with the PPACA, which already allows for coverage of additional services.125 Expanding mandatory coverage of preventive services to evidence-based services recommended by other physician organizations would also guard against over-politicization of one centralized agency.126

Section 4001 of the PPACA provides generally for the creation of a “National Prevention, Health Promotion, and Public Health Council” (the “Council”) to coordinate federal agencies and initiatives for prevention and public health.127 The Council is required to promote a national prevention and public health strategy within one year of the PPACA’s enactment.128 The Council could ideally assist courts in determining the eligibility of preventive services for mandated insurance coverage, perhaps by issuing opinions or guidelines for or against coverage of specific preventive services.

122 See, e.g., Interpreting the U.S. Preventive Services Task Force Breast Cancer Screening Recommendations for the General Population, AM. CONG. OBSTETRICIANS & GYNECOLOGISTS (2009) (on file with author) (“The USPSTF has not issued recommendations for many vital preventive services in women’s health care, such as preconception care, family planning counseling and services, and bundled services such as the annual well-woman examination. The USPSTF only makes and updates a handful of recommendations each year, far too few to address clinically appropriate preventive services that ought to be covered by any plan.”).

123 Cf. Calonge & Randhawa, supra note 120, at 719 (“Differences of opinion among independent experts regarding interpretation of current evidence are not unusual. An essential theme underlying all USPSTF recommendations is a commitment to evaluating the quality of scientific studies and synthesizing the results in a systematic and transparent fashion so that clinicians and patients can make informed decisions.”).

124 Cf. Univ. of Oxford, Oxford Centre for Evidence-Based Medicine – Levels of Evidence, CTR. FOR EVIDENCE-BASED MED. (March 2009), http://www.cebm.net/index.aspx?o=1025 (last visited Oct. 24, 2010) (describing the levels of evidence accorded to various types of clinical studies). For example, preventive medicine recommendations supported by Level 1a or 1b evidence could be mandated for full insurance coverage.

125 42 U.S.C.A. § 2713(a)(5) (West 2010) (“Nothing in this subsection shall be construed to prohibit a plan or issuer from providing coverage for services in addition to those recommended by [the USPTF] or to deny coverage for services that are not recommended by such Task Force.”).

126 The USPSTF has already been the target of politicization, as one of its recent evidence-based recommendations was specifically excluded from coverage by the PPACA. See id. (“[T]he current recommendations of the [USPTF] regarding breast cancer screening, mammography, and prevention shall be considered the most current other than those issued in or around November 2009.”) (emphasis added); see also Press Release, Joseph W. Stubbs, President, Am. Coll. Physicians, Statement on the Politicization of Evidence-Based Clinical Research (Nov. 24, 2009), available at http://www.acponline.org/pressroom/pol_ebr.htm.

127 42 U.S.C. § 4001(a)-(f).

128 See id. § 4001(g).
D. Easing Financial Indebtedness of Medical Graduates

1. Revitalizing the National Health Service Corps

One of the primary means of reducing the shortage of primary care physicians in underserved or rural areas is the NHSC. The NHSC provides scholarships and stipends to medical, dental, and other allied healthcare students in exchange for agreements to serve as primary care providers for two or more years in Health Professional Shortage Areas (HPSAs). An HPSA is defined as “an area with a ratio of 3500 or more people to one full-time equivalent primary care physician.” While full tuition repayment is available for NHSC scholars who serve for more than five years, the NHSC reports that more than seventy-five percent of NHSC participants voluntarily continue to serve in their HPSA location even after their obligation is fulfilled. A brief history of the NHSC will highlight the need for greater funding to adequately address the current physician maldistribution.

The NHSC was created in 1970 under the Emergency Health Personnel Act in response to dwindling numbers of primary care physicians, especially in rural areas. Though the NHSC program was originally based on volunteerism, the 1972 Emergency Health Personnel Act Amendments recognized the need for a scholarship program to attract medical students with the promise of a full scholarship in exchange for a commitment to serve in an HPSA. Initial funding of the NHSC Scholarship Program was a mere three million dollars in 1974 but quickly grew to $150 million in 1980. Almost all funding to the NHSC was cut after the issuance of the 1980 Graduate Medical Education National Advisory Committee’s report, which incorrectly predicted that there would be a surplus of physicians by 1990 and that market forces would push physicians into underserved areas. Though funding had increased by 1999, at which time the NHSC was funded at $115 million per year, this budget was sufficient to support only twelve percent of the physicians needed for HPSAs nationwide.

The NHSC reports that eighty-five percent of NHSC scholars fulfill their service commitments, whereas a mere three percent of scholars have defaulted on loans.

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137 Id. at 26.
138 Id.
139 See id. at 32.
140 See id.
Based on the effectiveness of the NHSC, medical and public health organizations have consistently recommended increased funding to allow the NHSC to recruit and retain adequate numbers of primary care physicians in medically underserved areas. Studies have also recommended that residency programs integrate their training regimens with medical centers in HPSAs. Such integration would enhance the effectiveness of the NHSC by allowing resident physicians to gain experience practicing in underserved communities. Integration would also save on training and administrative costs for the NHSC, since physicians in integrated residency programs would be able to draw on their experience serving in HPSAs immediately upon completing residency and beginning service with the NHSC.

2. Increased Funding for Primary Care Residency Programs

The PPACA provides selective funding for the planning, development, and operation of residency programs that train primary care providers. Specifically, section 5301 allocates funds for the creation and expansion of residency programs in family medicine, general internal medicine, and pediatrics. Awards for such funding is preferentially given to programs that, among other things, collaborate with academic centers; incorporate the PCMH model; have a record of training the largest percentages of residents who enter and remain in primary care practice; have a record of training underrepresented minorities or individuals from rural or disadvantaged backgrounds; or provide training for vulnerable populations, including individuals with mental health disorders and individuals with HIV/AIDS.

Section 5503 seeks to optimally redistribute training positions for resident physicians between different programs. Sixty-five percent of unused residency spots will be redistributed to areas of greater need, principally to primary care residencies. Rural hospitals are exempt from having to redistribute their residents to other hospitals. At least seventy-five percent of the redistributed residency positions must go to “primary care or general surgery residenc[ies].” In addition, seventy percent of the redistributed positions must go to hospitals “located in a State with a resident-to-population ratio in the lowest quartile.” The remaining thirty percent must go to hospitals located in rural areas or in the ten states with the highest ratio of population living in HPSAs. No individual hospital may receive more than

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141 See id. (“[C]linic directors felt the NHSC was essential for attracting quality health professionals to their sites.”); COUNCIL ON GRADUATE MED. EDUC., U.S. DEP’T HEALTH & HUMAN SERVS., NINETEENTH REPORT: ENHANCING FLEXIBILITY IN GRADUATE MEDICAL EDUCATION 16-17 (1998) [hereinafter COGME NINETEENTH REPORT].
143 See Philip Pollner & Jerrold J. Parrish, National Health Service Corps and Primary Care Training: A Mutually Beneficial Plan Affecting Physician Maldistribution, 228 JAMA 1405, 1405 (1974); see also discussion infra Part V.A.3 (regarding integration of residency training programs with community health centers).
144 See Pollner & Parrish, supra note 143, at 1405-06.
146 Id.
147 Id.
148 See id. § 5503.
149 Id.
150 Id.
151 Id.
152 See id.
seventy-five “full-time equivalent additional residency positions” from the redistribution.\textsuperscript{153} While the PPACA takes a step in the right direction toward optimal redistribution of resident training positions, the fact is that virtually all specialty training programs in the United States are filled each year.\textsuperscript{154} Thus, the amount of actual redistribution of residency positions into primary care programs based on section 5503 will undoubtedly be minimal.

The PPACA further seeks to facilitate increased training of community-based primary care physicians through providing development grants to Teaching Health Centers (THCs).\textsuperscript{155} These grants provide funding for innovative programs that will train primary care residents at “community based, ambulatory care center[s].”\textsuperscript{156} The grant specifically includes the provision of funds ($230 million) to areas of traditionally severe need, such as Federally Qualified Health Centers, community mental health centers, rural health clinics, and health centers operated by the Indian Health Service.\textsuperscript{157} By providing additional funding to these traditionally neglected residency training programs, the PPACA can facilitate closer connections between residency programs and academic health centers (AHCs), which could help alleviate the difficulty of academic isolation encountered in rural medical practices.\textsuperscript{158}

3. Expansion of the Primary Care Loan Program

The PPACA also updates the Primary Care Loan (PCL) program.\textsuperscript{159} The PCL program provides long-term, low-interest loans (currently at five percent per year) to medical students who agree to practice in primary care.\textsuperscript{160} The PPACA changes the requirements of the PCL program in two important ways. First, it limits the time required to practice in primary care. Whereas the PCL program previously required students to practice in primary care until the date the loan was repaid in full, the PPACA now requires students to practice in primary care for ten years or until full loan repayment—whichever occurs earlier.\textsuperscript{161} Second, the PPACA reduces the penalty for failure to fulfill the primary care service obligation. Whereas previously students who failed to fulfill the service obligation would face an annual interest rate of eighteen percent on the PCL, the PPACA changed this interest rate to seven percent per year.\textsuperscript{162} This lower interest rate on default may make the PCL program more attractive to medical students, drawing more medical graduates into primary care. It remains to be seen, however, whether the rate of students who renege on their primary care commitments will increase as a result of the less stringent penalties on PCL loan default.

\textsuperscript{153} Id.
\textsuperscript{155} See 42 U.S.C.A. § 5508.
\textsuperscript{156} Id. § 5508(a).
\textsuperscript{157} See id.
\textsuperscript{158} See supra note 86 and accompanying discussion.
\textsuperscript{159} 42 U.S.C. § 292q.
\textsuperscript{160} Primary Care Loans, HEALTH RES. & SERVS. ADMIN., http://www.hrsa.gov/loanscholarships/loans/primarycare.html (last visited Nov. 21, 2011). The interest rate during the PCL repayment period is currently five percent per year. 42 U.S.C. § 292r(e).
\textsuperscript{161} 42 U.S.C. § 5201(a)(1).
\textsuperscript{162} The PPACA changes the interest rate on default to “2 percent per year greater than the rate at which the student would pay if compliant in such year.” Id. Since the interest rate during the repayment period is five percent per year, see id. § 292r(e), the interest rate on default is now effectively seven percent per year.
V. THE NATIONAL RESIDENCY EXCHANGE AND PRIMARY CARE LOAN REPAYMENT PROGRAM

The creation of a National Residency Exchange (“NREX”) would provide the most direct solution to the U.S. primary care crisis. The PPACA provides important political momentum and financial support for initiatives that incentivize primary care.\textsuperscript{163} A major weakness in previous initiatives has been their failure to directly address disincentives for medical students to enter primary care.\textsuperscript{164} While the overall ratio of physicians to U.S. population is likely adequate,\textsuperscript{165} there currently exists no means of appointing medical graduates to specialties according to community needs. The primary goal of the NREX would be to secure equal access to primary care providers and specialists in all U.S. communities by training medical graduates in the residency positions in which they are most needed. The NREX would seek to facilitate optimal redistribution of residency training positions based primarily on local community needs, thus providing the most focused solution to address the root of the current physician maldistribution crisis. Because the effect of the NREX would be to preferentially appoint physicians to primary care positions in communities where they are needed, the NREX has the greatest potential to improve health outcomes in the United States.

To ease the financial burden and legitimize the demands placed on medical graduates entering primary care fields through the NREX, this Article also proposes the creation of a universal loan repayment program for all primary care physicians, modeled on the NHSC.

A. TOWARD AN IMPROVED RESIDENCY MATCHING PROGRAM

1. The Current Residency Matching Process

The vast majority of medical graduates currently applies to and obtains residency training positions through the National Resident Matching Program (NRMP), a private, not-for-profit corporation established in 1952.\textsuperscript{166} All primary care fields and medical specialties, except for Ophthalmology and Preventive Medicine/Public Health, currently offer their residency training positions through the NRMP application process.\textsuperscript{167} The NRMP administers “The Match” on an annual basis to link medical students with residency training programs.\textsuperscript{168}

\textsuperscript{163} The PPACA provides several provisions designed to promote primary care: by temporarily increasing payments to primary care providers, by redistributing unfilled positions in specialty training to primary care residencies, by increasing coverage of preventive services, and by providing substantially expanded support for the NHSC. \textit{See generally discussion supra Part IV.}

\textsuperscript{164} \textit{See Kristine Marietti Byrnes, Note, Is There a Primary Care Doctor in the House? The Legislation Needed to Address a National Shortage, 25 Rutgers L.J. 799, 836-41 (1994) (proposing that additional federal funds be allocated to schools that meet individualized quotas for training students that enter primary care residencies).}

\textsuperscript{165} In 2008, the WHO reported that in the United States, 730,801 physicians were available to serve a population of 302,841,000, leaving one physician, regardless of specialty, for every 414 people. \textit{World Health Org., World Health Statistics 2008}, at 82 (2008), \textit{available at http://www.who.int/whosis/whostat/EN_WHS08_Full.pdf.}

\textsuperscript{166} \textit{See About the NRMP, Nat’l Resident Matching Program, http://www.nrmp.org/about_nrmp/index.html (last visited Feb. 10, 2011). Medical students typically obtain residency positions outside the NRMP when they are unable to match into a residency program through the NRMP. The exact number of medical students who match outside the NRMP is not available but is widely believed to be very small.}

\textsuperscript{167} \textit{See Nat’l Resident Matching Program, supra note 154, at 5.}

\textsuperscript{168} \textit{See id. at 1.}
The NRMP provides a uniform residency application that collects data about a medical student’s biographical information, academic background, transcripts, essays, awards, honors, previous work experience, research experience, and publications, among other information. The applicant has the opportunity to submit applications to any number of programs in his or her desired specialty or specialties, with the cost per application increasing as the number of applications increases. Next, the residency programs select applicants for the interview stage.

After interviews are completed, both applicants and residency programs confidentially cross-rank each other in the NRMP system. The NRMP then runs a proprietary matching algorithm to determine the final match between an applicant and a residency program. The NRMP has created policies that seek to prevent communications between applicants and residency programs that could compromise the integrity of the matching process.

Neither the NRMP nor Medicare, which funds resident salaries, includes any requirement that residency program sizes reflect actual or anticipated community needs. Given the current incentives for specializing in the U.S. healthcare system, specialty residency programs are consistently able to fill all of their residency positions, while primary care programs far more often go unfilled. One study reports that the percentage of family practice residencies that filled their residency positions declined from eighty-six percent in 1998 to seventy-six percent in 2001. The fill rate for rural family medicine residencies was even more dismal, with only thirty-six percent of programs filling their positions between 1996 and 1998 and twenty percent in 2001.

The distribution of primary care physicians is a problem that resists blunt solutions such as increasing the total number of physicians. Despite oversaturation of physicians in specialty fields and urban areas, strong payment incentives have continually frustrated predictions that market forces would correct physician

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170 It is becoming increasingly popular for U.S. medical students to apply to both a competitive “reach” specialty as well as a “safety” field to ensure their chances of matching into a residency position. Generally, students rank any of the programs where they were interviewed. Similarly, residency programs will only rank students they interviewed. The matching algorithm favors the student ranking over the residency program ranking, determining the highest overall combined rankings for students and programs. See generally How the Matching Algorithm Works, Nat’l Resident Matching Program, http://www.nrmp.org/res_match/about_res/algorithms.html (last visited Feb. 10, 2011).


173 See generally discussion supra Part III.

174 Cf. 42 C.F.R. § 413.75-83 (2010) (mentioning no such requirements for residency programs that receive Medicare Direct Medical Education payments).

175 See Nat’l Resident Matching Program, supra note 154, at 5.

176 See Wail Malaty & Donald E. Pathman, Factors Affecting the Match Rate of Rural Training Tracks in Family Practice, 34 Fam. Med. 258, 258-61 (2002).

177 See id.
maldistribution. First, physicians tend to practice in urban or suburban communities. Because physicians have migrated to urban areas in greater numbers than the general population, HPSAs have become disproportionately situated in rural areas. Second, due to the increasing trend of physician specialization, there has been little change in the ratio of generalist physicians to population at a time when the ratio of total physicians to population has doubled. Thus, a more direct solution is necessary to ensure adequate distribution of physicians in U.S. communities.

2. The National Residency Exchange

Given the high level of public graduate medical education (GME) funding, medical residency training positions should be optimally distributed to benefit the public. Studies report that physicians trained in rural areas tend to remain in practice in those areas. The goal of the NREX would be to optimally distribute healthcare services to all U.S. communities through a two-step process. First, the NREX would periodically determine the optimal number of specialty residency positions per state, based on health outcomes research and projected needs assessments. The ACGME, which accredits U.S. residency training programs, would have a vital advisory role to the NREX in the process of determining the optimal number of specialty-specific residency positions per state. The NREX’s focus on appointing physicians of all specialties to practice locations based on community need would solve a significant limitation of the NHSC, which can only recruit primary care physicians to HPSAs. Second, the states, which can provide more targeted local responses to community needs, would optimally distribute resident physician appointments.

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179 For example, the 1980 Graduate Medical Education National Advisory Committee’s report incorrectly predicted that market forces would compel medical graduates to increasingly enter primary care in the 1990s and beyond. See supra notes 138-39 and accompanying discussion.

180 COGME TENTH REPORT, supra note 130, at 11 fig 2.1, 12 fig 2.2 (showing that of the generalist disciplines of general internal medicine, pediatrics, obstetrics & gynecology, and general surgery, only family medicine practitioners have distributed themselves reasonably proportionately between rural and urban areas). COGME noted that “[a]s experience in other countries has shown, some physicians will drive cabs in urban areas before they will migrate to isolated and underserved rural areas or set up practice in problematic inner-city areas.” Id. at 7; see also supra discussion Part III.C regarding physician disincentives for practicing in rural areas.

181 “20 percent of the United States population—over 50 million people—live in rural areas, but only 9 percent of the nation’s physicians practice in rural communities.” COGME TENTH REPORT, supra note 130, at 11; see John P. Geyman et al., Educating Generalist Physicians for Rural Practice: How Are We Doing?, 16 J. RURAL HEALTH 56, 58 fig 2 (2000) (showing that primary care providers continue to be more prevalent than specialists in rural areas); Roger A. Rosenblatt et al., Shortages of Medical Personnel at Community Health Centers: Implications for Planned Expansion, 295 JAMA 1042, 1043 (2006).

182 COGME TENTH REPORT, supra note 130, at 6-8, 8 fig 1.5.

183 The federal government finances a significant portion of medical education through Medicare and federal subsidized loan programs. See infra notes 211-13 and accompanying discussion.

184 See Geyman et al., supra note 181, at 57-58.

185 Cf. Byrnes, supra note 164, at 849-50 (describing Britain’s requirements for specialty certification); Katherine Huang, Note, Graduate Medical Education: The Federal Government’s Opportunity to Shape the Nation’s Physician Workforce, 16 YALE J. ON REG. 175, 202-03 (1999) (noting that President Clinton’s Health Security Plan of 1994 would have authorized a National Council on GME to “ensure that 55% of new residents entered primary care programs, cap the total number of residents, allocate positions among institutions and medical specialties, and distribute payments from the trust fund”).

186 See New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) (“It is one of the happy incidents of the federal system that a single courageous state may, if its citizens
training programs within each state region.\textsuperscript{187} Logistical considerations suggest that residency programs in the NREX would be subject to workforce reassessment and redistribution approximately every five to ten years.\textsuperscript{188}

Public input into the residency distribution process should be welcomed, especially regarding community-specific allocation of specialty positions.\textsuperscript{189} Periodic assessment of the NREX would focus on the ability of government programs to effectively manage the numbers of students entering into each specialty and practicing physicians transferring into new specialties.\textsuperscript{190} Experience has shown that due to financial constraints and other reasons, the percentage of physicians that chooses to undergo a second resident training program after practicing medicine as attending physicians has historically been very small.\textsuperscript{191} The history of the NHSC shows that roughly three quarters of NHSC scholars continue to practice in underserved areas even after completing their service obligations.\textsuperscript{192}

The idea of redistributing resident physician training positions to curb costs and meet community-specific healthcare needs is not new to healthcare systems in other well-developed countries, such as Britain, Canada, and Belgium.\textsuperscript{193} Previous U.S. legislation has also placed limits on residency training programs to achieve optimal distribution of healthcare resources. The Balanced Budget Act of 1997\textsuperscript{194} (BBA) placed a hospital-specific quota on the number of residents eligible for Medicare

\footnotesize{choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.”), Andrzej Rapacynski, From Sovereignty to Process: The Jurisprudence of Federalism After Garcia, 1985 SUP. CT. REV. 341, 408.

\footnotesize{An alternative, indirect form of centralized regulation of physician distribution could be to allocate GME funds to hospitals based on the quality of their resident physician training programs and the risk-factor-weighted health outcomes of their patients. See Jeffrey E. Shuren, Financing the Nation’s Graduate Medical Education: A Hybrid Approach, 33 VAL. U. L. REV. 181, 198 (1998). Due to the relative improvement in health outcomes associated with increased primary care presence and an optimal distribution of specialists, over time, this form of efficiency-based distribution of GME funding could result in relatively increased funding for primary care residencies, though quality measurements would be theoretically and quantitatively difficult.

\footnotesize{The reason for periodic, rather than annual, redistribution is that it takes at least a full year for residency programs to work out detailed contracts with training sites. These contracts must be carefully drafted to ensure that all shifts are covered, that there are enough patients to accommodate all residents, that there are enough residents to accommodate all patients, that there are a commensurate amount of teaching faculty and allied health professionals, and that there are enough teaching sites to accommodate all residents in each program.

\footnotesize{See e.g., Marion Danis et al., Low-Income Employees’ Choices Regarding Employment Benefits Aimed at Improving the Socioeconomic Determinants of Health, 97 AM. J. PUB. HEALTH 1650 (2007) (describing the use of an NIH-developed survey tool to ascertain community preferences for distribution of limited health resources); Susan Dorr Goold et al., Choosing Healthplans All Together: A Deliberative Exercise for Allocating Limited Health Care Resources, 30 J. HEALTH POL. POL’Y & L. 563 (2005).

\footnotesize{Cf. Shuren, supra note 187, at 191 (citing New York Health Care Reform Act of 1996, N.Y. PUB. HEALTH LAW § 2807 (McKinney 1996)) (describing New York’s GME funding pool, through which general teaching hospitals can receive increased funds if they comply with state requirements such as increasing the percentage of residents training in primary care programs).

\footnotesize{See Itzhak Jacoby et al., Retraining Physicians for Primary Care: A Study of Physician Perspectives and Program Development, 277 JAMA 1569, 1569-73 (1997); Susan L. Rattner et al., Assessment of Physicians’ Interest in Primary Care Training/Retraining, 72 ACAD. MED. 1103, 1103-05 (1997).

\footnotesize{See supra note 131-32 and accompanying discussion.

\footnotesize{Britain, Canada, and Belgium have adopted similar specialization distribution plans to ensure equitable distribution of physicians in their communities. See Byrnes, supra note 164, at 847-49. Furthermore, in 1992, Kansas and California had proposed legislation requiring state-funded medical schools to meet quotas for training students entering primary care. Id. at 827-28 (citing Cal. A.B. 3593, Reg. Sess. (1992); Kan. S.B. 490, Reg. Sess. (1992)).

\footnotesize{H.R. 2015, 105th Cong. § 4626 (a)(G)(3) (1997).}
support. AHCs, which train the majority of residents, typically operate fiscally inefficiently relative to community health centers (CHCs), costing healthcare payors more per patient for the same conditions, even accounting for disease complexity.195 The BBA sought to limit this inefficiency by balancing the need for economic efficiency with the need to support physician training. Accordingly, the BBA created a financial incentive system to reward hospitals that downsize their medical residency programs. There is evidence that the BBA’s incentives and HMO-imposed cost-control pressures have combined to motivate AHCs to limit their GME spending. “Between 1990 and 1993, for instance, GME spending grew by only twenty-one percent in [areas saturated with HMOs], compared with thirty-six percent” in areas of diminished HMO presence.196

There currently exist significant opportunities for optimal redistribution of residency training positions. The NREX would ideally focus initially on the most underserved populations, such as those in HPSAs, by facilitating collaboration between residency training programs and programs that serve vulnerable populations. As noted above, the PPACA’s THC development grants already seek to facilitate increased placement of primary care residents in Federally Qualified Health Centers, community mental health centers, rural health clinics, and health centers operated by the Indian Health Service.197 The NREX could also facilitate opportunities for residency programs to have their residents rotate through PCMHs, which would provide an ideal opportunity for residents to gain experience coordinating patient care in an outpatient setting.198 Another excellent opportunity for resident physicians to serve vulnerable populations is by practicing in Federal Community Health Centers.

3. Federal Community Health Centers

The NREX would also distribute more residency positions to programs that collaborate with CHCs.199 The Federal Community Health Center program was created in 1963 to “provide[] comprehensive . . . primary health care services to medically underserved communities and vulnerable populations.”200 CHCs have been shown to improve access to healthcare by emphasizing primary care and preventive medicine.201 Presently, CHCs provide 1.7% of primary care outpatient

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196 REUTER, supra note 195, at 6.

197 See supra notes 155-58 and accompanying discussion.

198 For a discussion of PCMHs, see supra notes 108-16. COGME has urged Congress to provide increased funding of residency programs that can supply primary care physicians to PCMHs. See COGME Letter, supra note 16, at 1.


201 See MICHELLE PROSER, NAT’L ASSOC. CMTY. HEALTH CTRS., THE ROLE OF HEALTH CENTERS IN REDUCING HEALTH DISPARITIES 8-13 (2003) (reporting a higher rate of preventive services delivered, fewer hospitalizations, and better management of chronic conditions for communities with a CHC than for those without one); MICHELLE PROSER & LISA COX, NAT’L ASSOC. CMTY. HEALTH CTRS., HEALTH CENTERS’ ROLE IN ADDRESSING THE BEHAVIORAL HEALTH NEEDS OF THE MEDICALLY UNDERSERVED, SPECIAL TOPICS ISSUE BRIEF #8, 3 (2004) (reporting that CHCs reduce
visits nationally, but such visits constitute forty percent of primary care for ethnic minorities with either no insurance or Medicaid.

Significant opportunities exist for residency training programs to collaborate with CHCs to allow resident physicians to serve underserved populations. According to a recent survey, family medicine residency programs have been working with CHCs for more than twenty-five years to train resident physicians. In 2010, 23.4% of the family medicine residencies provided residents with some opportunities working in CHCs. However, there is a need for more integrated continuity training in CHCs, which allows family medicine residents to be exposed to CHCs over the course of their entire residency program. Family medicine residents exposed to continuity training in CHCs are more likely to serve in underserved areas. Only nine percent of family medicine residencies, however, provided such continuity training—a figure that has remained unchanged since 1992.

B. UNIVERSAL FEDERAL FUNDING FOR PRIMARY CARE LOAN REPAYMENT

1. The Primary Care Loan Repayment Program

To ease the significant problems of U.S. medical graduate debt and to legitimize the demands placed on medical graduates, this Article proposes providing loan repayment to NREX participants. A successful shift to a national residency exchange will involve restructuring the current GME financing model. This Article argues that loan repayment programs, which at the federal level under the NHSC are currently limited to rural medicine programs and primary care programs in underserved areas, should be universalized for all primary care residents. Indeed, the PPACA’s ambitious funding of the NHSC seems to envision a significant expansion of the national loan repayment program. Full government subsidization of the cost of medical education would justify the demands placed on medical students who enter primary care fields through the NREX. Universal federal funding for loan repayment would also allow lenders to monitor and enforce, through time-delayed financial incentives, the career progression of physicians in training.

Full subsidization of the costs of graduate professional training is readily available for non-medical graduates in science and technology. The National Institutes of Health (NIH) routinely provides full tuition grants for Ph.D. candidates in science fields. Though NIH funding is available for joint M.D./Ph.D.

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healthcare disparities by providing mental health and substance abuse services to low-income families, minorities, the uninsured, and rural residents, who often have no other way to obtain behavioral healthcare).


Id. at 2081.


Id.

Id. at 1642.

See supra notes 63-65 and accompanying discussion.

Government subsidization could also be achieved through federal funding for M.D. degrees, though direct education grants would not allow for monitoring and enforcement of optimal specialty distribution.

See generally Office of Extramural Research, Ruth L. Kirschstein National Research Service Award (NRSA), NAT’L INSTS. HEALTH, http://grants.nih.gov/training/nrsa.htm (last visited Oct. 24, 2010). Note that postdoctoral NRSA recipients must “pay back” their tuition grants through service by engaging in health-related biomedical or behavioral research. Id.
candidates, it is not available for sole M.D. degree candidates.\textsuperscript{210} Despite the fact that resident physicians receive funding for their salaries from the Medicare program,\textsuperscript{211} resident physician salaries are very low compared to the significant student debt the vast majority of residents carry upon graduation.\textsuperscript{212} Medical education in the United States is currently financed largely through federal loans, such as Stafford and Perkins loans, which carry low interest rates and often qualify for interest subsidization for a student’s entire medical school term.\textsuperscript{213} The primary care loan repayment program would gradually repay an M.D. candidate’s loans throughout the course of the first eight years of postgraduate medical practice.\textsuperscript{214} Though residency training periods vary considerably,\textsuperscript{215} medical graduates would be able to apply time spent in residency training towards the eight-year postgraduate practice requirement. Loan repayment would be commensurate with the NHSC’s limit of $170,000,\textsuperscript{216} which would typically be adequate to reimburse the average U.S. medical graduate, who has a debt of $155,000 upon graduation.\textsuperscript{217} Students would remain responsible for any non-medical educational loans they may have.

Though loan repayment programs could be instituted at the federal or state level, this Part argues that the primary care loan repayment program should be implemented at the federal level due to the benefits of providing loan repayment for all medical graduates and the desire for ease and consistency of administration.


\textsuperscript{211} Medicare funds hospitals in the form of Direct Medical Education payments for resident training, 42 C.F.R. § 413.75-83 (2011), and taxes for Indirect Medical Education, which are meant to cover the higher operating costs incurred by teaching hospitals. See id. § 412.105; Social Security Act § 1886(h), 42 U.S.C. § 1395ww (2006); see also Eugene C. Rich et al., Medicare Financing of Graduate Medical Education: Intractable Problems, Elusive Solutions, 17 J. Gen. Internal Med. 283, 285-87 (2002) (detailing difficulties with the current Medicare GME funding scheme).

\textsuperscript{212} A typical salary for a resident physician ranges from $45,000 to $60,000, based on geographic location and year of residency. See FREIDA Online, Am. Med. Ass’n, https://freida.ama-assn.org/Freida/user/viewProgramSearch.do (last visited May 18, 2011) (FREIDA Online is a searchable database containing annually-updated information from almost all ACGME-accredited residency programs in the United States).

\textsuperscript{213} Medical students currently may receive up to $8000 per year in Perkins Loans, which have an interest rate of five percent that is fully subsidized by the Department of Education during one’s medical school career. Medical students may also borrow up to $20,500 per year in Direct Stafford Loans, which have an interest rate of 6.8%. Students may qualify for interest-subsidization for up to $8,500 in Stafford Loans per year. See US Dep’t Educ., Funding Education Beyond High School: The Guide to Federal Student Aid 5 tbl.1, 16-18, 18 tbl.4 (2011).

\textsuperscript{214} The practice requirement is intended to ensure that residency graduates go on to serve the public in the field in which they trained. The requirement of eight years of post-medical graduate practice for full loan repayment is modeled after the NHSC Scholarship Program, which provides full loan repayment for primary care physicians who serve for over five years in a HPSA. See infra note 215. Because most primary care physicians require three years of postgraduate training to become board certified (obstetrics & gynecology requires four years), they will require an additional five years of service in an HPSA to qualify for full loan repayment under the NHSC Scholarship Program.

\textsuperscript{215} The required period of residency training to become eligible for board certification varies from three years for primary care fields to seven years for neurosurgical fields, and even longer for certain surgical subspecialties. See BUREAU OF CLINICIAN RECRUITMENT & SERV., National Health Service Corps Loan Repayment Program, U.S. Dep’t Health & Human Servs. (December 2010), available at http://nhsc.hrsa.gov/downloads/loanrepayment.pdf (stating that the NHSC provides $170,000 in loan repayment over five years, and full loan repayment for NHSC scholars who serve for longer than five years).

\textsuperscript{216} See supra note 63.
Medicare has the administrative experience most relevant to coordinating the primary care loan repayment program because the Medicare program already distributes funds to hospitals for resident salaries and other GME expenses. Accordingly, Medicare would make supplemental loan payments to NREX-compliant hospitals in addition to the residency salary disbursements that Medicare currently makes to hospitals that accept federal funds. The individual residency programs would then be able to disburse the supplemental loan repayment funds to primary care residents who participate in NREX or otherwise satisfy the eligibility criteria for loan repayment. Hospitals that opt not to receive federal funds would not be required to limit their residency program sizes to conform to the NREX requirements, but such hospitals would be unable to offer Medicare-funded salaries to their residents or loan repayment to their primary care physicians.

Loan repayment programs are not new. Since the 1970s, the NHSC has provided loan repayment for medical graduates who serve in HPSAs. One 1993 proposal modeled after the “Berry Plan” would have provided universal loan repayment for medical students in exchange for two years of mandatory public service, which could be completed after the first, second, or third year of residency training. At least half the states have also passed some form of legislation creating loan or scholarship programs designed to encourage graduates to practice in underserved areas. Similar to the NHSC, these programs typically require loan or scholarship recipients to make a commitment to practice in an underserved area and provide loan forgiveness after completion of a specified time of service.

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218 A large portion of medical student loans are provided through the Federal Stafford and Perkins Loan programs. Recipients of Stafford and Perkins loans may be eligible for loan forgiveness if they serve in public service careers. See generally GAIL MCCALLION, CONG. RESEARCH SERV., STUDENT LOAN FORGIVENESS PROGRAMS (2005), available at http://projectonstudentdebt.org/files/pub/Loan%20Forgiveness.pdf.

219 The decision to opt in or out of the NREX would be required to be uniform for all residency programs within a particular institution. The institution-wide requirement would limit the number of hospitals that choose to opt out of the NREX, because, for strategic and financial reasons, it would be difficult to reach a consensus between all residency programs in a given hospital to opt out of the NREX. Hospitals generally depend significantly on Medicare for financial support of their residency programs. This financial dependence also explains why it would be very difficult for hospitals offering residency programs outside the NREX to compete against NREX programs by offering higher residency salaries. Though there would be no formal restriction on the amount of funding a hospital could offer to residents in non-NREX programs, the reality is that few, if any, hospitals would be able to compete with the Medicare-funded salaries and loan repayment opportunities that NREX programs would be able to offer their residents.

220 See supra notes 133-39 and accompanying discussion.

221 The Armed Forces Reserve Medical Officer Commissioning and Residency Consideration Program, or “Berry Plan” was a plan that allowed medical students to opt to serve two years in the armed forces medical service in exchange for exemption from the selective service draft. See Frank B. Berry, The Story of “The Berry Plan,” 52 BULL. N.Y. ACAD. MED. 278 (1976).

222 See Robert G. Petersdorf, Financing Medical Education: A Universal “Berry Plan” for Medical Students, 328 NEW ENG. J. MED. 651 (1993). Note that Petersdorf’s proposal coincided with President Clinton’s efforts to restructure the U.S. healthcare system, which were ultimately withdrawn due to lack of political consensus.

223 See Byrnes, supra note 164, at 820 n.112 (listing twenty-five such state statutes). Several states have passed limited initiatives for increasing funding for primary care residencies. See id. at 819-24.

224 See id. at 820-21. Though the success of state loan repayment programs varies widely, approximately sixty percent of participants in state loan repayment programs completed their required service. See id. at 822 n.114 (citing CHARLES E. LEWIS ET AL., A RIGHT TO HEALTH: THE PROBLEM OF ACCESS TO PRIMARY MEDICAL CARE 52-53 (1976)).
2. Projected Costs of the Primary Care Loan Repayment Program

This Article makes the following assumptions for the purpose of making an approximate estimate of the funding required for the primary care loan repayment program: (1) the number of medical students applying for residencies through the NREX will be equal to the number of medical students who applied to residencies through the NRMP, which in 2010 was 30,543 students; and (2) the total cost per medical graduate participating in the NREX will be equal to the total cost per medical graduate in the NHSC Loan Repayment Program. For fiscal year 2009-2010, the NHSC made 3000 loan repayments within a total budget of $191.5 million. Thus, the total cost of loan repayment for a medical graduate under the NHSC is equivalent to $31,916.67 per scholar per year multiplied by 5 years, which is the length of time over which the NHSC will repay a total of up to $170,000 in medical tuition loans. To estimate the cost per year of the new primary care loan repayment program, this result, $159,583.35, is multiplied by 6771 participants. Thus, the operating costs of the primary care loan repayment program are estimated to be $1,080,538,862.85 per year. While this cost may appear daunting, the PPACA has already authorized an amount greater than this to be appropriated for the NHSC for each year beginning in 2015. Section 5207 authorizes continued funding for the NHSC, beginning relatively modestly, but quickly increasing to more than one billion dollars in 2015. By exponentially increasing the NHSC’s funding each year until 2015, the PPACA seems to envision an ambitious expansion of the NHSC.

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223 This Article assumes that the small proportion of medical students matching to a residency position outside of the NREX will remain similar to the proportion currently matching outside the NRMP. See supra note 166 and accompanying discussion.

224 NAT’L RESIDENT MATCHING PROGRAM, supra note 154, at 9.

225 These assumptions, which are intended to provide an approximate estimate of the annual costs of the primary care loan repayment program, are necessarily simplistic. For the purposes of actual implementation of the NREX, the author invites economists to perform a more detailed budget analysis.

226 See HEALTH RES. & SERVS. ADMIN., DEP’T HEALTH & HUMAN SERVS., HEALTH PROFESSIONS TRAINING PROGRAMS – NATIONAL HEALTH SERVICE CORPS (NHSC) 1, 4 (2010), available at http://www.hhs.gov/recovery/reports/plans/pdf20100610/HRSA%20National%20Health%20Service%20Corps%20June%202010.pdf. $190.54 million of the costs went to direct loan repayments for participants in the NHSC loan repayment program, while $0.96 million covered federal administration and support costs.

227 This result is reached by the following equation:

\[
\text{[number of individuals participating in the NHSC during fiscal years 2009-2010 / (total budget appropriations / 2 years)]} = \frac{3000 \text{ participants}}{\frac{$191,500,000}{2 \text{ years}}} = \$31,916.67 \text{ per participant per year.}
\]

228 A total of 6771 U.S. medical graduates filled primary care residency spots in the NRMP in 2010. See NAT’L RESIDENT MATCHING PROGRAM, supra note 154, at 5 (listing the number of spots filled by U.S. graduates per primary care specialty: 2829 in internal medicine, 1254 in family medicine, 1744 in pediatrics, 940 in obstetrics and gynecology, and 4 in combined internal medicine-family medicine programs).

229 This estimate is based on the current number of primary care positions in the NRMP. The actual cost of the primary care loan repayment program will be based on the number of primary care positions in the NREX, which will be adjusted based on the primary care needs of each community.


231 See id. § 5207(a)(1)-(6) (providing $320,461,632 for 2010, increasing annually to $1,154,510,336 for 2015).

232 The PPACA authorizes an annual increase in funding from $414 million in 2011 to $1.1 billion in 2015. Note that not all of the funding authorized to be appropriated for the NHSC ends up being actually appropriated. For example, the PPACA authorizes up to $414,095,394 in funding to the NHSC for fiscal year 2011, while explicitly appropriating $290 million for the same year. Compare
loan repayment program provides such an expansion opportunity, superseding the
NHSC’s mission of providing primary care services to underserved areas by
ensuring that primary care physicians are available in all U.S. communities. The
PPACA provides a formula for sustainable growth of the NHSC for years 2016 and
beyond, based on the average increase in cost of health profession education and the
average increase in populations living in HPSAs.235 The formula also eliminates the
cap on the number of professionals in the NHSC.236 Accordingly, if the full amount
authorized for NHSC funding gets appropriated for years 2015 and beyond,
projected funding for the NHSC program alone may well be adequate to cover the
annual costs of the primary care loan repayment trust fund.

3. Achieving Cost Neutrality for the Primary Care Loan Repayment Program

Cost neutrality for the primary care loan repayment program should be achieved
through restructuring Medicare and Medicaid reimbursements, especially for cost-
inefficient diagnostic technologies and procedures. The PPACA contains important
provisions that acknowledge the widespread agreement that the physician
reimbursement system must be rebalanced to assist primary care physicians.237 The
U.S. healthcare system has often been noted to “over-compensate[] for high-cost
procedures and underpay[] primary care services,” such as preventive services,
chronic disease management, and continuity with a single physician.238 Given a fixed
amount of funding for physician compensation in the United States, there is an
inherent competition for reimbursement between generalists and specialists.239

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235 Id. § 5207, with id. § 10503(b)(2). Thus it remains to be seen what the actual amount appropriated for
the NHSC will be in the years 2015 and beyond. Nonetheless, the estimate provided in this Article is
intended to demonstrate that the level of funding required for the primary care loan repayment
program may well be achievable even via current funding projections in the PPACA.

236 Id. § 5207(a)(7) (detailing the formula for calculating the increased amount authorized to be
appropriated by the NHSC for 2016 and each subsequent year).

237 See Addressing Healthcare Workforce Issues for the Future: Hearing on Examining the Ways
to Address Healthcare Workforce Issues for the Future, Focusing on Primary Care Professionals
Bruce Steinwald, Director of Health Care, Government Accountability Office) [hereinafter Primary
Care Professionals] (finding that conventional payment systems undervalue primary care services
relative to specialty services, and that primary care service reimbursements should be increased to
reflect the improved outcomes and cost savings that they provide); ZURIEH, supra note 61, at 26-28.

238 Roberto Cardarelli, The Primary Care Workforce: A Critical Element in Mending the
omitted). Note that in certain cases there also exist perverse financial incentives that reward primary
care physicians for inappropriately referring patients to specialists. For example, capitulation systems
provide a physician with a fixed payment per month per patient. If a primary care physician refers a
patient to a specialist, the referrer lets the specialist do the disease management and treatment, while
receiving the same amount of income under the capitulation system. See Alan Meisel, Managed Care,

239 John K. Iglehart, The American Health Care System: Medicare, 340 NEW ENG. J. MED. 327,
330 tbl.1 (1999) (“Medicare’s schedule of physicians’ fees, like the prospective payment system that
pits different kinds of hospitals against each other, provokes conflict between medical generalists and
specialists. These disputes have grown in prominence ever since 1989, when Congress directed [the
Health Care Financing Administration] to develop a schedule of physicians’ fees.”). Of course, this
zero-sum game could be avoided if more funding for physician compensation were poured into the
healthcare system. Regarding the proposed ten percent bonus payment for primary care services
provided for in the PPACA, half of the bonus is funded with “new money,” and half through slight
reduction in payment for all other physician services. See discussion supra Part V.A.2; see also Letter
from Joseph W. Stubbs, President of Am. Coll. Physicians, to Harry Reid, S. Majority Leader (Dec. 4,
2009), available at http://www.acponline.org/advocacy/where_we_stand/access/baucus.pdf (Dr.
Medicare, the largest U.S. health payor, utilizes a payment system that has perpetuated a disparate reimbursement scheme between specialists and primary care physicians. The CMS, the federal agency responsible for operating Medicare, is required by statute to use the Resource-Based Relative Value Scale (RBRVS) methodology for physician reimbursement. The RBRVS is a fee-for-service system that sets reimbursement rates according to cost of service. Payments for physicians under the RBRVS are calculated via a two-step process that involves assigning to each billable item a relative value unit (RVU) and then multiplying the RVU by a conversion factor. The RVU accounts for time required to complete the service, physician effort, practice expenses, and malpractice costs for the relevant physician specialty. The conversion factor is a cost-control mechanism built into the RBRVS that is designed to counteract increases in volume of billed services by reducing the payment per service billed. Thus a simplified equation for calculating reimbursement under the RBRVS is as follows:

\[
\text{Total Medicare physician payment for the provision of a specified service} = (\text{Work RVUs} + \text{Non-Facility Practice Expense RVUs} + \text{Professional Liability Insurance RVUs}) \times (2011 \text{ Medicare Conversion Factor}).
\]

While the RBRVS had some success saving on certain specialists’ fees (ten to twenty percent in some cases) and similarly modest success in improving reimbursement for primary care physicians soon after adoption, the share of

Stubbs’s letter, written prior to the PPACA’s enactment, requested that the primary care incentive payment bonus be funded in a way that does not decrease compensation for other physician services.). Medicare’s payment system has been criticized as a system “designed for specialty care and single problems.” Comments at Perspective Roundtable, supra note 92, at 8 (testimony of Dr. Katharine Treadway) (“There is nothing in the [RBRVS] system that allows you to take into account the fact that you’ve just seen somebody with congestive heart failure, hypertension, hyperlipidemia, coronary disease, renal insufficiency, and diabetes.”); see Primary Care Professionals, supra note 237, at 15-16 (noting that Medicare reimburses $103.42 for a half-hour primary care visit in Boston, but $449.44 for a colonoscopy that would take roughly the same amount of time).

RBRVS was implemented in the Omnibus Budget Reconciliation Act of 1989, Pub. L. 101-239, § 6102, 103 Stat. 2106, 2169 (1989), which replaced the “reasonable-charge” formula initiated with Medicare’s enactment in 1965. M. Gregg Bloche, The Emergent Logic of Health Law, 82 S. CAL. L. REV. 389, 475 n.382 (2009) (noting that because the “reasonable-charge” formula fixed physician payment to the prevalent billing schedules in each region, doctors were incentivized “to raise their fees as quickly as the market would bear”).


42 U.S.C. § 1395w-4(b). The conversion factor is detailed in § 1395w-4(d).


Bloche, supra note 241, at 474-75.


John K. Iglehart, Medicare’s Declining Payments to Physicians, 346 NEW ENG. J. MED. 1924, 1925-26, 1927 tbl.1 (2002) (providing examples of payment codes for evaluation and management that increased soon after adoption of the RBRVS, but noting that the success of the RBRVS in equitably redistributing physician payments is difficult because the physician fee schedule involves more than 7000 payment codes).
Medicare payments to primary care physicians has now declined to the level prior to implementation of the RBRVS.249

A major reason the RBRVS has failed to provide sustained equitable reimbursement to primary care physicians has been that the conversion factor is shared between all medical specialties.250 There are two broad categories of RVUs: “evaluation and management” (E&M)-type RVUs,251 which are billed mainly by primary care physicians, and non-E&M-type RVUs,252 which are billed primarily by specialists. While the volume and value of non-E&M services has grown at a much faster rate than the volume and value of E&M services,253 the conversion factor for the RBRVS has had to be adjusted downward equally for both E&M and non-E&M services. Accordingly, the proportion and value of Medicare payments for E&M services has been rapidly declining, causing primary care physicians to generally receive decreased payments and specialists to generally receive increased payments for services billed. Indeed, the large majority of the increase in Medicare spending in excess of the original sustainable growth rate254 (SGR) is attributable to increasing payments made for specialist procedures. One author notes that:

From 1997 to 2006, although overall Medicare physician spending grew by 90 percent, Medicare expenditures for E&M services grew by 74 percent (from $19.7 billion to $34.4 billion) while non-E&M expenditures grew by 101 percent (from $29.5 billion to $59.3 billion). As a result, in 2006, non-E&M services accounted for 86 percent of the overage in Medicare physician expenditures.255

Because there is one shared conversion factor for all Medicare billable services, Medicare reimbursements to primary care physicians have decreased in inverse proportion to the significant growth in use of specialized services in every year since the RBRVS was enacted. In 2007, to counteract this disparate impact of the RBRVS payment scheme on primary care physicians, the Medicare Physician Payment Advisory Commission (“MedPAC”), which advises Congress on the rates for

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250 See 42 U.S.C. § 1395w-4(c)(2)(F)(i); MEDICARE PHYSICIAN PAYMENT ADVISORY COMM’N, REPORT TO THE CONGRESS: MEDICARE PAYMENT POLICY 87 (2010). Even private insurers have long failed to implement reimbursement systems that accurately track the relative costs between generalist and specialist services. Paul B. Ginsburg & Joy M. Grossman, When the Price Isn’t Right: How Inadvertent Payment Incentives Drive Medical Care, w5 HEALTH AFF. 376, 378-379 (2005); see also Bruce Steinwald & Frank A. Sloan, Determinants of Physicians’ Fees, 47 J. BUS. 510, 510 (1974) (noting the effect of the trend towards specialization on increasing physician reimbursement rates).

251 See 42 U.S.C. § 1395u(b)(16)(B)(ii). E&M services consist of “primary care services . . . hospital inpatient medical services, consultations, other visits, preventive medicine visits, psychiatric services, emergency care facility services, and critical care services.” Id.

252 Non-E&M services include surgical procedures, invasive diagnostic procedures, and radiological imaging, most of which are provided exclusively by specialists.

253 See Bodenheimer, supra note 92, at 301-05. From 2000 to 2005, the number of colonoscopies billed to Medicare increased by forty percent, CT scans increased by sixty-five percent, and MRI scans increased by ninety percent. Id. In the same time, the number of office visits billed for established patients increased by twelve percent. Id.

254 The SGR is the rate at which Medicare payments under the RBRVS were designed to be maintained in order to control healthcare spending from year to year. See 42 U.S.C. § 1395w-4(f)(2).

physician reimbursement of Medicare expenses, recommended “splitting the SGR” by setting payment targets under the SGR based on type of specialty, or type of service provided. MedPAC has also been recommending a budget-neutral payment increase for primary care services since 2008. To date, these proposals have not been adopted.

The PPACA provides an important opportunity to reevaluate the reimbursement of medical and surgical services under Medicare. Starting in 2015, the Physician Fee Schedule will include a payment modifier “based on the quality of care compared to cost.” The PPACA includes a provision to systematically and regularly evaluate potentially “misvalued codes” under the Physician Fee Schedule. This process of evaluation can include a number of potential assessment methods, including surveys, studies, or other analyses. After identification of such misvalued codes, the Secretary of Health and Human Services may make adjustments to reflect the actual value of each service.

Such a readjusted reimbursement scheme could, however, result in adverse selection of Medicare and Medicaid by healthcare providers. Free market pressures in the U.S. health insurance market impart a certain degree of systemic inertia to payment model restructuring. If any single private insurer were to unilaterally make drastic cuts in reimbursement to specialist procedures, specialists would likely stop accepting that particular insurance. Thus, Medicare, which accounts for approximately one-fourth of physician payment, is uniquely positioned to restructure the payment scheme. A previous proposal to keep Medicare and Medicaid rates competitive with private insurance rates focused on broadening the current GME

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256 See Medicare Payment Advisory Comm’n, Report to the Congress: Assessing Alternatives to the Sustainable Growth Rate System 75-81 (2007).
257 See id. at 95-106.
258 See Medicare Physician Payment Advisory Comm’n, supra note 250, at 88-89. MedPAC also recommends that physician payments should be structured to incentivize both care coordination and optimal health outcomes. See id.; see also Aligning Incentives in Medicare: Hearing Before the Subcomm. on Health of the H. Comm. on Energy and Commerce, 111th Cong. 3-4 (2010) (statement of Glenn M. Hackbart, Chairman, Medicare Payment Advisory Comm’n); Bloche, supra note 241, at 475 (“Medicare should go as far as is politically feasible toward closing the chasm between payment for high-tech procedures and other uses of physician time.”).
259 Some scholars believe that Congress’s refusal to “split the SGR” has been due to Congressional staffers’ fears that adoption of such proposals would cause infighting between physicians in different fields. See Brian Yoshio Laing et al., Primary Care’s Eroding Earnings: Is Congress Concerned?, 57 J. Fam. Prac. 578, 578-83 (2008).
261 § 3134.
262 § 3134(a).
263 Id.
264 Id.; see also Ginsburg & Grossman, supra note 250, at 376, 382.
financing scheme from Medicare alone to an all-payer system in which private health insurers and the public would also contribute to GME funding through insurance premium taxes.\footnote{See Medical Education Trust Fund Act of 1999, S. 210, 106th Cong. (1999) (proposing a one and a half percent tax on health insurance premiums, Medicare, and Medicaid that would generate seventeen billion dollars per year to support GME); see also Huang, supra note 185, at 199-202 (proposing a broad base one percent tax on private insurance premiums that would yield six billion dollars per year); Shuren, supra note 187, at 197-200 (proposing a Medical Education Tax Act that would tax private insurers on the premiums paid by their insured payees).}

The PPACA provides a timely opportunity to standardize competition between health plans. If a specialist service surcharge were imposed on Qualified Health Plans in the PPACA’s health insurance exchanges,\footnote{See generally § 1301 (defining Qualified Health Plans).} commercial health insurers would likely be motivated to readjust their reimbursement schedules for currently over-reimbursed specialist procedures to conform more to Medicaid and Medicare’s fee schedule.

C. EMPHASIZING PRIMARY CARE IN MEDICAL SCHOOL

The U.S. healthcare system must invest financial and human resources into improving the perception of primary care beginning in medical school, where students’ impressions are first formulated and specialty choices are made. Such a program would allow students to make informed career choices prior to entry into the residency matching process.

Medical education programs in the United States tend to emphasize inpatient treatment and cure of acute diseases rather than ambulatory care and management of chronic conditions.\footnote{Byrnes, supra note 164, at 803.} For example, the current medical curriculum at the University of Medicine & Dentistry of New Jersey–New Jersey Medical School (UMDNJ-NJMS) allocates a mere five weeks to outpatient care out of the sixty-six weeks of mandatory clinical rotations scheduled for third- and fourth-year medical students.\footnote{See N.J. MED. SCH., UNIV. MED. & DENTISTRY NEW JERSEY, CURRICULUM OVERVIEW, 2011-2012, available at http://njms.umdnj.edu/admissions/prospective/documents/curriculum.pdf. UMDNJ-NJMS added a mandatory two week rotation in preventive medicine and public health in 2008. See id.} This de-emphasis on outpatient and preventive care in current medical schools’ educational curricula deprives medical graduates of primary care experience.\footnote{See, e.g., Robyn Richmond, Teaching Medical Students About Tobacco, 54 THORAX 70, 73 tbl.4 (1999) (reporting that sixty-two of North American medical schools had no systematic approach to teaching medical students about smoking cessation and prevention, the single most preventable cause of morbidity and mortality in the United States); see also David R. Graber et al., Academic Deans’ Perceptions of Current and Ideal Curriculum Emphases, 62 J. DENTAL EDUC. 911, 911 (1998) (reporting on a study utilizing a mail-in survey reporting that “health promotion/disease prevention” and “primary care” were two of the three topic areas considered by dental school deans to be most in need of emphasis in their school curricula).}

Noting that the United States spends “about 70 times more on the production of specialists than . . . on the production of primary care physicians,” one prominent health services researcher recommends changing “the ethos of medical education” to address the prestige and the financing problems confronting primary care.\footnote{See Comments at Prospective Roundtable, supra note 92, at 8 (testimony of Barbara Starfield).}

Greater representation of primary care programs in medical schools can be achieved through increased funding of medical school primary care departments and increased exposure to public health issues within medical school curricula.
Individual medical school initiatives focused on increasing medical student interest and involvement in primary care have proven successful. For example, the Family Medicine Student Track (“FaMeS”) program at Boston University consists of several curricular and extracurricular activities intended to increase “exposure to family medicine faculty in the preclinical years.”\(^{272}\) The FaMeS program reports nearly double the odds for Boston University students subsequently matching into family medicine compared to the period prior to implementation of the program.\(^{273}\)

Likewise, Wayne State University School of Medicine in Michigan developed an initiative to encourage medical students to practice in rural areas.\(^{274}\) Wayne State University’s program, known as the “integrated rural core curriculum,” involves recruiting and matriculating students from rural settings; providing avenues for students to interact with faculty and preceptors with rural backgrounds and/or rural practice experience; offering seminars and group activities to expand awareness of special issues in rural medicine; and promoting rural practice training experiences via externships, clerkships, and elective rotations.\(^{275}\)

After implementing the program, a significantly larger proportion of medical students elected to pursue training in more rural areas.\(^{276}\)

These examples show that emphasizing primary care and integrating outpatient experiences in the medical school curriculum can increase student interest in and pursuit of primary care fields. These programs’ success stories are admittedly anecdotal. They provide important insights, however, into the manner in which medical school education curricula can be reoriented to facilitate optimal distribution of physician specialists for the nation’s health.

VI. CONCLUSION

A strong primary care workforce is vital to achieving improved health outcomes, disease prevention, and cost savings for the U.S. healthcare system. Yet due to inequitable reimbursement schemes and lack of support within the healthcare system, medical students have become increasingly disinterested in entering into primary care fields. Previous proposals to revitalize the U.S. primary care workforce have been unsuccessful in large part because they have failed to address the root of the primary care crisis. The adoption of a national residency exchange and a restructured graduate medical education financing model would lead to a more optimal distribution of physicians across all U.S. communities to achieve improved health outcomes.

\(^{272}\) Joanne E. Wilkinson et al., FaMeS: An Innovative Pipeline Program to Foster Student Interest in Family Medicine, 42 FAM. MED. 28, 29 (2010).

\(^{273}\) Id. at 31-33 (1.94 times).


\(^{275}\) Id.

\(^{276}\) See id. at 61-64 (noting that a majority of students were placed in residency programs located in counties where the rural population was forty percent or greater, in a state where only twenty-five percent of patients live in rural areas).