

## Your Future is Family Medicine Sample Remarks and References

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### **Slide 1 – Your Future is Family Medicine**

Before we get started there are four important points you should know about a career in family medicine:

1. Family medicine is an extremely satisfying career and an ideal specialty choice for students who like getting to know their patients as much as they like getting to know their patients' diagnoses.
2. It is intellectually stimulating and personally rewarding to care for families and individuals over time – through various life stages and during routine and significant events. It forges a patient/doctor relationship unlike any other specialty. And we know that this is exactly what patients want.
3. Recent research confirms that family medicine has more impact on population and individual health than other specialties and that family physicians are highly valued for their diagnostic and patient advocacy skills.
4. Being able to follow patients throughout their entire lives helps to ensure that men, women and children get the appropriate screening and preventive services well before they have established disease.

### **Slide 2 – What are the primary care specialties?**

To understand family medicine and the context in which family physicians view their patients, it is instructive to understand the tenets and value of primary care to individual health and quality of life.

The three primary care specialties recognized by the Institute of Medicine are family medicine, general internal medicine and general pediatrics. Each requires three years of residency training.

In 2005, 216 million office visits were made to family physicians; this is 48 million more than any other specialty.<sup>2</sup>

Family physicians provide more primary care than any other discipline in the United States; they provide nearly one-fourth of all primary care visits.<sup>1</sup> Family physicians see and manage a wide variety of problems, concerns and diagnoses and are often the first to hear and see the new problem.<sup>21</sup>

To keep up with patient demand for family physicians' services and to ensure a good lifestyle, family physicians are adopting new clinical and practice support strategies<sup>14</sup> which will be addressed in more detail later in this presentation.

### **Slide 3 – What is a typical week in primary care?**

Major reason for visit to all primary care specialists: acute conditions – 32.6 percent; chronic conditions – 34.7 percent; injury related – 11.5 percent.<sup>3</sup>

In addition, 87 percent of these patients also named a chief concern as prevention.<sup>3</sup>

### **Slide 4 – Why is primary care important?**

Cancer prevention, behavior modification, and control of chronic diseases are some of the ways in which primary care improves the health of individuals.

When we examine medical outcomes related to primary care we find:

U.S. adults and children who have a regular source of primary health care have better health outcomes than those who don't.<sup>4,5</sup>

An increase in the proportion of physicians who practice primary care leads to earlier detection of several types of cancer including cancer of the breasts, colon, cervix and skin.<sup>6-8</sup>

Having a primary care physician reduces mortality due to cardiovascular and pulmonary diseases.<sup>8</sup>

States that have more primary care doctors have lower death rates.<sup>5</sup>

Primary care decreases hospital admission rates and decreases emergency room utilization for children and adults.<sup>10-13</sup>

Countries that emphasize primary care have better population health [as measured by longevity, infant mortality and patient satisfaction] at lower costs.<sup>9</sup>

Researchers who have examined the potential impact of primary care on health care spending in the United States estimate that the nation would save \$67 billion dollars per year if every American used primary care physicians as their usual source of care.<sup>14</sup>

To put the cost/quality value of primary care into context:

U.S. health spending per person is twice the average of that in Britain, Canada, France, Germany, and Italy -- countries that support and emphasize primary care and have better health rankings.<sup>15,16</sup>

In 2001, as many as 2.2 million Americans and their dependents experienced medical bankruptcy; more than 75 percent of them had health insurance at the onset of the bankrupting illness. High medical bills contribute to the majority of medical bankruptcies.<sup>18</sup>

In the United States, one-third of excessive costs is attributed to performance of unnecessary and non-indicated procedures.<sup>5</sup>

### **Slide 5 – People rely on primary care physicians to care for complex disease**

Primary care physicians are the key source of health care for people with complex diseases and provide ongoing care for most of the health care needs of these patients.<sup>19,20</sup>

Recent research indicates that primary care physicians are better diagnosticians than their subspecialty colleagues.<sup>5</sup>

The ability to make an accurate diagnosis is a skill that makes family physicians, general internists and general pediatricians the ideal first contact point for patients in a highly complex health care system.

### **Slide 6 – What do family physicians do?**

Family physicians care for people and families of all ages. Family physicians emphasize wellness, disease prevention, and evidence-based medical interventions; they are always aware of the psychological and social dimension of their patients' lives.

Family physicians are important because they:<sup>21,22</sup>

- Care for a wide variety of medical problems,
- Coordinate care with other health professionals,
- Prioritize from a broad agenda to meet their patients' needs,
- Practice patient-centered medicine,
- Provide care to individuals within the context of family and community,
- Develop relationships over time and multiple patient visits,
- Perform a significant amount of patient education,
- Tailor messages about health habits to high-risk patients,
- Use illness visits as opportunities for prevention, and
- Use patient visits and opportunities to identify mental health problems.

### **Slide 7 – Family Physicians Provide**

Family physicians recognize and manage complicated acute and chronic diagnoses including diabetes, heart disease, hypertension, anxiety, depression, obesity and cancer. Helping patients and their families prevent the onset of these complex diseases is an area in which family physicians excel.

Sometimes, family physicians focus on the needs of very specific kinds of patients and have the option of pursuing additional expertise and training through fellowships in areas such as geriatrics, sports medicine, palliative care, preventive medicine, and international medicine, to name a few.

### **Slide 8 – Procedures performed by family physicians**

Family medicine is a great specialty for students who want to have long-term patient relationships and still have the opportunity to perform a variety of hands-on procedures.

In addition to office-based procedural training, family physicians receive training in hospital-based medicine, including critical care and obstetrical procedures, such as amniocentesis and cesarean section. Family physicians have the flexibility to incorporate procedures into their patient care as their skills and interests evolve and demand for those procedures change in the community.

### **Slide 9 – What distinguishes family physicians from general internists?**

In a nutshell, family medicine is the most versatile of all physician specialties and the only primary care specialty that provides comprehensive medical care to patients of both sexes and all ages within the context of family and community.

Though there are several similarities between family medicine and other primary care specialties, such as internal medicine, these graphics show that family physicians have an unprecedented opportunity to have an impact on the health of an individual patient over that person's entire lifetime.

Being able to follow patients through key life stages helps the physician ensure that men, women and children get the appropriate screening and preventive services long before they have established disease.

Another key distinction between family physicians and internists is that the vast majority of internal medicine residents don't plan to work in a primary care setting. In 2003, only 19% of surveyed first-year internal medicine residents planned to pursue careers in general medicine.<sup>23</sup>

### **Slide 10 – Percentage of Children’s Office Visits by Specialty**

An important component of caring for families is caring for children and adolescents. As a result, family physicians receive extensive training in the care of infants, children and adolescents and have the opportunity to pursue additional fellowship training in this area after residency.

When we examine who is providing health care to children, we find that family physicians play an important role. Maldistribution of the pediatric workforce is a major concern as pediatric residency graduates increasingly avoid practice opportunities in underserved urban and rural areas. Bridging this gap are family physicians. A recent report from the American Academy of Family Physicians points out that children in rural and underserved areas depend on family physicians more than ever for health care and that family physicians take care of a disproportionate share of uninsured children and those with public assistance.<sup>24,25</sup>

In some urban and suburban areas family physicians are providing care to fewer children. Because adults and seniors have become a greater proportion of the population, those physicians that provide care that spans the lifetime are increasingly likely to see a greater proportion of adults to children.<sup>25</sup>

Caring for children will continue to be an important part of a family physicians practice.

### **Slide 11 – What FP attributes are highly valued?**

A national market research firm recently asked subspecialists what they valued most about family physicians. Subspecialties said that family physicians are the best suited specialty to:

- act as a partner to patients
- know a patient's long-term medical history
- provide preventive care
- care for patients with complex medical problems

People who become patients value their relationships with family physicians above all else.<sup>27</sup>

The value of the patient-doctor relationships is especially emphasized in family medicine training and it creates unique opportunities to make a difference in the lives of patients and their families.

*Include examples from your experience such as a time when a subspecialist depended on you to track the patient's clinical course, or a time when the patient relied on you to explain the treatment and plan of the subspecialist.*

### **Slide 12 – Family physicians' whole-person orientation and training ensures that ...**

Family physicians are trained to go beyond the routine family medical history and to use tools such as genograms to gain a better understanding of a patient's situation. These tools and FPs' orientation to the whole person help a family physician know how family patterns and imbalances might affect illness management and reveal sources of support that may inhibit or contribute to well being.

Family physicians integrate biomedical and psychosocial factors into every patient visit often spending time with the patient discussing issues that may not have anything to do with their current complaint.

*Include examples from your experience such as a time when the patient's chief complaint was not the true reason for their visit and how you arrived at what was really on the patient's mind, how your ability to identify the true reason for the visit affected how much the patient trusted you.*

### **Slide 13 – Family physicians have a unique influence on patients lives.**

Family physicians are oriented to their patients' long-term health goals as well as the short-term interventions that their patients need.

Family physicians' unique bond with their patients and their families help create opportunities to monitor and tailor the care plans of their patients. For example, in a 15-minute illness visit that you might observe between a family physician and a patient, you likely would see the family physician casually visit with the patient at the beginning or end of the visit. Family physicians are particularly adept at using information from these open-ended conversations, which may appear to have limited medical value, to identify subtle signs of hidden disease, check the health status of a family member, or evaluate the success of a long-term health intervention suggested by the physician in a prior visit.

*Include examples from your experience*

**Slide 14 – Family physicians are relationship-oriented.**

A family physician's ability to develop good relationships is key to ensuring the good health of their patients. It may be one of the most effective tools that a family physician has. Family physicians use technology to confirm what they have already learned from their relationship with the patient.

Family medicine specific training is different from other primary care training models because it emphasizes the value of continuity and physician-patient relationships. It does this by assigning a panel of patients that the resident will follow through all three years of training.

*Include examples from your experience. For example, identify a situation that showed how a long standing relationship with a patient helped you to identify a hidden problem or how you helped a patient navigate a frustrating experience in the health care system.*

**Slide 15- Family physicians have a natural command of complexity**

Family physicians enjoy being the first point of contact for the undifferentiated patient.

They enjoy the challenge of making the right diagnosis from what seems like a series of unrelated or vague symptoms.

Family physicians take pride in their ability to help patients understand the varied and subtle ways in which an individual's health affects the family and community.

**Slide 16 – How are family physicians trained?**

Each of the three years of family medicine residency training incorporates a unique balance of biological, clinical and behavioral knowledge that prepares graduates to be comfortable in the role of first contact, primary physician for individuals and families.

More than 400 family medicine residency programs are available to students. They are in small and large communities in every state and they offer great flexibility that accommodates lifestyle interests, geography and family.

Many of these residencies also provide post-residency fellowship opportunities in areas such as sports medicine, academic medicine, geriatrics, adolescent medicine, women's health and research to name a few.

### **Slide 17 – Family medicine residency clinical curriculum**

The three-year family medicine residency curriculum is rigorous and ensures that family medicine residents gain a high level of competence in each of these areas. Most importantly, the family medicine residency curriculum is structured to ensure that residency graduates are very competent at leveraging relationships to diagnose and treat undetected disease from seemingly vague symptoms, disconnected events and unique family relationships.

Residents establish ongoing relationships with a core group of patients and their families early in the first year of residency training; these relationships continue throughout all three years. Just as they would if they were in practice, family medicine residents follow their continuity patients in the family practice center, in the hospital, in the nursing home and in some cases with home visits.

#### ***Med-Peds comparison (optional)***

Over the course of your training, other physicians may suggest that another route to “family medicine-like training” is a combined medicine-pediatrics residency.

Those of you compelled to compare the two training programs should know that there is limited published data that would allow anyone to present a side-by-side comparison or to suggest that med-peds graduates are more or less effective in practice than family medicine graduates.<sup>27</sup>

Some recently published studies shed some new light on combined medicine-pediatrics practice. A study published in *Academic Medicine* in 2004 examined the practice patterns of med-peds residency graduates. The study asked medicine-pediatric residency directors about the career plans of 1,500-plus graduates from 1998-2002. Among the key findings:<sup>28</sup>

- 1) The number of med-peds graduates choosing subspecialty training after graduation increased significantly between 1998 and 2002,
- 2) The percentage of med-peds graduates seeing both adults and children had declined each year from 1998 to 2002, and
- 3) Med-peds graduates were less likely to practice in an underserved community than family medicine graduates.

Another study published in *Academic Medicine* in 2005 indicated that the vast majority of med-peds graduates who work as generalists provided at least some care to all age ranges of patients. However, these physicians provided more care to adults than to children. When reporting on the adequacy of their residency training in preparing them for generalist practice, respondents felt better prepared to care for adults and geriatric patients than for children.<sup>25</sup>

The best way for students to effectively explore the differences and similarities between the two training curricula is to look for several opportunities to shadow and precept with family physicians and practicing medicine-pediatric physicians in the community setting. You may even want to identify a multispecialty practice that employs family physicians and medicine-pediatrics trained physicians. Ask each how they were prepared for ambulatory-based family medicine and why it was the right choice for them.

**Slide 18 – What’s a typical week in family medicine**

The family medicine office is where family physicians provide the majority of care to their patients.

Their patients present with diverse medical problems that demand the broad medical and psychosocial knowledge that family physicians possess.

Family physicians also deliver care in several other settings: hospitals, nursing homes, community health centers, urgent care centers, emergency rooms, the homes of their patients, managed care clinics, and university-based health centers to name a few.

**Slide 19 – A typical month of health care in the United States**

More women, men and children receive medical care each month in the office of primary care physicians than any other professional setting.<sup>1</sup>

In 2002, only 27 percent of American adults and 13 percent of American children saw a subspecialist. More than 12 times as many people are seen in primary care physicians’ offices as in hospitals.<sup>17</sup>

**Slide 20 – Hospital practice of family physicians**

Hospital-based care is an important part of family physicians’ training and practice. A very small percentage elect not to provide hospital-based care and do so to accommodate lifestyle choices, mix of patients that they serve, or specific clinical interests.

On average in 2006, family physicians who provide OB deliver 28.9 babies per year.<sup>30</sup> Though many family physicians, particularly in rural areas, deliver many more than the average.

### **Slide 21 – Lifestyle of Family Physicians**

Like most physicians, family physicians work hard to balance their calling to help patients with a desire to be available for their own families and other interests.

A recent survey by *Medical Economics* magazine indicates that family physicians generally spend between 50 and 55 hours of a week caring for patients and managing their practice. The survey showed that family physicians worked an average of 50 hours a week in patient related activities in 2003 down from nearly 55 hours in 2001. To put this information into perspective: The average hours worked per week by family physicians was three hours fewer than internists; two hours fewer than orthopedic surgeons and 10 hours fewer than cardiologists, gastroenterologists, general surgeons and obstetricians.<sup>31,32</sup>

Family physician work hours depend a great deal on the choices the physician makes about his/her practice. For family physicians, the practice setting, size and mix of patients are key variables. Family physicians have the flexibility to tailor their clinical services to the unique needs of their patients and situation. For example, nearly one-fourth of family physicians have reported practicing part-time at some point in their careers to accommodate personal and professional needs.<sup>34</sup> The AAFP Facts about Family Physicians, shows that physicians on average spend 39.7 hours per week in direct patient care.

Family medicine residency graduates can expect to make around \$125,000 after expenses, which compares favorably to average starting salaries in internal medicine (\$128,000) and pediatrics (\$120,000). According to one of the nation's largest physician recruitment agencies, the average salary offer made to family physicians in 2006 was \$161,000.<sup>44</sup>

This data made Family Medicine the highest recruited specialty in 2006.<sup>44</sup>

Family physician income is highly dependent on region, practice setting, and the number and mix of patients. A family physician's flexibility to tailor clinical services can shape income. For example, family physicians who see more patients and see patients in the hospital will have a higher income.<sup>35</sup> In the future, incomes for family physicians are projected to increase as much as 25% in practices that use new technologies and new care models such as chronic disease management.<sup>14</sup>

*Insert examples of shared call schedules and other ways family physicians balance personal and professional responsibilities*

### **Slide 22-Where Do Family Physicians Practice?**

Family medicine training gives family physicians the flexibility to go where people need health care and to adapt to different practice environments.

This whole-person training makes family physicians the ideal specialty to care for America's most vulnerable and underserved communities.

This slide documents the impact family medicine has on America's access to quality health care. The red areas noted on the map on the left show the location of designated Primary Care Health Personnel Shortage Areas at this time. Primary Care Health Personnel Shortage Areas are designated by the federal government based on low physician to population ratios and/or unique ethnic and socioeconomic status. The map on the right depicts the location and number of shortage areas that would be designated if family physicians were removed.<sup>36</sup>

About 21% of U.S. citizens live in the rural United States and have limited access to health care services by physicians. Family physicians have stepped in to fill that void. Currently about 23% of the family physician workforce practices in rural areas of the United States, while the majority practice in suburban and urban centers.<sup>37</sup>

Contrary to popular belief, rural physician incomes are on par with urban physicians. Rural physicians have significantly more purchasing power or higher "real" incomes, after accounting for the lower cost of living.<sup>38</sup>

### **Slice 23 – Are Family Physicians In Demand?**

As you progress through your medical education, you'll likely hear references to physician workforce projections. To put this information into context of specialty choice, review the data with a critical eye. Past physician workforce projections have proven to be flawed, mostly because they depended on complex models that are not easy to predict. For example, a little over a decade ago, workforce experts predicted that by the year 2000 certain subspecialists would not be able to find work.

Once again, organized medicine is studying the physician workforce needs of the nation and the debate about the mix of subspecialists to primary care physicians is heating up. While there are documented shortages in some medical specialties, it is clear that family physicians are and will be in demand for the foreseeable future.<sup>34,37,42</sup> and that expanding the nation's primary care base would improve the health of the nation.<sup>3</sup>

Current recruitment data show that family physicians are in demand in nearly every region of the United States, particularly in underserved communities. For example, Merritt Hawkins and Associates (MHA), one of the nation's largest physician recruiting companies, listed family medicine as the number one most recruited specialty in 2005-2006.<sup>44</sup>

### **Slide 24 – What Loan Repayment Options Are Available for Family Physicians?**

Family physicians make enough money to pay off student loans and have the lifestyle they want. More importantly, the demand for family physicians provides unique borrowing and loan repayment options that other specialists may not be eligible to receive.

Loan repayment programs for family physicians are sponsored by national, state, and local governments and some private organizations. Most contracts require a 2-4 year commitment. Benefits may include tax relief, scholarship opportunities and service commitments.

There are several sources for this information but no one resource lists them all. The Association of American Medical Colleges and your medical school's financial aid office are the best places to start.

The best thing you can do to manage your educational debt is to get organized, be informed and get counsel at the beginning of each year of medical school to plan your budget and consider all of the options available to you. Don't let complexity of the loan process, personal budget mismanagement and procrastination limit what you want to do with your career.

In 2003, the median level of educational debt of family medicine graduates was \$93,438 which compares to \$102,452 for all medical school graduates in 2003.<sup>30,40</sup>

A 2007 residency graduate with \$120,000 in debt who begins repayment after a three-year residency will generally pay \$20,616 per year for 10 years (\$1,718 per month). Consolidating the debt and extending repayment over a period of 25 years will result in payment of \$12,000\* per year (\$1,022 per month). \*Based on consolidated interest rate for Stafford loans of 6.8%. Maximum allowable is 8.25%.<sup>45</sup>

### **Slide 25 - What is the Future of Family Medicine?**

Family medicine has been successful at helping meet the health care needs of people -- particularly the needs of the underserved -- for more than 30 years. Yet, the specialty is not resting on its past success and is actively engaged in innovations to better care for people while making a career in family medicine even more rewarding.

Many of the new innovations include technology to better accommodate patients and support the clinical and practice needs of family physicians.

Family practices and family medicine training programs are implementing electronic health records with increasing frequency.<sup>43</sup> EHRs will permit family physicians and other clinicians to have -- in hand, at the time of the visit -- all the information known about a patient: lab results, imaging reports, correspondence from consultants, medications lists, refill histories and all the chart notes. The focus of the visit can then be on caring for the patient rather than collecting missing patient information.

EHRs also can be used to support clinical decision tools and to collect information that can help measure clinical outcomes. Clinical decision support tools include drug interaction warnings and clinical guidelines. Family medicine is one of the leading advocates for this technology and is helping family physicians and other primary care practices to test, finance and implement this technology.

Also, family physicians are increasingly integrating e-mail and Web-based technologies to improve physicians-patients' communication. Analysts project that using these technologies will help patients avert unneeded visits and allow the physician to spend more time with patients when they *do* need an office appointment. They also project that these technologies will help patient's get access to reliable information about their health conditions and the latest developments in treatments.

**Slide 26 – Innovations in Family Medicine**

Innovations also include new ways to care for and support patients.

Group visits offer a contrast to the typical 15-minute office visit. A two-hour group visit with 20 patients permits ample time for family physicians to provide patient education and discuss patient concerns. The benefits include: reduced health care expenses, improved patient and physician satisfaction, higher immunization rates, fewer repeat hospital admissions and fewer visits to the emergency department and subspecialists.

In addition, family physicians are using health care teams of physician-assistants, nurses and health educators to better meet the increasing need for extensive education and chronic disease management for illnesses such as diabetes, asthma, and health issues resulting from obesity, inactivity and poor diet.

### **Slide 27 – Family Medicine’s Model of Practice**

Recently (2003), the family medicine community actively engaged family physicians, patients, government, advocacy groups, health plans, residents and medical students in a process to evaluate the current state of family medicine and to determine how best to continue to meet the changing health care needs of Americans.

The findings of that research were evaluated by six task forces that looked at the core attributes of family medicine, education, life long learning, communication, advocacy and finance. Each of the task forces put forward recommendations to shape the specialty's evolution, to ensure a positive future for students who choose family medicine and to make sure Americans have access to high-quality primary care for the foreseeable future. Organized family medicine is now implementing these recommendations and here's what you should know.

At the core of the Future of Family Medicine Report are concepts such as Family Medicine's Model of Practice, Personal Medical Home and the Basket of Services.

Family Medicine's Model of Practice reinforces family medicine's strengths and suggests innovations that support patient-centered care and allow practices to operate more efficiently.

Another important component of the New Model is the personal medical home: the point at which all individuals – regardless of age, sex, race or socioeconomic status -- should be able to receive chronic and preventive medical care. This research tells us that patients want a personal medical home. Family physicians are best positioned to serve as a personal medical home.

The concept of basket of services emphasizes that all family physicians will directly or indirectly deliver key elements of care to their patients. Those elements include management and prevention of acute injuries and illnesses as well as chronic diseases; health promotion; well child care; child development and anticipatory guidance services; rehabilitation and supportive care; hospital care; maternity care; primary mental health care, consultation and referral services; and quality improvement.

The report also outlines other recommendations, such as guidelines to advance family medicine resident education. To read more about these innovations and other recommendations outlined in the Future of Family Medicine Report go online to [www.futurefamilymed.org](http://www.futurefamilymed.org)

### **Slide 28 – More About Family Medicine**

The best opportunity to explore family medicine is to pursue additional clinical rotations in multiple practice settings. Other programming that will help you explore family medicine include the AAFP Student Website known as Virtual FMIG, AAFP chapter meetings, the National Conference of Family Medicine Residents and Medical Students held each summer in Kansas City, Mo., and national meetings hosted by the Society of Teachers of Family Medicine and AAFP.

These conferences provide unique opportunities for students to meet with national leaders in family medicine and to visit with residents and residency program faculty.

## References

1. Cherry DK. National Ambulatory Medical Care Survey: 2002 Summary. Advance Data from Vital and Health Statistics; No. 346, Hyattsville, Maryland: National Center for Health Statistics. 2004.
2. National Ambulatory Medical Care Survey: 2005 Summary. Advance Data from Vital and Health Statistics.
3. National Ambulatory Medical Care Survey: 2004 Summary. Advance Data from Vital and Health Statistics.
4. Baicker K, Chandra A. Medicare Spending, The physician workforce, and beneficiaries' quality of care. *Health Aff.* Jan-Jun; Suppl Web Exclusives: w4-184-97.
5. Starfield B, Shi L, Grover A, Macinko J. The effects of specialist supply on populations' health: Assessing the evidence. *Health Aff.* March 15, 2005.
6. Ferrante JM, Gonzales EC, Pal N, Roetzheim RG. Effects of physician supply on early detection of breast cancer. *J Am Board Fam Pract.* 2000; 13:408-414.
7. Roetzheim RG, Pal N, Van Durme DJ, Wathington D, Ferrante JM, Gonzalez EC et al. Increasing supplies of dermatologists and family physicians are associated with earlier stage of melanoma detection. *J Am Acad Dermatol.* 2000; 43(2 Pt 1):211-218.
8. Campbell RJ, Ramirez AM, Perez K, Roetzheim RG. Cervical cancer rates and the supply of primary care physicians in Florida. *Fam Med.* 2003; 35(1):60-64.
9. Macinko J, Starfield B, Shi L. The contribution of primary care systems to health outcomes within organization for economic cooperation and development (OCED) countries, (1970-1998). *HSR: Health Service Research.* 2003; 38(3): 831-865.
10. Bindman AB, Grumbach K, Osmond D, Komaromy M, Vranizan K, Lurie N et al. Preventable hospitalizations and access to health care. *JAMA.* 1995; 274(4):305-311.
11. Wasson J, Sauvigne A, Mogielnicki R. Continuity of outpatient medical care in elderly men: A randomized trial. *JAMA.* 1984; 252(17):2413-17.
12. Hochheiser LI, Woodward K, Charney E. Effect of the neighborhood health center on the use of pediatric emergency departments in Rochester, New York. *N Engl J Med.* 1971; 285:148-152.
13. Hurley RE, Freund DA, Taylor DE. Emergency room use and primary care case management: Evidence from four medicaid demonstration programs. *Am J Public Health.* 1988; 79:843-846.
14. Spann SJ. Report on financing the new model of family medicine. *Ann Fam Med.* 2004 Dec 2; 2 Suppl 3:S1-21.
15. Starfield B. Is US health really the best in the world? *JAMA.* 2000; 284(4): 483-5.
16. Starfield B. Primary care and health. A cross-national comparison. *JAMA.* 1991; 266(16): 2268-71.
17. Phillips RL, Green LA, Fryer GE, McCann J. The new model of primary care: Knowledge bought dearly. *American Academy of Family Physicians.* 2004.
18. Himmelstein DU, Warren E, Thorne D. Woolhandler. Illness and injury and contributors to bankruptcy. *Health Aff Web Exclusive.* Feb 2005.
19. Mold JW, Fryer GE, Phillips RL, Doversy SM, Green LA. Family physicians are the main source of primary health care for the Medicare population. *Am Fam Physician.* 2002; 66:2032.
20. Biola H. Green LA, Phillips RL, Guirguis-Blake J, Fryer GE. The U.S. primary care physician workforce: Undervalued service. *Am Fam Physician.* 2003; 68:1486.
21. Stange KC, Jaen CR, Flocke, SA, Miller WL, Crabtree BF, Zyzanski SJ. The value of a family physician. *J Fam Pract.* 1998; 45 (5): 363-368.

22. Stange KC, Zyzanski SJ, Jaen CR, Callahan EJ, Kelly RB, Gillander WR et al. Illuminating the "black box". A description of 4454 patient visits to 138 family physicians. *J Fam Pract* 1998; 46(5): 377-389.
23. Garibaldi RA, Popkave C, Bylsma W. Career plans for trainees in internal medicine residency programs. *Acad Med.* 2005; 80: 507-512.
24. Backer LA. Caring for children: Re-examining the family physicians role. *Fam Pract Management.* 2005 July/Aug; (12) 7; 45-52.
25. Randolph GD, Pathman DE. Trends in the rural-urban distribution of general pediatricians. *Pediatrics.* 2001 Feb; 107 (2): E18.
26. Freed G, Fant, K, Hahra T, et al. Internal medicine-pediatrics physicians: Their care of children versus care of adults. *Acad Med.* 2005 September; 80:858-864.
27. Martin JC, Avant RF, Bowman MA, et al. The Future of Family Medicine: A collaborative project of the family medicine community. *Ann Fam Med.* 2004 Mar-April; 2 Suppl 1:53-32.
28. Campos-Outcalt D, Lundy M, Senf J. Outcomes of combined internal medicine-pediatrics residency programs: A review of the literature, *Acad Med.* 2002; 77:247-256.
29. Frohna JG, Melgar T, Mueller C, Borden S. Internal medicine-pediatrics residency training: Current program trends and outcomes. *Acad Med.* 2004; 79: 591-596.
30. AAFP Facts About Family Practice. 2006. <http://www.aafp.org/x530.xml>
31. Terry K. Jobs 2004. Primary care outlook. *Med Econ.* 2004 May 21;81(10):84-7.
32. Terry K. How hard are you working? *Med Econ.* 2004 Oct 8;81(19): 30-4.
33. Maresh OK. Part-time practice: making it work. *Fam Pract Management.* 2004 Jun; 11(6):45-50.
34. 2004 review of physician recruitment incentives. Merritt, Hawkins & Associates. 2005
35. Carter J. What makes a high earning family physician? *Fam Pract Management.* 2005 July/August 12(7):16-20.
36. Primary Care Health Professional Shortage Area Maps. Robert Graham Center for <http://www.graham-center.org/maps.xml>. Accessed August 4, 2005.
37. Green LA, Dadoo MS, Ruddy G, et al. The physician workforce of the United States: A family medicine perspective. The Robert Graham Center. October 2004. [www.graham-center.org/Prebuilt/physician\\_workforce.pdf](http://www.graham-center.org/Prebuilt/physician_workforce.pdf).
38. Reschovsky JD, Staiti, AB. HSC Community tracking study physician survey, Center for Studying Health Systems Change. Issue Brief No. 92. January 2005. <http://www.hschange.org>. Accessed July 16, 2005.
39. Croasdale M. AMA sees physician supply tightening in specialty areas. *Amednews.com*, Accessed July 2005.
40. Jolly, P. Medical school tuition and young physicians' indebtedness. *Health Aff.* 2005; 23(2) 527-535.
41. Morrison G. Mortgaging our future-The cost of medical education. *N. Engl J Med.* 2005. 352;2. 117-119.
42. Croasdale M. AMA sees physician supply tightening in specialty areas. *Amednews.com*. Accessed July 2005
43. Terry K. Exclusive survey: Doctors and EHRs. *Med Econ.* 2005, January 21.
44. Merritt Hawkins and Associates. 2007 Review of Physician and CRNA Recruiting Incentives. Oct 2007.
45. Jolly, P. Medical School Tuition and Young Physician Indebtedness- An update to the 2004 Report. AAMC 2007.