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Country Case Study: Primary care in the United States

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1 Summary information

1.1 Governance of primary care in the United States

Primary care, for the purposes of this US case study, is accessible, comprehensive, coordinated and continuous care, characteristics described in the first IOM report on Primary Care (IOM 1978)[1]. Most independent primary care is delivered in small practice settings, but over one-third of American primary physicians are employed by HMOs, hospitals, community health center systems, and other large health systems[2].

Practice setting	1996-97	2004-05
1-2 physicians	37.5%	35.6%
3-5 physicians	10.3%	7.3%
6+ physicians	15.1%	20.4%
Others	37.1%	36.7%

Three characteristics of American healthcare strongly influence various efforts to reform primary care. First, 47 million Americans are without health insurance coverage at any point in time, and many others have periods of time without coverage. It is now well documented that the uninsured have significantly less care, poorer care, and worse outcomes. Second, a culture that emphasizes specialty care for all problems exists in many places, and tends to dominate medical training. Third, there is a large payment and income gap between primary care providers and most specialists.

The United States does not have a national "system" of health care so the governance of healthcare is defined primarily at the state and local levels. Larger group practices and in some cases, large integrated health systems such as the Veterans Health Administration or Kaiser Permanente, have an organizational culture and internal operating rules, with forms of governance for primary care physicians practicing in those systems. Federal government involvement in the delivery or financing of primary care is largely limited to:

- Medicaid and Medicare payment laws, which, in addition to determining payment for enrollees in those plans, influence the provider payment policies of private health insurance companies.
- Support for health care systems serving low-income Americans: community health centers, the Veteran's Health Administration, and the Indian Health Service.

The lack of a national or even regional primary care health "system" leaves us unable to provide a simple picture of primary care in the US. Our national policy is to allow health care to be market driven, so that payment systems and local practice organizational structures are *de facto* our primary care policy-makers.

1.2 Financing/remuneration in primary care

The majority of primary care is provided in "private" practices in a fee for service model where the private and federal insurers pay a fee for a given service, with the practices managing the costs of providing the services. The insurers typically pay a higher fee to other specialties than to primary care providers for the same intensity of service. Larger integrated health systems, such as Kaiser Permanente, pay physicians a salary, with productivity incentives, and, as an organization, may operate under a global budget to manage revenue and expenses over time. Capitation has been employed on a limited basis but most primary care practices are not skilled at actuarially managing risk. Many private insurers have modest pay for performance programs and the federal government through Medicare has recently implemented a modest physician pay for reporting program, the Physicians Quality Reporting Initiative (PQRI).

1.3 HHR in primary care

Primary care remains largely delivered by physicians in the US, with newer models, such as the patient-centered medical home (PCMH) incorporating teams, but the model is in development and not yet proven. Although nurse practitioners and physician assistants have become more common in US primary care, we are only in the very early stages of that evolution. Most nurse practitioners (NPs) and physician assistants (PAs) in primary care are either treated as an equal provider taking care of their own panel of

patients where their licensure permits, or they provide urgent care and absence coverage for physicians. The typical clinical team in primary care remains one clinician and one medical assistant. Due to the expense, nurses are relatively rare within US primary care.

1.4 Main drivers for reform in primary care

For the insured population, cost of care is a principal driver for primary care reform, primarily being driven by the employers paying for their employees' health care (led by the self-insured employers). Quality of care is also a driver among consumers, insurers and employers, with Medicare just beginning to assess quality with the Physicians Quality Reporting Initiative (PQRI). Lack of access to doctors, including primary care for the insured population, is not yet a primary driver, but may soon as the proportion of US medical graduates choosing primary care residencies is plummeting.

1.5 Barriers to primary care reform

A principal barrier to primary care reform is access to health care. Not only is lack of health care insurance a barrier for the un- and underinsured, but the workforce of primary care clinicians and other clinical staff (e.g., nurses) may be inadequate for the growing demand for primary care services. There are also financial barriers. Primary care compensation relative to other specialty and subspecialty physicians is inadequate and, critical primary care services, such as care coordination, are not properly reimbursed. Also, many small practices have limited financial capital and are unable to adequately invest in their practices for newer technologies, such as electronic health records, with the business case difficult to make in the short term.

2. Macro level

2.1 The Health System

Because federal policies play such a minor role in U.S. private medical care, primary care practices vary significantly based on their local environment and whether there is some organization between the practitioner and the payment system. As a result, primary care access and services can differ within neighborhoods and even within family

households. So, rather than a single “macro” level in the US, there are numerous local or “meso” influences on both individual practices and on the community or region as a whole. These influences include the degree of organization or integration of care (role of larger medical groups or hospital systems) and the policies and priorities of the major payers (state [Medicaid], private health insurers, and self-insured employers). For illustration purposes, a practice that is part of an integrated capitated system, such as Kaiser Permanente (including health plan, hospitals and providers) could be considered at one end of the spectrum and a small independent practice dependent on fee-for-service payments from several governmental and private insurers (without an organizational intermediary) at the other. Along the spectrum, there is variation in the size and depth of integration and how the health care institutions are paid. This will be discussed below.

2.2 Measurement

The structure, process and outcomes of primary care are largely not measured in the U.S. in any systematic way. There is a heavy reliance on HEDIS measures, which were developed and primarily used by health insurance plans in response to purchasers asking about the value of their health care expenditures. Health plans and large medical groups generally use them. In general alignment with these measures, provider organizations often work to improve, for example, diabetes management or immunization rates and in some cases are being rewarded for better care (“pay for performance”). For “self-employed” physicians, efforts are underway to “certify” practices that evaluate their performance, again, primarily focused on process improvements, with plans to link payment to better performance in these settings as well.

National public-private membership organizations, such as the National Quality Forum and the National Committee on Quality Assurance (NCQA), are attempting to develop consensus performance measures pertaining to the work of primary care. The NCQA is testing a new measure (the Physician Practice Connection—Patient-centered Medical Home (PPC-PCMH)—that may well be used to certify that primary care practices meet criteria for payment as a PCMH.

2.3 Clinician training and role of HSR

The rapid decline in the proportion of US medical students choosing primary care careers has intensified interest in primary care reform. But, there is no national graduate medical education curriculum focused on the coordinating role of primary care providers, and there are essentially no governmental constraints on specialty choice. The PCMH model has had little influence on primary care training, until recently. Essentially all primary care residency training programs have a "continuity clinic" experience for their trainees, but most don't provide well-organized care consistent with the CCM or PCMH. Many feel that these suboptimal training experiences are contributing to the dramatic decline in the choice of primary care careers. More recently, some residency training programs are participating in collaborative improvement activities based on the CCM and Medical Home models.

Residency program accreditation and physician specialty board certification are the responsibility of national accreditation and certification organizations such as the Accreditation Council for Graduate Medical Education and the Boards of Internal Medicine, Pediatrics, Family Medicine and Osteopathy. These organizations only recently have given greater emphasis to care coordination, chronic illness and patient-centered care. While the field of health services research is quite robust in the US, the relevance of their findings is often limited by the absence of an adequately funded health services effort directed at primary care. In addition, as most of these studies are done in academic settings, the findings are often not representative of the population. These factors limit their translation into policy.

2.4 National Primary Care Leadership

Federal government leadership for primary care redesign and payment reform in the U.S. has not been a priority in any prior election and does not appear to be a priority in this election year. Some state governments (e.g., Pennsylvania, Vermont, and North Carolina) have made primary care management of chronic illness a major priority driven by the escalating costs of chronic illness care among Medicaid recipients and state employees. The major primary care professional societies, the American Academies of Family Medicine and Pediatrics, and the American College of Physicians, are among the strongest advocates for primary care reform. These organizations have developed,

endorsed and are vigorously promoting the Patient-centered Medical Home model and related payment reform.

3. Meso Level

The Meso level, so important in understanding American primary care, comprises the local or community factors that influence care delivery, funding, and regulation of primary care, and . These major local influences include:

1. **State and Local Government** – in many parts of the U.S. are beginning to play larger roles in healthcare reform. Because states are responsible for a significant proportion of Medicaid funding and state and local governments provide health insurance for their many employees, many have been experimenting with different approaches to improving quality and reducing the costs of care, especially for the chronically ill. While these experiments often began with contracts to Disease Management companies1, they more recently have involved strategies to improve primary care.

2. **Health insurance plans** – have considerable local influence, individually and collectively, on primary care practice. The influence of a particular health insurance company varies with the percentage of a practice's population enrolled in a particular company. But perhaps even more important is the management philosophy of the plan. Some strongly support, subsidize and incentivize quality improvement, while most others simply try to manage costs. One of the major challenges to the improvement of American primary care is that even very small primary care practices serve the patients of several health insurance plans.

3. **Medical Groups** - are also local. They may be single specialty (e.g., all primary care), multi-specialty, hospital-based or not. Many larger medical

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1 A peculiar phenomenon of the US market, **disease management companies** are generally for-profit entities that contract with governmental or private insurers or payers to support/improve specific patient populations, usually with a chronic condition, to improve medication adherence, self-management, and reduce costs usually outside of the context of the primary care setting. *BMJ* 2000;320:563-566 (26 February). Many of these programs have failed to deliver better patient outcomes and/or lower costs and this approach is falling out of mode in the US.

groups have active programs of quality improvement, and are leaders in American healthcare. For example, the availability of electronic medical records and nurse care managers is strongly related to the size of the medical group.

4. **Regional Improvement Coalitions –** are springing up across the U.S. with philanthropic and some public funding. These coalitions generally include the major stakeholders – providers, health plans, and employer purchasers. State or local governments are often involved and may even be the driving force.

3.1 The Health System

Coordination between medical (especially primary care) and social or other services for patients is infrequent and inconsistent unless the primary care practice is part of a large medical group. But even large medical groups and hospital systems often build their own services rather than coordinate with existing community agencies. As a result, most primary care practices, especially smaller ones, have minimal access to or coordination with nurse care managers, clinical pharmacists, exercise programs, or other services of demonstrated value to individuals whose care could benefit from them.

Coordination among providers has never appeared to be a priority in American medical care. A recent Commonwealth Fund international survey found that nearly 30% of American primary care physicians receive information from specialist referrals less than half the time[3]. Recent changes in American healthcare delivery (e.g., the growth of the hospitalist movement2) have further limited primary care's ability to coordinate care. Finally, American primary care's ability to be held accountable for continuity, prevention, and coordination is made more difficult by fee-for-service reimbursement, which, in addition to undervaluing such services, makes it difficult to link a patient with a primary care medical home. The medical home experiments being mounted by multiple

2 (From Wikipedia) **Hospital medicine** in the United States is the discipline concerned with the general medical care of hospitalized patients. Doctors, Physician Assistants or Nurse Practitioners whose primary professional focus is hospital medicine are called **hospitalists.** Hospital medicine, like emergency medicine, is a specialty organized around a site of care (the hospital), rather than an organ (like cardiology), a disease (like oncology), or a patient's age (like pediatrics).

U.S. organizations hopefully will force clearer definitions of practice panels and provide greater incentives to meet their needs for access, continuity and coordination.

3.2 Community Resources

Unlike many European countries, social and community services that could complement primary care have no coherent oversight, but are a generally a collection of public and private agencies often competing with one another. Linkage between these services and primary care is in general informal and under-developed. Except in a few locales, the public health sector has not addressed clinical quality improvement other than in its own primary care clinics.

3.3 Self-management Support

Community-based self-management support resources consist of a few proven and many unproven programs offered by patient advocacy organizations (e.g., the Arthritis Foundation), hospitals or large medical groups primarily for their own patients, as well as the activities of Disease Management companies hired by health insurers or employers. As mentioned above, there is no oversight or systematic efforts to provide information or linkage with primary care. There is a growing sense that time-limited self-management programs, while a useful starting place, can't meet patient self-management needs over time. As a result, more advanced primary care practices are developing the capacity within the practice to provide collaborative goal-setting, action planning, and follow-up.

3.4 Delivery System Design

Concerns about the escalating cost of healthcare have increased the focus of health plans, purchasers, governmental agencies, and multi-stakeholder coalitions on the care of the chronically ill. Prevention is seen as part of a longer-term chronic illness cost reduction strategy. The degree to which primary care has the will and resources to provide comprehensive care appears stronger where there are organizations who are paid to be responsible for a patient (e.g., capitated medical groups) and where separate payments are made to provide more comprehensive services to individual patients. An increasing interest in the high-cost chronic disease patients has led to experiments (with

various success) to pay for additional disease management services (e.g., Medicare pilot, Indiana Medicaid).

Smaller primary care practices in the U.S. generally do not have the practice infrastructure to provide comprehensive care to patients. , nor do they have financial incentives to invest in such infrastructure. Moreover, the shifting nature of insurance coverage for many people works against the formation of a continuing relationship between patients and practitioners. Major infrastructure needs are information technology and staff to provide self-management support and case/care management. The meso level of American healthcare has, in general, only been of marginal assistance to smaller primary care practices in this regard. One interesting development is the development of practice coalitions in the state of North Carolina and elsewhere. In North Carolina, primary care practices serving Medicaid (state and federally supported low income insurance) patients are given a small monthly payment for each Medicaid patient if they join a state sponsored provider coalition. The coalition also receives a small monthly payment for each patient that is used to develop community infrastructure—e.g., nurse care managers, measurement, and other quality improvement activities.

3.5 Decision Support

Evidence-based guidelines are ubiquitous, but, like measures, often vary from health plan to health plan, medical group to medical group. There is recognition that the multiplicity of guidelines and measures is an obstacle to improvement, and there is hope that there will be wide acceptance of guidelines and measures established by national organizations such as the National Quality Forum. Most health plans, medical groups, and regional coalitions seem to recognize the urgency of standardization.

3.6 Clinical information Systems

Most large medical organizations have substantial electronic data (mostly based on billing/claims forms) and some form of measurement program in place. Smaller practices may receive measures of their performance from the multiple health plans covering their patients. But health plans only have data on their own enrollees and may well not use the same measures as other health plans, which makes it difficult for a practice to get an overall perspective on performance. As a consequence, smaller primary

care groups often have very limited understanding of their quality of care. Regional coalitions that provide community-level measurement may ultimately be the best hope for systematic measurement. Some of these coalitions such as statewide efforts in Wisconsin, Massachusetts and Minnesota that publicly report quality measures also include measures of patient experience. The measurement of patient experience may well be an important step in increasing the attention paid to making care more patient-centered.

There is growing evidence that the electronic patient data systems (registries) that support population improvement[3] contribute the most to improvements in chronic illness and preventive care. Practice information systems are a highly competitive marketplace in the U.S. with many vendors and many different products. Sadly, many of the more successful EHRs do not have registry functionality. As a result, only a small minority of primary care practices have information systems that can support major improvements in health care. There are many efforts underway to aid the adoption of IT in practice, but they are beginning to recognize that full and successful implementation of IT requires redesigning the practice to use technology well, and that requires a different kind of technical assistance.

3.7 Other aspects

The meso level of American healthcare has suffered from the divisive effects of market competition, especially among health insurers, and the lack of leadership and accountability especially at the federal level. The advent of multi-stakeholder coalitions and growing interest among state and local governmental agencies in playing a greater role in clinical quality improvement may begin to fill this leadership void.

4. Micro level

4.1 Self-management support

Like other aspects of the US health system, the degree of self-management support provided by medical practices is quite variable. While some practices have

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3 More specifically, **registries** allow: identification of specific populations needing service, stratification based on risk/severity, and decision support to target interventions.

components of self-management support in place, such components are either fragmented or minimally existent in most practices. Specific data are lacking on the penetration of these tools into medical practices or the degree of self-management support provided within practices. We suspect that most physicians believe that they engage patients in shared-decision making for example, although few would use formal tools to do so.

The same fragmentation exists from the patient's perspective. Self management support is widely available outside of the medical practice via the Internet and an increasing percentage of individuals use the internet to obtain information and advice about health and healthcare. A 2005 survey by the Pew Internet and American Life Project, 46% of American Adults have used the internet for health or medical purposes[4].

Likewise, health insurance providers frequently provide forms of self-management support via so called disease management programs (See footnote 1). Insurers will most commonly contract with a national provider of disease management services. The services they provide vary based on the company and the contract with the insurer. Disease management providers typically interact with the patient directly. A paucity of high quality data on the effectiveness of these services exists[5]. The primary concern about such programs is that they are based outside of physician practices and communication between disease management programs and the patient's primary care practice is generally lacking.

A review of self-management support strategies was published by the California HealthCare Foundation in 2005[6].

4.2 Decision support

A wide variety of evidence-based treatment guidelines are produced by variety of organizations and they are readily available to practicing physicians. For preventive services, there is relatively broad acceptance of a single source of recommendations put forth by the Agency for Healthcare Research and Quality's US Preventive Services Task Force[7]. For non-preventive services however, while guidelines are abundant, no single source of accepted clinical guidelines exists. The US Agency for Healthcare Research and Quality (AHRQ) hosts a searchable database called the National Guideline Clearinghouse for evidence-based clinical practice guidelines[8].

Other easily accessible decision support tools are available to primary care clinicians in the form of internet resources. Examples include the highly popular product UpToDate[9], the American College of Physicians Physicians' Information and Education Resource[10]. Despite their availability, the formal use of such guidelines is quite variable and systems to embed guidelines into care processes are in early stages of development. The electronic infrastructure in most practices make is difficult to fully and reliably incorporate anything beyond the most rudimentary decision support tools. Decision support within Electronic Health Record (EHR) products frequently consists of preventive care reminders and drug-drug interaction checkers. Most advanced tools can be incorporated into good EHRs, but it is frequently dependent upon the practice to do so.

Continuing Medical Education (CME) requirements differ by state. CME is available in a wide variety of formats including individual educational sessions such as a hospital's Grand Rounds, to CME courses, to widely available online CME. Some products such as UpToDate4 provide CME in conjunction with the use of their product. A minimum number of hours are required to maintain active licensure to practice medicine.

4.3 Clinical information systems

The adoption of EHRs continues to expand in the US, although specific data on current adoption is variable due to differences in definitions of an EHR. Current estimates are that about 25% of physicians use EHRs although less than one in 10 are using what experts define as a "fully operational" system that collects patient information, displays test results, allows providers to enter medical orders and prescriptions, and helps doctors make treatment[11] decisions. Unfortunately, EHR vendors are themselves in a competitive market and most products are prohibitively expensive for small practices. In addition, most EHR systems have limited registry functionality to support population care.

5. Key Findings

Major Barriers

4 **UpToDate** is an electronic clinical reference resource that summarizes published evidence and specific recommendations for patient care.

The major barriers to improving primary care in the U.S. are:

- The lack of a national healthcare system that can provide leadership, coherent planning and financial management, and support quality improvement.
- A fee-for-service payment system that creates a large administrative burden on primary care and undervalues important primary care activities. As a result, many primary care practices are struggling financially, have had to reduce clinical staff while adding administrative staff to keep up with paperwork and billing, and can't afford information technology or other practice enhancements.
- The organizational and professional isolation of practices that are not part of larger organizations that can help them acquire resources, measure performance, receive continuing education, participate in collaborative quality improvement, and protect them from the confusion and demands of multiple competing health insurance plans.
- The lack of national recognition of the importance of and a commitment to primary care principles and enhancements.

Major Success Factors

The following factors offer the best hope that U.S. primary care will improve:

- Development of a national consensus on the value of primary care and a medical home for every individual.
- Medicare and commercial payment reform based on the value of primary care, that supports and rewards infrastructure development, involvement in continuous quality improvement, and those services shown to improve patient outcomes regardless of which member of the practice team provides them.
- Further development of state and regional public-private coalitions focused on improving care and reducing costs. Most have focused on chronic illness and primary care with special attention to smaller practices.
- National consensus primary care performance measures that assess practice structure and patient experience in addition to process and outcome indicators.
- Even more aggressive leadership and action by major national professional organizations in support of practice redesign and payment reform.

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