ARIZONA HEALTH FUTURES

DECEMBER 2009

GOODBYE, HELLO

Framing the Future of Primary Care: An Arizona Perspective

SLHI

GOODBYE, HELLO. *It's the journey metaphor of life. It's the process of change, the stories we tell one another, the attitudes, values and beliefs we hold, the lessons learned in our coming and going from one landscape to another.*

GOODBYE, HELLO. *It's a suggestive metaphor for framing the process of change in American health care, and the future of primary care in particular.*

"Primary care is on death row."

David Reuben, American Journal of Medicine, 2007

The Long Goodbye

In many respects, health care reform in the United States is a *long goodbye*. To paraphrase St. Augustine, we want to be saved, "but not just yet."

- **Physicians** are reluctant to say goodbye to a physician-centric system, even though they recognize the forces that are breaking it apart.
- **Patients** – those who have good health insurance, that is – are reluctant to say goodbye to getting pretty much what they want, when they want it, and having somebody else pick up most of their health care tab.
- **Health plans** are reluctant to say goodbye to profits generated through medical underwriting and bundling patient risk through employers, even though they recognize some of the inherent inequities and inefficiencies that result.
- **Hospitals** – especially smaller, less integrated ones – are reluctant to say goodbye to their dominant role in delivering comprehensive health care services, even though they recognize the technological and economic forces that may be shaping a very different corporate future.
- **Pharmaceutical companies**, brokers, and health care businesses of all types are reluctant to say goodbye to industrial practices and arrangements that have generated jobs and sizeable profits for them over the past 40 years.
- **Politicians** are reluctant to say goodbye to the well-heeled health care lobbyists who grease their campaigns, even though they know the system they represent is unsustainable.

Most of all, none of us wants to say goodbye to relationships of mutuality and trust we have nurtured in our professional and community associations over the years. We recognize the inexorable rising costs, disparities in access and quality of care, system inefficiencies and ineffectiveness, yet we are reluctant to toss it all out and start over.

We know we have to say goodbye, but not to everything – and not just yet.

The Promise of Hello

On the other hand, there are some things we look forward to saying hello to:

- A *health* care system – an actual *system* of coordinated and integrated care across the health continuum – instead of a fragmented *sick* care system. A *patient*-centered, not a provider-centered, system.
- The primacy of *primary care*. Systems that invest in core primary care services based on prevention and wellness produce better outcomes at a lower cost than specialty-driven care.[1]

- *A value-based payment system.* A blended approach that reinforces integrated care and rewards quality. Moving away from fee-for-service alone.
- *Transparency.* Being able to collect, analyze, access and share relevant information through seamless electronic health information exchanges to inform private and public choice, efficiency and effectiveness.
- *Personal responsibility.* A greater emphasis on the individual and community role in staying alert, focused and involved in promoting good health – and taking responsibility for our actions.
- *System improvement.* A relentless focus on improving quality and safety, reducing errors, waste and unnecessary care, and lowering costs. *A total value perspective.*

We won't move from a long goodbye to the promise of hello in health care without upsetting some ingrained traditions and interests. In particular, the past, present and future of primary care, which many in health care believe to be in a state of crisis, illustrate the central challenges – and opportunities – we collectively face.

Those challenges and opportunities are the subject of this two-part Arizona Health Futures Issue Brief.

You say goodbye
And I say hello
Hello, hello
I don't know why
you say goodbye
I say hello

Lennon and McCartney

Purpose, Outline and Method

Purpose

In 2008 and early 2009, the authors of this report participated in the Arizona Primary Care Workgroup, a representative group of clinicians, educators and other stakeholders assembled under an Executive Order by then Governor Janet Napolitano to develop recommendations to ensure that Arizona is able to attract and train an adequate supply of well-trained primary care health providers. The Workgroup issued its report in April 2009.[2]

The report listed a number of factors impacting primary care but, because of lack of time and resources, did not cover them in any depth. The Workgroup's focus – and charge – was the primary care *workforce*, not primary care per se, so a number of complex, fascinating and even contentious issues were acknowledged but left to "other venues and groups."

Goodbye, Hello provides a broader venue for a discussion of the future of primary care. Instead of focusing solely on a shortage of primary care physicians, we start with the thesis that the more fundamental problem is how primary care is organized, practiced and rewarded within a larger fragmented, specialty-driven "non-system" of care. Until we address these issues through healthcare reform, it is unlikely that workforce shortages will change substantially.

"You skate to where the puck is going,
not where the puck is."

Wayne Gretsky

Part Two: Bending the Possibility Arrow will be released January 2010.

Outline

To illustrate this thesis, we have organized this report in two parts:

Part One: The Primary Care Parade

1. The *definition* of primary care. It's a multi-dimensional term – and one dimension can crowd out another.
2. The *history* of primary care in the U.S. Where we sit today is the result of well-established economic, political and social forces.
3. Trends in *health access* and *health status* of Arizonans – and their impact on the present and future of primary care.
4. The Arizona primary care *workforce*. Numbers, distribution, divisions.
5. The *current* primary care practice environment. What are the social and economic drivers, values and belief systems that shape the practice environment today?

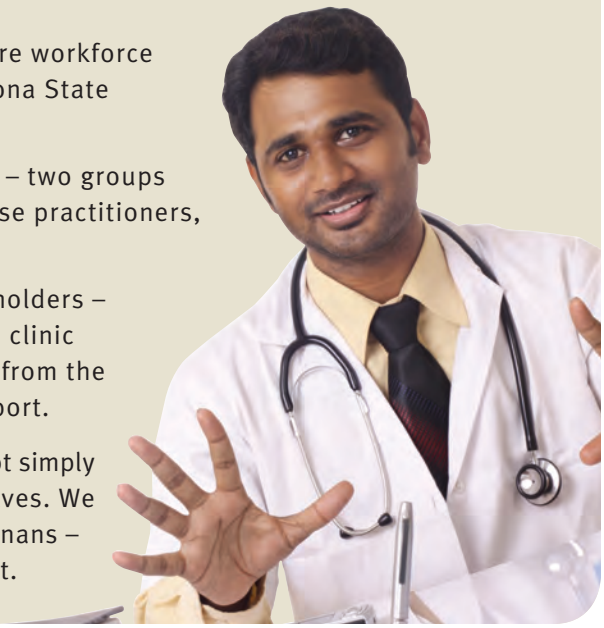
Part Two: Bending the Possibility Arrow

6. The *future* of primary care. What promising practices, models, and larger economic and sociocultural trends might shape the practice environment tomorrow?
7. *Recommendations.* How does Arizona get from here to there?

Method

SLHI issue briefs are exercises in framing complicated and contentious issues in health policy and community health. We employ multiple methods to establish a broad, interpretive context that informs, provokes and ideally inspires further discussion and collective action on how to improve primary care:

- A review of primary and secondary research and literature on the subject of primary care and related issues in American health care.
- Use of SLHI's 2008 Arizona Health Survey (AHS) to highlight access and health status issues related to primary care.
- An analysis of central components of Arizona's primary care workforce by the Center for Health Information and Research at Arizona State University, utilizing licensing and survey data.
- Interpretation of the results of eight Arizona focus groups – two groups of consumers and six groups of clinicians (physicians, nurse practitioners, physician assistants, other alternative clinicians).[3]
- In-depth interviews with 25 Arizona informants and stakeholders – clinicians, educators, health plans, health policy analysts, clinic and hospital leaders, employer benefit managers. Quotes from the focus groups and interviews are found throughout this report.



Goodbye, Hello is designed as a structured conversation, and not simply as a research report. This is a story told by Arizonans themselves. We are all committed to a mission – improving the health of Arizonans – and to the important role primary care can play in advancing it.

Part One: *The Primary Care Parade*

I'll Tell You a Story

"What is primary care? I'll tell you a story.

I had a patient who came in one day and said, 'Doc, I get this really bad headache. When I wake up in the morning, I'm fine. I drive to work, and by the time I get there the headache is coming on, it's pounding, then it eases off. By lunchtime it is severe. I eat lunch and come back to work, and it just kind of builds through the afternoon. When I go home, the headache is so bad I get confused. I take a shower, and before I go to bed the headache is almost gone.'

So I examined him, and I couldn't find anything, but I thought we better get a CAT scan, because this had been going on for a few weeks.

Then I'm sitting at my desk, and I hear a loud truck starting up. I glance out, and it's my patient. As soon as I saw him, I remembered that he liked to fix up old Toyota pickup trucks. I remembered he was a welder.

Then it dawned on me: carbon monoxide poisoning. He left before I could catch him, so I called him up and said, 'Cancel the CAT scan, go in for this $50 blood test.' I made the diagnosis, and he got his muffler fixed and started wearing the right mask when he welded, and he was fine.

And you know, if I didn't remember or even ask what he did for a living, or cared about what he did for a living, I never would have come up with that diagnosis.

That's primary care. That's the way it should be." *— general internist*

What is Primary Care?

We asked this question of Arizona clinicians and patients. Their responses indicate the multi-dimensional nature of the term, and where some of the challenges and opportunities we will discuss later lie:

Primary care as a level of care, the point of entry.

This is the definition of 'primary' as first in time or order. It stresses the triage function of primary care: the first stop on the journey through the health care system:

"Primary care is the first point of contact, the first line of care, and also the coordinator of care. Those of us doing primary care in rural settings tend to do a bit more than other primary care providers because of the limitations of other resources, like specialists." — *nurse practitioner*

"Primary care is the first place where someone goes for care – primary as opposed to secondary." – family medicine physician

"Primary care is like an umbrella. It covers pretty much everything on the first stop, and you may be able to follow through on a lot of things and then refer people out to a specialist if needed." – nurse practitioner

"When most people talk about primary care, they usually mean first contact, long-term access to a practitioner, somebody who provides the most basic health services." – family medicine/educator physician

"Primary care is the person you see first, and then they give you a referral, which is a whole other process in itself. You have to be approved and jump through all these hoops." – patient

"Primary care is more of the day-to-day kinds of health care issues that we face, whether it's flu, a twisted ankle, colds, allergies and so forth – those diseases, viruses, conditions that can be treated pretty well through protocols."

nurse educator

Primary care as a set of activities and attributes.

This utilizes the meaning of 'primary' as chief, principal or main. It is more multi-dimensional than the limited definition of 'primary' as first in time or order:

A particular set of activities

"Primary care is your everyday kind of medical care: colds, sore throats, urinary tract infections, but also, taking care of and managing hypertension, diabetes and other chronic diseases." – nurse practitioner

"Primary care is like taking your car to a mechanic every 3,000 miles." – patient

'When I think of primary care, I think of Lake Michigan. I have to know the first three feet of Lake Michigan. Yes, it's a lot, but when I come to the part were there is a big heart problem, someone has to know it all the way to the bottom. It's a deep lake." – family medicine physician

Treating the whole person

"Primary care has a whole body focus, as well as behavioral health and population health. We haven't always given the tools to our primary care professionals to successfully manage these areas, but they are definitely part of the whole body." – health plan director

"Primary care is caring for the whole patient as opposed to caring for an organ or a specific disease. I also think it is important when you care for a patient to care for that person in the complexities of his or her family and community." – family medicine physician

"Primary care is the main doctor you see on a regular basis. Somebody who is interested in your whole body, and not just your left arm or right elbow." – patient

Prevention and coordination of care

"Primary care is the hub of the health care wheel. Everything should come out of it, and everything should come back to the hub for coordination to occur. Working together with the patient towards specific health goals is what it's all about." – nurse practitioner

"The primary care physician is the one who knows you best, the one who hangs with the patient the longest, and who is probably more mindful of preventive medicine than the other providers who are on the team." – internist/psychiatrist

"In a nutshell, primary care is about prevention and coordination."

psychiatrist/former nurse practitioner

How primary care is defined and how it is practiced are not necessarily the same thing:

"The definition of primary care has changed. When I trained, primary care was a holistic concept with longitudinal care and coordination of services. Today, intensity, first-line care and the whole concept of coordination have only picked up anecdotally, and it's not something that's necessarily intrinsic to the way primary care is being practiced now."

– health plan medical director

Primary care as care provided by certain clinicians

Another way of defining primary care is by who provides it – and who ought to provide it. This is where some of the current tension lies, as we explore later:

"Primary care is not degree-based, it is specialty-based. It is family medicine, pediatrics, internal medicine and obstetrics at this point." – family medicine physician

"When I think of primary care, I think of certain specialties, pediatrics for children; internal medicine, which tends to be adult medicine; family practice, where they cover kids and adults and sometimes do minor procedures; and the well-woman part of gynecology. And I look at it as more in the outpatient setting, where the main physician orchestrates all that may be going on with the patient." – internist

Some assert that family medicine is more of a "prototypical" primary care than other specialties:

"Family medicine is the only specialty that doesn't have a focus on an organ system, on a gender or on an age group. We can understand and are aware of developmental issues from childhood on. In the residency program, we call it 'womb to tomb' care." – family medicine physician

Others expressed an alternative view on certain medical specialties as constituting primary care:

> *"I used to define primary care as a specialty that was family practice, internal medicine, pediatrics and OB/GYN. But recently, I've had conversations with folks who say that instead of those labels, primary care is people who are willing to take care of the total patient. And I started to realize that there were probably multiple specialties that were willing to take care of the total patient. So it isn't as clear cut into specific specialties as I once thought."* – physician assistant

It also depends on who is doing the defining, and what their circumstances are:

"My patients see me as their primary care provider. They call me their doctor, although I am not a doctor. They have nowhere else to go." – nurse practitioner

> ***"I just moved here from Canada, where I saw a nurse practitioner for my primary care, so I don't know where I'll go now."*** – patient

"Primary care is where you go to get the direction you need, and I see nurse practitioners as being providers of primary care. I see physicians as people I reach out to if I need their help in managing a patient." – nurse practitioner

"I see a naturopathic doctor and an NP who work together in the same office for primary care. It works great." – patient

"I consider myself a portal of entry physician. My practice is primarily musculoskeletal care. I don't treat cardiac cases or gastronintestinal problems, but what I am able to do is recognize when something is not right and make the appropriate referral, and maybe talk to that physician about co-management and nutritional care, or certain types of alternative care therapies." – chiropractic physician

"Even if we end up referring patients to specialists, we work with the same basic facts for everyone, which come down to improving their diets, improving their lifestyle, and that's basic primary care that directly impacts all levels of health." – naturopathic physician

Fault Lines in the Definition of Primary Care

There are various multidimensional definitions of primary care floating around in the health care infosphere. Most of them emanate from various professional bodies and healthcare organizations, are vetted with membership and represent a "consensus" view.

One such definition comes from the Institute of Medicine (see sidebar). It is notable for three things:

1. The definition eliminates any reference to the dimension of primary care as a point of entry into a system of *levels of care* (primary, secondary, tertiary). It seeks to avoid painting primary care as the "first stop" into a multi-level system, although the report goes on to acknowledge that it often is. The report specifically rejects the pejorative connotations of primary care as a "gatekeeper" function by managed care plans to control costs or limit care.

2. The definition refers to the dimension of primary care as health services supplied by *clinicians*, but does not specifically list which ones. The report goes on, however, to say that most primary care is supplied by physicians, and also by non-physicians such as nurse practitioners and physician assistants.

3. The definition focuses on the attributes of integrated, accessible and accountable health care in a sustained partnership with patients – all within the context of family and community. The report stresses the attributes of care embedded in this definition, such as continuous, comprehensive and coordinated care.

The IOM illustrates, either explicitly or implicitly, the *fault lines* in the dimensions of primary care that we wish to explore:

- *The fault line of levels of care.* By avoiding this fault line, the IOM calls attention to it. There are multiple entry points to the healthcare system today. If primary care is simply the first stop – the place you go to get referred to the "good stuff" – it's no wonder that many clinicians are choosing to do something else.

- *The fault line of who provides primary care.* There are well documented scope of practice turf wars between clinicians such as physicians and nurse practitioners, which the IOM definition avoids. When one includes the participation of other clinicians (naturopathic, homeopathic, chiropractic, acupuncture physicians, etc.) and the preferences of patients in deciding whom they see as primary care providers, issues of definition and scope of practice expand considerably.

- *The fault line of attributes of care.* There are places in the U.S. today where primary care is integrated, comprehensive, coordinated, continuous and accountable. Because of how we organize and pay for care in a fragmented and discontinuous "non-system," however, these attributes do not necessarily describe the actual state of primary care in large sections of the country.

We take up these fault lines as we proceed. Our central thesis is that the dimension of primary care as the first entry point into the healthcare system – what we characterize later as the *throughput model* – has superseded the more substantive dimension of primary care as a set of attributes leading to better outcomes and reduced costs. That's where we need to focus our efforts in health care reform.

What is Primary Care? The Institute of Medicine[4]

"Primary care is 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*."

The History of Primary Care: A Roadmap[5]

A roadmap to the history of primary care covers a lot of territory and is filled with interesting side trips. We scan it here from a distance to provide a general understanding of how we arrived at our current predicament.

1890s-1920s

The turn of the century witnessed the advent of the biomedical paradigm: the science of body system/organ functions and disease as physical-chemical alterations in the body. This facilitated specialization in medicine and the search for "cures" – a view that downplayed the social and behavioral considerations of disease. The Flexnor Report in 1910 influenced the creation of centers of excellence within teaching hospitals, furthering a focus on specialization. Physicians became licensed professionals, states enacted medical practice acts. Physicians saw everyone and dealt with patients directly on a cash basis. Specialty groups, such as the American College of Surgeons (1913) and the American College of Physicians (internists, 1915), began to form.

1920s-1940s

Advances in surgery transformed the American hospital experience, with more specialists providing inpatient services. Hospital care became increasingly unaffordable during the Great Depression; hence the rise of the first Blue Cross plan for pre-paid inpatient services. Outpatient physicians, also suffering from patients' inability to pay, followed suit with the first Blue Shield plan in 1939. Physicians set their own fees on a "usual, customary and reasonable" payment system. Insurance coverage for specialties like surgery and radiology grew faster than for office visits. Without insurance coverage, generalist physicians kept their fees low and affordable.

1940s-1960s

During World War II and following, subsidies increased substantially for graduate medical education (GME) and residencies encouraging physician veterans to specialize. Demographic, economic and cultural trends fueled demand for specialists, who concentrated in cities as part of the urbanization of America. A healthy economy and fascination with science and technology added fuel to the specialist fire. So did the rapid growth of academic medical centers and funding for biomedical research and specialty training. The payment divergence between specialists and generalists was institutionalized through the "relative value unit" (RVU) method of payment for specific services, which ended up favoring resource-based, procedure-oriented medicine, and not evaluation and management services. Generalist physicians, who had limited ability to increase resource use or procedure intensity compared to specialists, began to fall behind in "fee for service" medicine.

"I don't see the end of primary care, but I can see the end of primary care physicians." – *internist*

1960s-1970s

Following the war, the idea that a generalist could be trained as a "specialist" with a broad set of competencies took hold. The term 'primary care' came into use in the 1960s – the expectation that the primary physician "will serve as the primary medical resource and counselor to an individual or family," overseeing medical arrangements, providing comprehensive and continuous care, and focusing "upon the whole man, who lives in a complex social setting."[6] The "generalist" values and competencies of the primary care physician became instantiated in family medicine residency training and subsequently in internal medicine and pediatrics training. Training programs for nurse practitioners and physician assistants began in the 1970s to deal with a widely perceived shortage of physicians, with most of the former and about half of the latter going into primary care. Despite this growth in primary care, other specialist training continued to outpace generalist training.

1980s-1990s

Rather than establishing a national policy on the appropriate balance between generalists and specialists in health care, the U.S. government ceded that decision to academic medicine and hospitals through generous direct and indirect medical education payments. Federal funding for primary care initiatives by the mid 1990s was $90 million – one percent of the $9 billion for Medicare's support for hospital training programs, which continued to favor specialty-oriented research, training and clinical care. Primary care enjoyed a resurgence in the late 1980s and 1990s as health care costs rose and interest grew in capitated payments and the role of primary care as the "gatekeeper" in managed care plans, which reached their zenith in the mid 90s. A backlash against tightly managed care plans and the gatekeeper function ensued, followed by the growth of preferred provider organizations (PPOs) and the consolidation of specialists into larger groups, which negotiated favorable contracts with insurers. Primary care, meanwhile, remained largely focused on ambulatory visits, with less favorable rates.

2000s

The growth of managed care in the 1990s put pressure on primary care clinicians to see more patients in the outpatient setting and on hospitals to reduce length of stay. This led to the rapid growth of hospitalists and a reduction in the number of hours spent by primary care physicians in inpatient settings. By 2006, approximately 20 percent of general internists were hospitalists. Meanwhile, technology growth, aided by a specialist-oriented workforce and financing policy, exacerbated the growing disparity between primary care and specialist income. Most academic medicine today continues to focus on the biomedical aspects of disease rather than the "whole person" aspects of population health. More medical students, faced with the declining prestige of primary care, high levels of education debt, a significant income disparity between primary and specialty practice, and a desire for more balance between their professional and personal lives, continue to abandon primary care in favor of such specialties as radiology, ophthalmology, anesthesiology and dermatology. Nurse practitioners and physician assistants, meanwhile, seek to expand scope of practice to respond to a shortage of primary care physicians.

"The days of family docs doing their own deliveries, setting broken bones, seeing patients in the hospital – those days are done." – *health plan medical director*

Chronic Conditions and Primary Care:

An Arizona Health Snapshot

"We need more training in psychology and mental health. We see a lot of patients with depression and other things. Gee, what a surprise. There just aren't enough mental health providers out there you can refer the patient to, and if you find me one, I'll be happy to send them there, but while we wait the six months or whatever it's going to take, somebody needs to do something for this patient."

nurse practitioner

As the preceding roadmap makes clear, health care practice and policy over the past century have resulted in a system that is structured primarily to respond to acute episodes of care with an emphasis on procedure-driven and high technology medicine. Every part of the system – financing, research, education, payment, delivery, benefit design – incents this arrangement.

Meanwhile, the burden of disease in many advanced industrialized countries like the U.S. has shifted from infectious diseases and acute non-infectious diseases like heart attacks to chronic diseases. We still must respond to the former, but it is the latter diseases that increasingly overburden the health care system, adversely impact mortality and morbidity, and lead to rapidly rising costs.

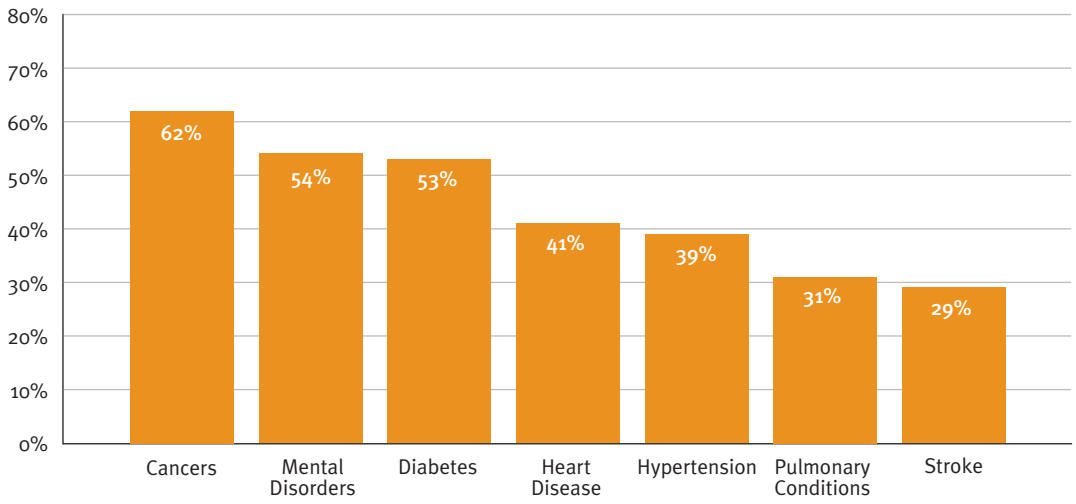
The difficulty is that a system built on acute, episodic and fragmented care is poorly designed to deal with managing and preventing chronic diseases.

The solution: a system built around proactive, coordinated and integrated primary care.

Chronic Conditions: The National Picture

- In 2005, some 133 million Americans – close to half of the population – had at least one chronic condition. By 2020, that number will increase to 157 million (Figure 1).

FIGURE 1 Projected Rise in Cases of Seven of the Most Common Chronic Diseases, 2003-2023[7]



- 75 percent of total U.S. health care spending is on patients with one or more chronic diseases. That is larger than all of personal consumption in China (Figure 2).
- The percentage of childhood chronic diseases has almost quadrupled over the past four decades (Figure 3).

FIGURE 2 Amount Spent in 2007 (in Trillions)[8]

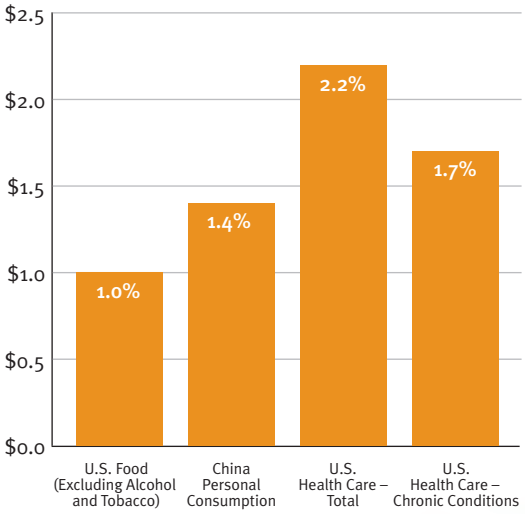
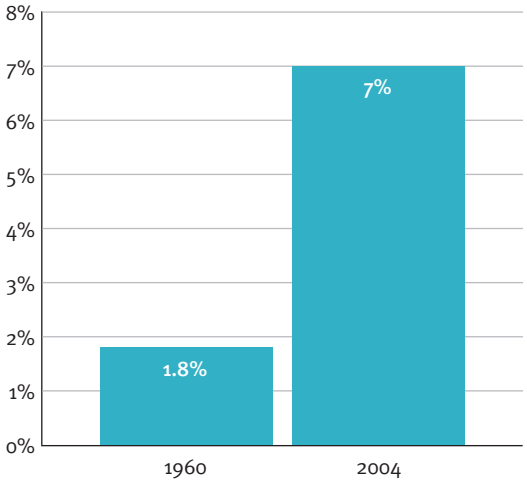
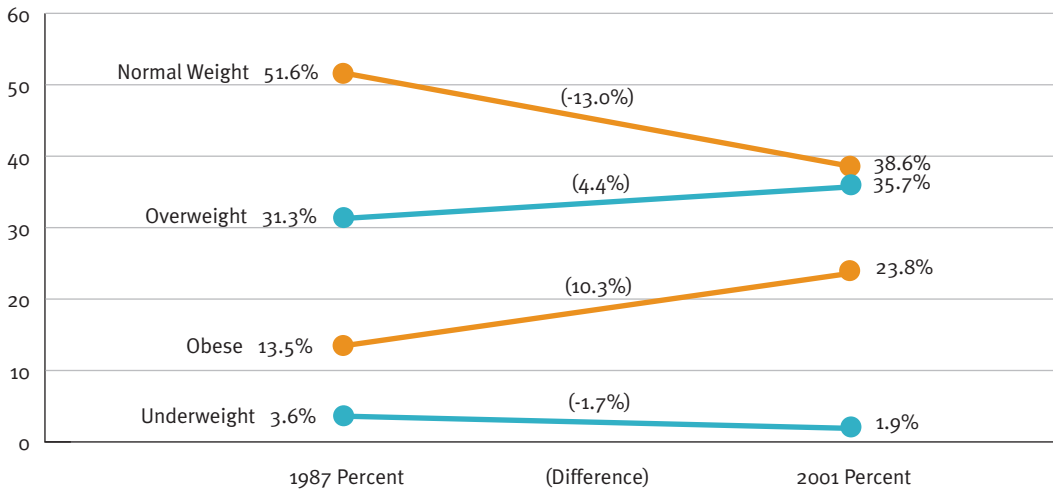


FIGURE 3 Percent of U.S. Children Diagnosed with a Chronic Disease[9]



- U.S. obesity* rates continue to rise and contribute to rising rates of other chronic diseases (Figure 4). Increase in obesity prevalence alone accounted for 12 percent of the growth in U.S. health spending between 1987-2001.[10]

FIGURE 4 Changes in the Prevalence of Obesity in the U.S. 1987-2001[11]



"I've worked with the Navajo people for a long time. I went up to Tuba City in 1975, and there were no fast food places then. There were trading posts where you got produce or you grew your own. The disease patterns have change dramatically since then. You saw a little diabetes, but not like now. There was little cancer, little heart attacks, and it's totally flipped in 30 years."

nurse practitioner

* Obesity = body mass index (BMI) ≥ 30.

Chronic Conditions: the Arizona Picture

SLHI's 2008 Arizona Health Survey (AHS)[12] provides a state overview of selected chronic conditions, among other things. Data presented here are taken from the survey and are for adults 18 and older only. Chronic conditions tracked in the survey are asthma, diabetes, heart disease, hypertension (high blood pressure), arthritis/other auto-immune disorders, and affective disorders (anxiety disorder, depression, bi-polar disorders).

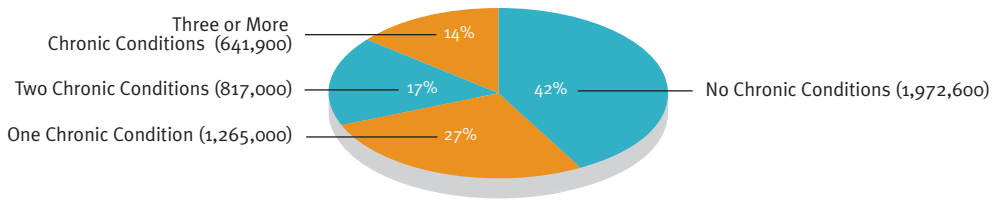
Prevalence

- Over half of all adults (58%) have been diagnosed with one or more chronic conditions, and 14% have been diagnosed with three or more conditions. Chronic conditions affect over 2.7 million Arizona adults.

"We see sicker and sicker patients. They develop diabetes earlier, they have hypertension earlier, poor nutrition. They get cancers earlier – stuff you might see in people in their 70s and 80s you now see in their 50s and 60s. It's more and more work for primary care clinicians."

nurse practitioner

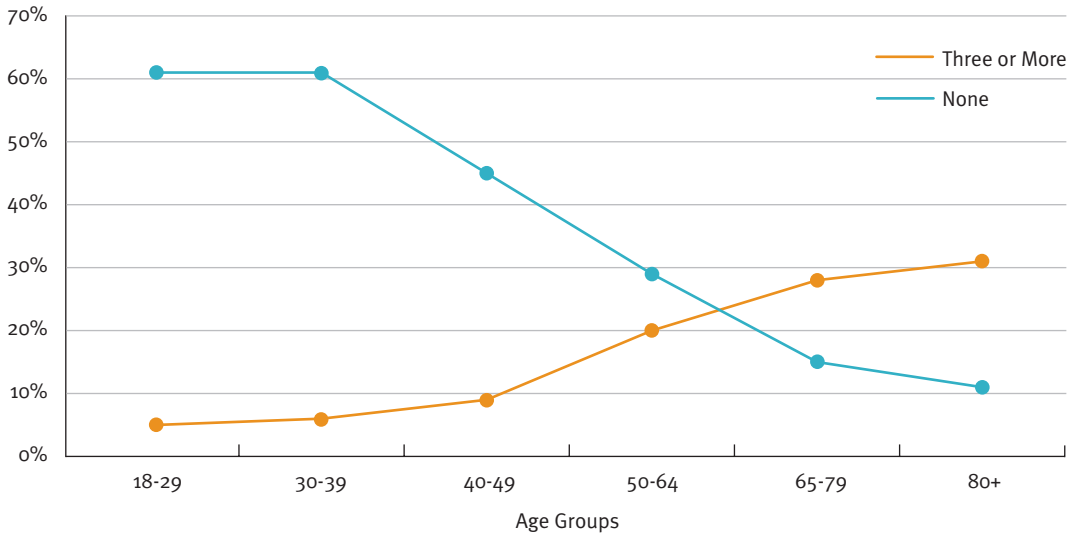
FIGURE 5 Percent of Arizona Adults Diagnosed with Chronic Conditions, 2008



Source: AHS, 2008.

- Chronic conditions increase with age. Nine out of ten Arizonans over the age of 80 have at least one chronic condition, and almost one-third have three or more conditions.

FIGURE 6 Prevalence of Chronic Conditions by Age Group, 2008

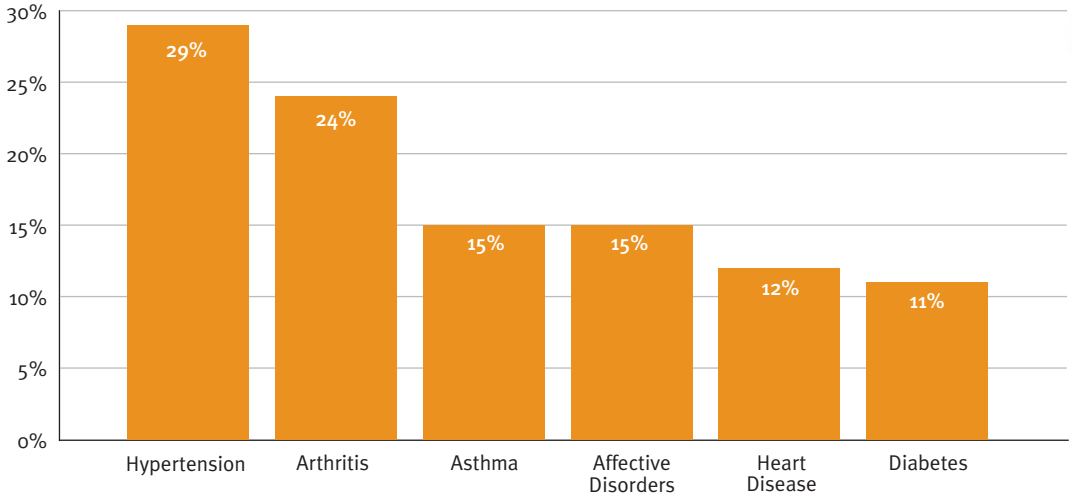


Source: AHS, 2008.

Distribution

- Hypertension is the most prevalent chronic condition (29%), followed by arthritis (24%).

FIGURE 7 Prevalence of Chronic Conditions Among Arizona Adults, 2008



Source: AHS, 2008.

Chronic Conditions and Access to Care

- Persons with chronic conditions visit the doctor's office and use emergency departments significantly more often than persons without chronic conditions.

FIGURE 8 Doctor's Visits and Emergency Department (ED) Use By Persons with Chronic Conditions, 2008

	Number of Doctor's Visits in 12 Months	Ever Visited ED in Past 12 Months
No conditions	2.3	18.9%
Affective Disorders	8.6	35.7%
Arthritis	7.3	27.5%
Asthma	7.0	27.7%
Diabetes	7.4	27.1%
Heart Disease	8.2	38.9%
Hypertension	6.4	25.3%

Source: AHS, 2008.

"One of the biggest things I see in Arizona is asthma care. Trying to get any kind of longitudinal education done with the family is a nightmare. They come in with a sick child, and they are not ready to hear about why they have a problem. We are just dealing with the acute situation."

pediatrician

Primary Care and Emergency Room Use *

People with chronic diseases use emergency rooms more often than those who don't have these conditions. But no matter what the condition, 50% of emergency room visits in Arizona during the first six months of 2008 — 371,651 out of 741,438 total visits — could be classified as "non-emergent and emergent-primary care treatable."

In other words, half of the ED visits could have been treated in primary care settings.

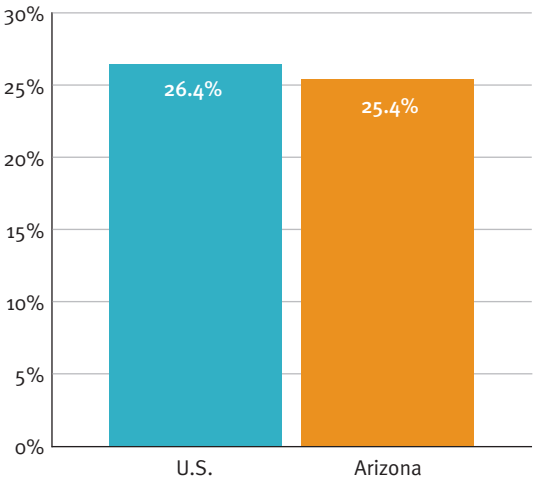
Further calculation translates these visits to an estimated equivalent of 101 primary care physicians. Of course, they would have to be available 24/7, since people don't always show up at the ED during regular weekday office hours, but the point is taken: If we had a more robust and accessible system of primary care, we could make an appreciable dent in expensive emergency room use.

* From analysis of 2008 ED use in the Arizona HealthQuery database by the Center for Health Information and Research (CHIR), Arizona State University.

Obesity and Chronic Diseases

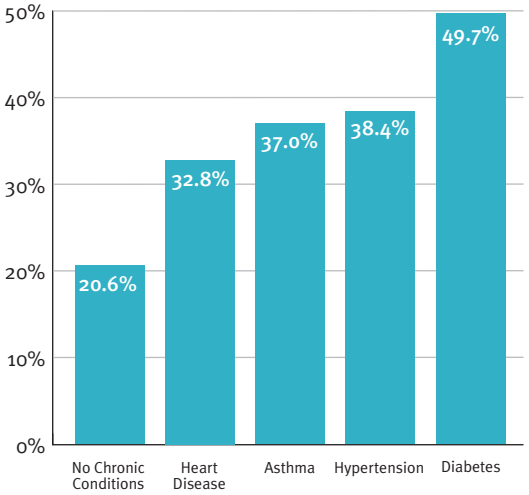
Arizona adults who are obese (BMI ≥ 30) closely track national numbers.

FIGURE 9 Percent of Obese Adults, U.S., Arizona 2008



Source: U.S. and Arizona Behavioral Risk Factor Surveillance System, 2008.

FIGURE 10 Prevalence of Obesity Among Arizona Adults with Selected Chronic Conditions



Source: AHS, 2008.

- Arizona adults with selected chronic conditions are significantly more likely to be obese than those without chronic conditions. Almost one-half of Arizona adults with diabetes (49.7%) are obese.

"A lot of patients who walk through my door have diabetes and obesity and hypertension, and to get someone to accept responsibility for their health and get motivated to change, and help them manage that change, is tough. But some do it. And to watch that light bulb go off – that's what keeps me doing it."

family medicine physician

Chronic Conditions and Primary Care: *The Bottom Line*

The numbers clearly indicate that chronic conditions are involved in the majority of encounters with the health care system in Arizona and the U.S. – and they are growing. Based on disease trends, population projections and health care inflation forecasts, Arizona will face $99 billion in chronic disease costs by 2023, when the state has 8.5 million people.

But here's the kicker: Over one quarter of these costs – $25.7 billion – could conceivably be avoided through lifestyle changes, better disease management, greater use of screening devices and education.

That is why primary care is so critically important:

- Successfully managing and educating patients about chronic conditions require attention to ongoing communication, coordination and monitoring between the patient and a provider team. The best place for this to happen is in an integrated primary care setting – not a fragmented, fee-for-service, procedure-oriented system.

- Many affective conditions are diagnosed and treated in a primary care setting. Public policy should encourage the integration of physical and behavioral health in training programs and practice settings.

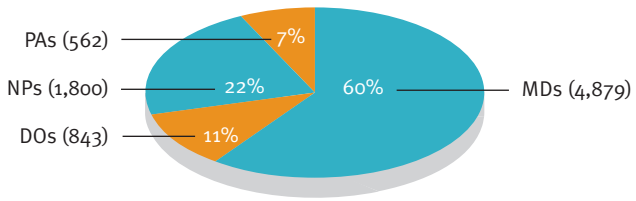
By the Numbers: The Arizona Primary Care Workforce[14]

Any credible health workforce plan that will address the needs of Arizona in the 21st Century depends on an effective planning process. Such a process, in turn, depends on the ongoing availability of accurate, up-to-date data and information, an organizational structure with the resources and time sufficient to develop the plan, and leadership to ensure that the plan is implemented.

Regrettably, none of these is evident in Arizona today.[15]

To address this, SLHI and other organizations have recently supported efforts to track the Arizona health workforce generally, and the primary care workforce in particular. Critical gaps remain in data collection and analysis, and the effort is very much a work in progress. With that important caveat, we are nevertheless able to note some general trends that inform conclusions and policy recommendations later in this report.

FIGURE 11 Arizona Primary Care Clinician Workforce, 2008 *



* Estimates based on MD/DO Arizona licensing and survey data, and national averages based on percentages of NPs and PAs who work in primary care settings. Does not include nurses other than NPs, complementary and alternative physicians/clinicians who may provide primary care services, technicians and support personnel, etc.

Primary Care Physicians (PCPs)

Different samples and surveys of primary care physicians (MDs, DOs) in Arizona and the U.S. provide varying views on composition, depending on specialties surveyed, active vs. retired and federal/non-federal practice settings. Here we reference 2008 data from ASU's Center for Health Information and Research, as well as national data (with authors' modifications) from the Kaiser Foundation's statehealthfacts.org.

- Arizona lags behind the national average in the number of active non-federal primary care physicians (PCPs) (Figure 12).

Defining the *Primary Care Workforce*

Any definition of primary care that rests on care provided by specific categories of clinicians can be disputed to the extent that it may exclude clinicians who consider themselves to be providers of primary care services. All the same, there are general principal categories that are documented in national studies, which we track here for comparative purposes:

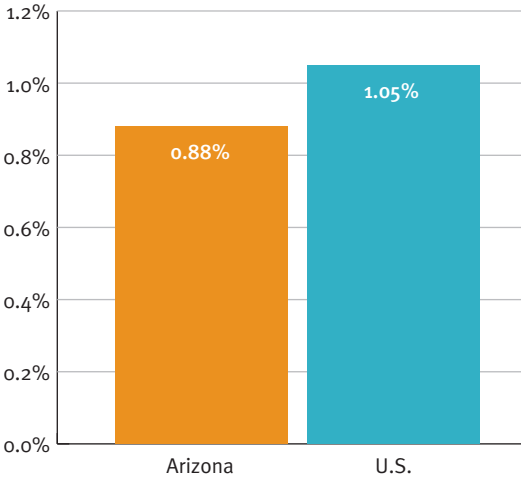
PHYSICIANS – ALLOPATHIC (MDs) AND OSTEOPATHIC (DOs). The primary care specialties are defined here as one of the following: family medicine, family practice, general practice, preventive medicine, geriatrics, gerontology, internal medicine, pediatrics, adolescent medicine and osteopathic manipulative medicine. Some national groups also include obstetrics/gynecology (ob/gyn).

NURSE PRACTITIONERS (NPs). NPs are classified as advanced practice nurses (APNs), a category that also includes certified registered nurse anesthetists (CRNAs), clinical nurse specialists (CNSs) and certified nurse midwives (CNMs). Registered nurses (RNs) and licensed practical nurses (LPNs) also deliver primary care, but are generally not included as "offering first contact" with the system. We track only NPs here.

PHYSICIAN ASSISTANTS (PAs). PAs provide a wide variety of medical services, including primary care. Unlike NPs, who can practice independently in Arizona, PAs must have an approved supervising physician "available."

- Growth of active PCPs in Arizona, while still below national averages, significantly exceeded state population growth in the 2004-2008 period, especially in the 2004-2005 and 2006-2007 periods (Figure 13, Table 1).
- The portion of Arizona DOs in primary care relative to the overall growth of active DOs declined 9% in the 2004-2008 period (Table 1). This suggests that fewer DOs, like MDs, are choosing primary care careers. The American Association of Colleges of Osteopathic Medicine surveys document a decline in self-reported interest in primary care from 40% of DO graduates in 1999 to 28% in 2007.[17]
- To simply keep pace with a .88 PCP/1,000 population, Arizona would need an additional 2,206 PCPs in 2020.[18]

FIGURE 12 Nonfederal Primary Care Physicians Per 1,000 Population, 2008*



* Source: statehealthfacts.org. Data modified to exclude ob/gyn specialty. When ob/gyn physicians are included, the Arizona and U.S. figures change to 1.0 and 1.2 respectively.

"We've dropped from 15-17 people in our rotation of doctors to 7. We've been waiting two years for someone to drop into our lap. It's hard to find docs who are interested in rural care, and we're looking at a shrinking pool of physicians."

IHS family medicine physician

FIGURE 13 Growth of Active PCPs Compared to Growth of State Population, 2004-2008

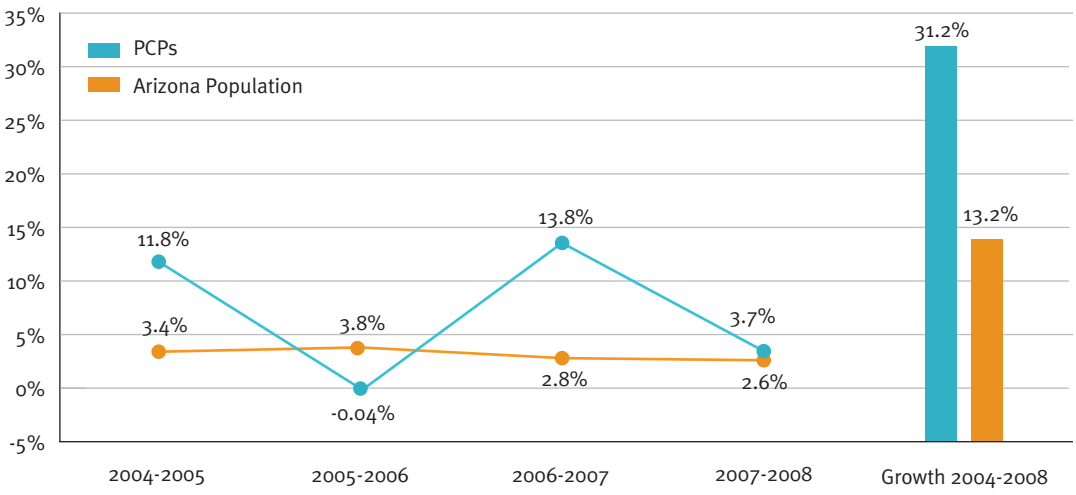


TABLE 1 The Estimated Number and Percent of Arizona Non-Federal Active Primary Care Physicians (PCP) by Type, 2004-2008

	PCP	MD Total	Percent	PCP	DO Total	Percent	PCP	TOTAL Total	Percent
2004	3,636	9,717	37.4%	726	1,194	60.8%	4,362	10,912	40.0%
2005	3,945	10,462	37.7%	929	1,544	60.2%	4,875	12,008	40.6%
2006	4,049	10,724	37.8%	802	1,394	57.5%	4,851	12,117	40.0%
2007	4,738	12,159	39.0%	782	1,411	55.4%	5,520	13,570	40.7%
2008	4,879	12,406	39.3%	843	1,526	55.3%	5,723	13,934	41.1%

The estimated number of MDs and DOs was adjusted according to 2004-2006 PPS Survey and 2007-2008 HIT Survey (excluding "Fully Retired", "Hospitalist", and solely "Academic/Teaching/Research"). Survey data were weighted to population totals.

Source: 2004-2008 Arizona Medical Board License Database, 2004-2006 PPS Survey, 2007-2008 HIT Survey.

- PCPs are unevenly distributed in Arizona. Significant shortages exist in selected rural areas (Figure 14).
- Some 500 physicians (MD) with a federal license are employed in the Veterans Administration (VA) health care system or the Indian Health Service (IHS) in Arizona (2007). Of those, 38.8% are PCPs (Figure 15).
- Based on a 2008 CHIR/AHCCCS survey that is weighted to represent the total population of physicians (MDs, DOs), approximately 722 report working in a government setting (not just the VA, IHS). Of those, it is estimated that 296 (41%) are PCPs.
- Almost one-third of MD primary care physicians in Arizona (30.5%) are foreign trained. This is higher than the portion of all foreign trained MDs practicing in Arizona (23.1%) (Table 2).

FIGURE 14 Active Primary Care Physicians Per 1,000 Population, Arizona Counties, 2008

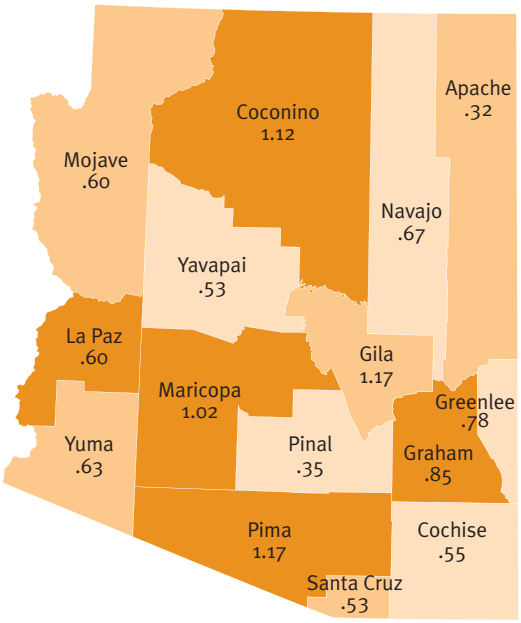
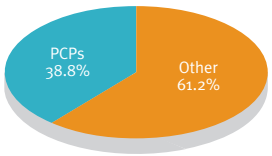


FIGURE 15 Primary Care Physicians (MDs) in the VA and IHS Systems, Arizona, 2007*



* Source: HRSA Federal MD License Database 2007.

Complementary and Alternative Medicine (CAM) Clinicians

It is estimated that over one third (38%) of American adults spent nearly $34 billion out-of-pocket on complementary and alternative medicine (CAM) visits and products in 2007.[16] In Arizona, there is an active and growing community of licensed CAM clinicians. While we don't know how many Arizonans see a CAM clinician on a regular basis as their primary care provider, it is clear from our interviews that some do – although the majority use CAM in addition to, rather than instead of, conventional treatment. We also found a growing interest in integrative medicine – a holistic focus on mind, body and spirit within a responsive setting – and medical practices that integrate both traditional and CAM approaches under one clinical roof.

While a study of CAM is outside the scope of this report, it is important to note that a growing number of consumers consider CAM to be "primary" to their health and actively seek out such services. Any study on the future of primary care should take this into account.

One possibility: the composition of integrated primary care *teams* in the future may look quite different from the traditional allopathic-dominated model of today.

Licensed CAM Clinicians in Arizona – A Selective List, 2008

Naturopathic physicians – 600

Chiropractic physicians – 2,700

Homeopathic physicians (MDs, DOs) – 101

Acupuncture clinicians – 481

TABLE 2 Foreign Trained MDs and PCP MDs, 2004-2008*

	PCP MDs		All MDs	
Year	Number Foreign Trained	Percent Foreign Trained	Number Foreign Trained	Percent Foreign Trained
2004	1297	30.6%	2,595	24.1%
2005	1305	28.3%	2,551	22.0%
2006	1328	28.1%	2,586	21.7%
2007	1526	29.6%	2,936	22.5%
2008	1622	30.5%	3,070	23.1%

* Data Source: 2004-2008 Arizona Medical Board License Database.

- Almost one-third of Arizona PCPs (MDs, DOs) are women (31.9). This percentage is trending upward, as reflected by more women entering medical school compared to the past (Figure 16).

FIGURE 16 Arizona Primary Care Physicians By Gender, 2008

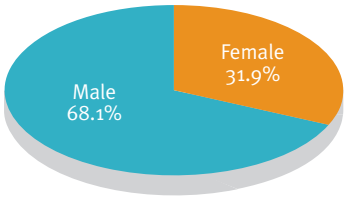
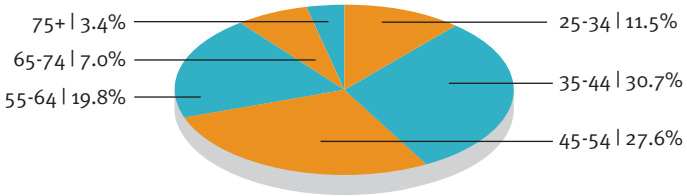
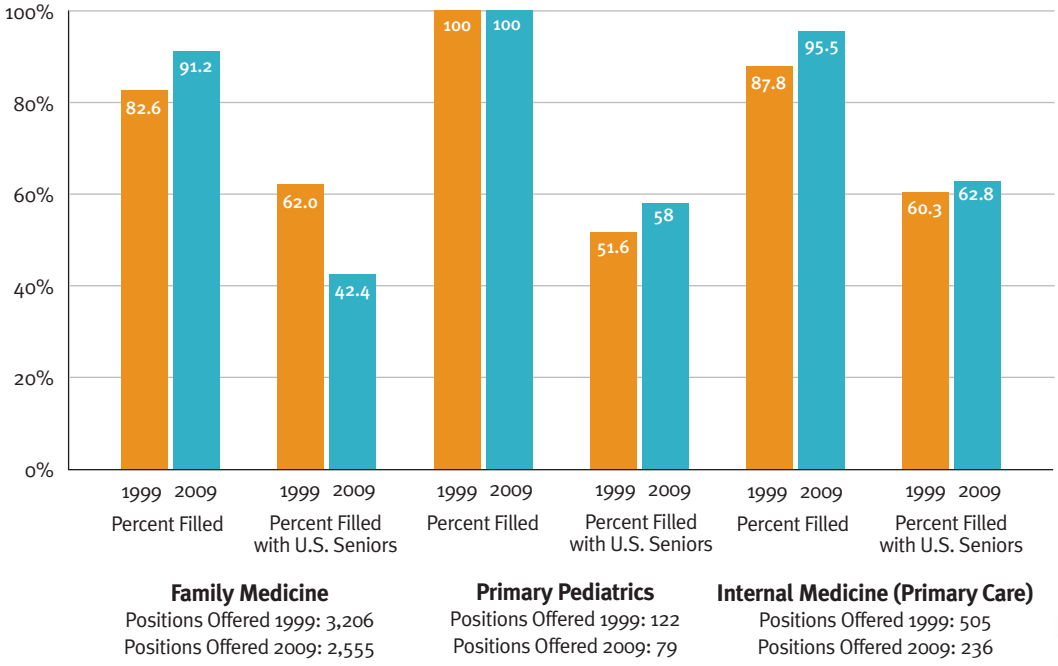


FIGURE 17 Arizona Primary Care Physician Distribution By Age, 2008



- The majority of PCPs (58.3%) are in the 35-54 age range. Interestingly, almost as many PCPs 65+ years of age (10.5%) are practicing medicine as those in the 25-34 age range (11.5%) (Figure 17).
- According to 2004-2006 MD and DO surveys, primary care physicians see approximately 18-20 patients daily. About 35 percent of their time is taken up with work other than seeing patients – recording notes, tracking down information, lab results, etc. Minutes per patient were in the 17-20-minute range. This is similar to results found in national studies.
- Feedback from physicians in our 2009 focus groups and individual interviews suggests patient volume has gone up since then – 26 to 30 or more patients in some cases, with time per patient in the 10-15-minute range. More research is needed to verify this trend.
- Nationally, U.S. residencies in selected primary care specialties have been declining, with a greater percentage filled by *non-U.S. medical school seniors* in Family Medicine (Figure 18).

FIGURE 18 U.S. Residencies in Selected Primary Care Specialties, 1999, 2009[20]



Family Medicine
Positions Offered 1999: 3,206
Positions Offered 2009: 2,555

Primary Pediatrics
Positions Offered 1999: 122
Positions Offered 2009: 79

Internal Medicine (Primary Care)
Positions Offered 1999: 505
Positions Offered 2009: 236

Is There A Shortage *of Primary Care Physicians?*

It's worth noting that most, if not all, past attempts to predict the future supply of physicians have proven wrong.

The American Academy of Family Physicians and other organizations project a shortage of family physicians in the 40,000-46,000 range in little more than a decade. In 2009, out of the 2,555 training positions offered in family medicine (21.7% fewer than in 1997), 42% were filled by graduates of U.S. medical schools, compared to 71.7% in 1997.[21] Clearly fewer U.S. medical residents are interested in pursuing a career in primary care.

On the other hand, the number of primary care pediatricians has increased substantially, and no shortage is predicted.[22]

In Arizona, there is a clear shortage of PCPs in selected counties, as Figure 14 illustrates. Meanwhile, some PCPs are opting to switch to concierge practices and pick off the insured and upper income population in urban areas where one can attract that kind of patient panel.

It's not a black or white picture. We ought to be concerned about shortages of primary care physicians, especially as we seek to provide health insurance coverage and access to all Americans. But practice patterns are not static and will continue to adapt to changing market conditions. The real issue is whether we will continue to let those conditions alone drive health workforce policy in a *reactive* mode, or actually *plan* for the future through the crafting of intelligent health workforce policy in a *proactive* mode.

Nurse Practitioners (NPs)[23]

Nurse Practitioners (NPs) are registered nurses with advanced graduate (master's level) education and clinical training who are licensed to provide a wide range of preventive and acute health care services. Arizona is one of six states in which NPs can diagnose, treat and prescribe autonomously without physician collaboration or supervision.

Comparatively, Arizona is a good state for NPs. One report rated Arizona NPs first in the nation in five categories reviewed, including "legal capacity, NP patient access to services, and NP patient access to prescriptions." [24]

- Even though Arizona had a lower rate of registered nurses (RNs) per 100,000 population (581) than the U.S. generally (836) in 2008, the state had a higher rate of NPs than the nation in 2000, and is most likely even higher in 2008 (Figure 19).

FIGURE 19 Nurse Practitioners per 100,000 Population, 2000, 2008[25]

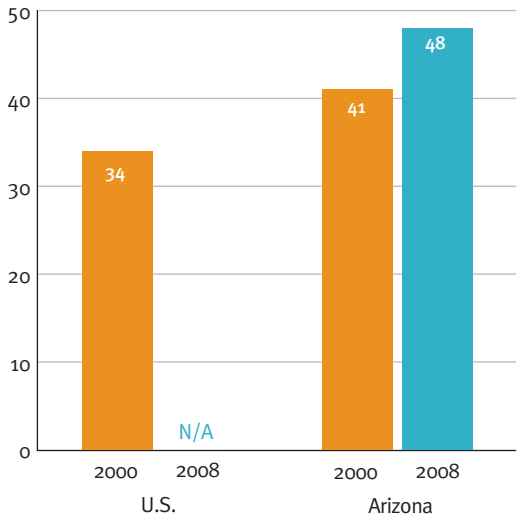
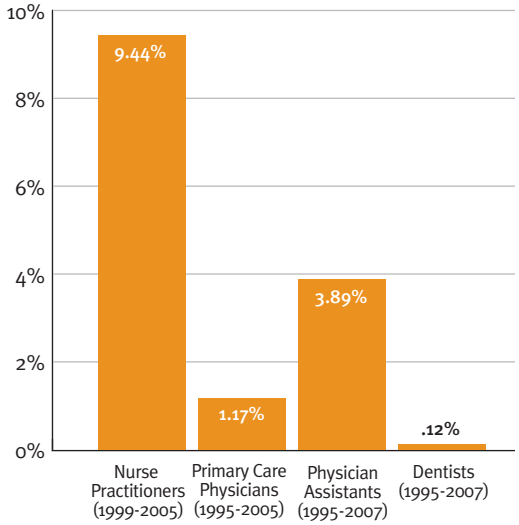


FIGURE 20 U.S. Average Annual Change Per Capita for Selected Primary Care Professionals[26]



- The supply of U.S. nurse practitioners in primary care in the 1999-2005 period increased from 44,200 to 82,622 – an average annual change per capita of 9.4%. This is much higher than the rate of increase for primary care physicians, physician assistants and dentists for overlapping – although not identical – time periods (Figure 20).
- According to the American Academy of Nurse Practitioners, approximately 55-60% of NPs practice in primary care settings. Assuming a similar percentage would apply in Arizona, this translates to about 1,800 NPs.[27]
- Based on responses to various national and state surveys, we estimate that approximately 71% of Arizona NPs in primary care practice in ambulatory settings (general medicine, pediatrics, geriatrics, etc.), 21% in public and community health clinics, and the rest in home health settings and school health (Figure 21).
- The American Academy of Nurse Practitioners estimated that in 2004 approximately one in five NPs reported practicing in rural settings, and over 50% reported working primarily with populations whose annual income was below $50K.[28]

FIGURE 21 Primary Care Practice Settings, Arizona Nurse Practitioners, 2008

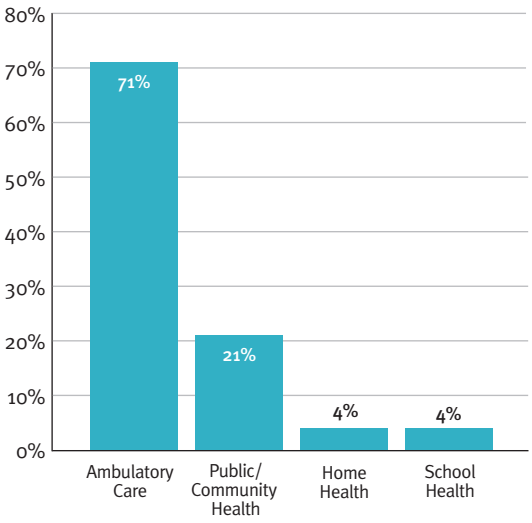
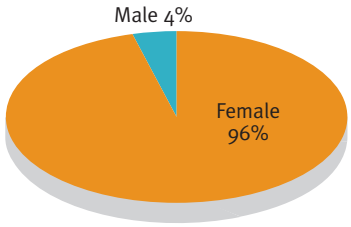


FIGURE 22 Arizona Nurse Practitioners By Gender, 2008*



* Source: ABN, 2008.

- Most (96%) of NPs in Arizona – and elsewhere – are female. Nationally, about 6% of all nurses are male (Figure 22).

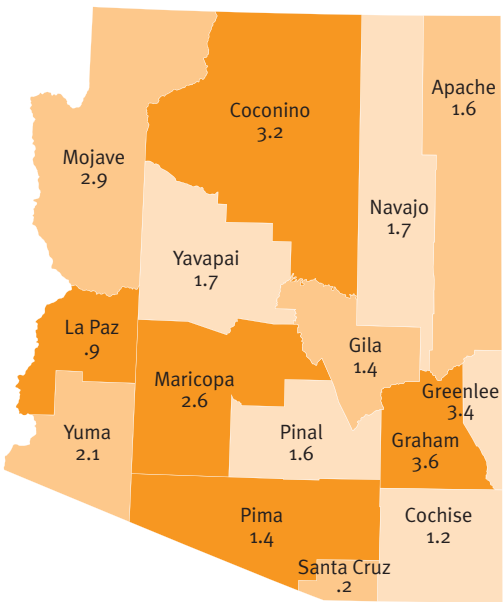
Physician Assistants (PAs)

Physician Assistants (PAs) must hold a valid Arizona PA license, possess an approved notice of supervision, and have an approved supervising physician available while performing healthcare tasks. The supervising physician is not required to be physically present. Physicians may supervise up to two PAs.

- According to administrative data from the Arizona Medical Board (AMB), there were 1,521 licensed PAs in Arizona in 2008. There is no direct way to determine what percentage of these practice in a primary care setting. Nationally, approximately 37% of PAs practice in primary care settings. This was confirmed in a 2008 American Academy of Physician Assistants (AAPA) survey with Arizona-specific information on the specialties of family/general medicine, general internal medicine, and general pediatrics.[29] This translates to approximately 562 PAs practicing in Arizona primary care settings in 2008.
- 70% of all Arizona PAs practice in Maricopa County. To no great surprise, their distribution in Arizona indicates wide variations between counties (Figure 23).
- The majority of Arizona PAs are male, but the percentage of females is higher among PAs than it is for physicians (Figure 24).

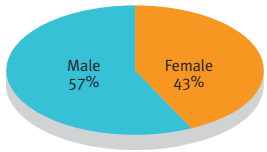
FIGURE 23 Active Physician Assistants Per 10,000 Population, By County, 2008*

State Average: 2.3



* Data Source: AMB, 2008, Population Statistics Unit, Arizona Department of Commerce.

FIGURE 24 Arizona Physician Assistants By Gender, 2008*



* Source: AMB, 2009.

Drivers:
The Primary Care Practice Environment

"The issue of revenue and just trying to make a decent living is probably the number one challenge facing primary care doctors today."

family medicine physician

If you've seen one primary care practice setting, you've seen one primary care practice setting.

The nuances of practice are as varied as the people working within them. Primary care happens in small private offices and large group practices that include specialists as well as primary care providers. It happens in practices led by physicians, by nurse practitioners, and by alternative practitioners. It happens in community health centers, teaching clinics in hospitals, and in school-based health centers. It happens in busy urban areas, sprawling suburbs, rural areas and in offices that serve entire counties.

Across this diversity of settings, there are some common organizational, economic, social and cultural "drivers" of the practice environment:

Business Drivers

The industrialization of American health care has been a recurring theme in the literature for the past 40 years. It is the business of health care – the overriding emphasis on money and the exchange (throughput) model of goods and services – that dominates the current health reform debate.

Nowhere is this more evident than in the business of primary care.

A Throughput Business

The current fee-for-service model of medical reimbursement results in having to see ever more patients for shorter periods of time simply to make ends meet. Today's primary care environment is a throughput business:

Mental Models

In reviewing the transcripts of focus groups and interviews with clinicians, patients and others, we were struck by the diversity of *mental models* used in framing challenges and opportunities in the context of primary care:

- **PHYSICIANS** (MDs, and to a lesser extent, DOs) tended to focus on their professional role in providing patient care – a "physician-centric" mental model. They readily acknowledged the importance of working in teams and engaging families and the broader community, but given organizational, time and economic constraints, most (but not all) defaulted to medical interventions they could actually control.
- **NURSE PRACTITIONERS (NPs)** tended to focus on their role as the patient's advocate and a broader conception of "health" than what they characterized as the "medical" model of (physician) clinical train-

"Over the years we [hospital system] learned a lot about family practice, and what a lousy business it is. It's very difficult for family practice physicians to make a good living. Volume of patients is what drives it. It's a throughput business. We're always pushing our physicians to go, go, go. You have a huge fixed cost basis in terms of your office and the staff and equipment and all of that stuff. You have to push the revenue through there." – hospital administrator

"When I walk into the office at the beginning of the day and see that I have 30 people on my schedule, I just want to turn around and walk back out the door, because I don't control that. I deal with the consequences, because I'm not going to spend less time with someone if they need a half hour and are scheduled for only 15 minutes. That's really frustrating." – physician's assistant

"We're a consumer society. We're a capitalistic society. The money motivation is in medicine now, and it's never going to go away. It's unfortunate." – family practice physician

"I left primary care because business started to overwhelm medicine. The beauty of medicine became overshadowed by money." – internist

"What frustrates me about primary care is that there really is no incentive to treat chronically ill patients who are complicated because everything is based on volume, volume, volume. The way reimbursement is today, you can spend a lot of time on a chronically ill patient, but the amount of money you are reimbursed doesn't begin to make up for the three or four patients you can see on a rapid basis." – pediatrician/educator

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ing. We saw the most diversity of mental models among the NPs: some of them were focused on their role as independent clinicians and comparing their efficacy and status to physicians, while others perceived their role as "mid-level" practitioners and being part of a team.

- **PHYSICIAN ASSISTANTS (PAs)** were primarily focused on their role as physician extenders in providing clinical care. Of all the clinicians, they expressed the least frustration with primary care, other than having to see more patients in ever shorter time periods and the dominance of "money-driven" medicine.
- **COMPLEMENTARY AND ALTERNATIVE PROVIDERS (CAM)** were uniformly focused on the value of prevention and wellness. They viewed their world of holistic health as being on the outside looking in on the dominant world of a fragmented "sick care" system. Some expressed an "outsider" mentality and the frustration that goes with it; others championed a "new frontier" holistic health model that they believe is destined to become the dominant paradigm.
- **PATIENTS** were primarily focused on their role as consumers seeking access to convenient, high value, affordable services, with choices to address their specific needs. Some were focused on building personal relationships of trust and genuine caring with clinicians, but the customer service mental model was clearly dominant.

These are qualitative impressions, and are not offered as definitive characterizations of specific professional populations. Nevertheless, they colored the responses we heard from different groups on what is driving the current primary care practice environment.

Veterinary Medicine

"There are many physicians out there who feel they cannot maintain a business without doing very short 7-8-minute appointments. So what happens is they miss the conversation with the patient. That puts many doctors in the position of practicing – I hate to say this – veterinary medicine. Because there is no speech."

family medicine physician/educator

It's frustrating for patients as well:

"It's like a seating chart in the doctor's office. They are way too distracted. They should stay in the room and check you out, but instead they leave." – patient

"I look for somebody who takes the time to try to find out what is wrong with you instead of 'hurry up, let's get this done,' and then they send you off." – patient

"I used to go to a doctor who booked like three people in a 15-minute period. He never spent more than three minutes in a room, never. And I told him one time, I want a complete physical, and he said we will get to it. But there was still only three minutes. I didn't stay with him." – patient

But not everyone has to – or chooses to – practice in the harried throughput environment:

"There's no way I would ever work in a physician's office again. Ever. It's the autonomy I like, plus being able to spend 30 to 60 minutes with each patient. That's the way primary care should be." – nurse practitioner

"I am paid a salary, I get benefits, I get a lot of vacation time, and I have my practice insurance paid. I get to practice medicine, period. I don't have a lot of the hassles that some of the others have." – pediatrician

"We've moved completely out of the insurance realm and now are strictly cash pay at the office. That has been a huge benefit both for our morale and for the simplicity in the office. I can spend an hour with the patient, so I think that's why satisfaction is higher because they pay cash, I feel committed to them, and not to some third party, and I take good care of them because I know they pay for their stuff, and they value it because they pay for it themselves." – internist/psychiatrist

Pushmi-Pullyu:

Dr. Doolittle's View of Primary Care

Primary care clinicians are pushed and pulled in many different directions:

- Simple vs. complex care
- Mastery of a subject vs. expanding knowledge base
- Prevention/wellness vs. intervention
- Doing vs. listening
- Minimal intervention vs. defensive medicine
- Generalist medicine vs. specialization
- Autonomy vs. evidence base
- Industrialization vs. craftsmanship
- Cost vs. quality

Hassle Factors

The throughput model, combined with dealing with multiple payers, forms and regulations, creates a number of mind-numbing hassle factors.

Primary care offices – and health care providers in general – are drowning in paperwork. In addition to the multiple forms required by insurers, licensing agencies, credentialing organizations, and others, there are referrals, lab requests, prior authorization and formulary changes to track down and fill out. Pediatricians and other clinicians routinely encounter forms for annual sports physicals, school physicals and camp forms, not to mention special education and early intervention authorizations, home health orders, and disability applications (to name a few).

To rub salt into the hassle wound, none of this activity is reimbursed.

> *"Streamlining the prior authorizations would be a dramatic improvement. I also think there is a lot of wasted money in repeating tests, and I personally spend a lot of time trying to track down whether somebody had a CAT scan in the past six months, things like that. Lots of times patients don't even know what they had."* – nurse practitioner

> *"I feel like 40 or 50% of my time is spent on the phone yelling at insurance companies and trying to get prior results. I don't have staff, I call in my own things, and I know how painful that is."* – internist

The Cost of Practice

According to a 2005 analysis by Health Services Advisory Group (HSAG), over 90% of primary care in Arizona is delivered through small practices of five physicians or less. Based on feedback in our focus groups and interviews, the cost of practice overhead is routinely over 50% and even goes as high as 70-80%. This is consistent with a recent national survey, where 60% of predominantly primary care physicians reported practice costs over 50%, and almost one quarter reported practice overhead between 61-90%.

One example of factors contributing to high overhead: The average primary care physician in a solo or two-physician practice spends 4.3 hours per week dealing with health plans, on everything from contracting to reporting quality data. For all practice sizes in primary care, the amount is 3.5 hours per week, compared to 2.6 hours for medical specialties.

This translates into significant costs:

FIGURE 25 Average Costs for Participating in Health Plans, 2006

	1-2 Doctors	3-9 Doctors	10+ Doctors	Weighted Mean
Primary Care	$72,675	$63,611	$57,480	$64,859

"Look at the research [Figure 25]. It costs two doctors $70,000 to do all the pre-authorizations for the health plans. Well, that's $70,000 you could save [by not going into private practice]. And then there's the billing system you're going to have to spend $25,000 or $35,000 to get, and there's a savings there. And there's an annual service charge, usually around $8,000 to $10,000. And then you're going to pay someone 10 percent just to bill for you."

internist

"I fill out paperwork as much as I see patients. I want to take care of kids, period." – pediatrician

"[Name of company] would literally keep my office manager on hold for 45 minutes just to get some meds. We don't get reimbursed for that time, and we still have to pay our staff, and you just watch the clock on the phone turn and turn." – internist/naturopath

"Dealing with insurance prior authorizations is insane. I think my nurse has to do 10 or more a day. We don't get paid for that. Plus dealing with formulary changes that are inexplicable, and we're not told about them, so we find out when the patient goes to the pharmacy. That's more backtracking, more time." – pediatrician

The hassles of dealing with insurance companies can extend far beyond filling out excessive forms. Some health plan practices seem more conducive to their own needs than that of clinicians and their patients:

"We have people living in Show Low whose primary care provider is over in Springerville or Holbrook or Winslow because the insurance plan assigned them there. It doesn't serve people's needs at all." – nurse practitioner

Referral Madness

The emphasis on primary care as the first stop in the health care system – a 'gateway' or 'gatekeeper' mentality, depending on which group is doing the defining – stresses the role of the clinician in referring patients to the next level of care. The referral role is increasingly driven by both patient demand and the expectation of specialists, and in the process diminishes the substantive role of the generalist clinician in diagnosis and treatment:

"Patients today don't want to show or tell their problem to you [the primary care physician]. They just want a referral. They think primary care is just the first stop to get to the next definite level." – internist

"When I started practice, all of a sudden I had a bunch of patients coming in, and all they wanted was referrals. I hated what I was doing because there was zero respect." – internist

"I do remember growing up, my physician knew everything, took care of everything, and we didn't have all of these specialties we have today. Now it seems when you go to the doctor and ask a question, right away they are referring you to somebody else." – nurse practitioner

The referral role can be a rational response to dealing with time constraints and the hassle factor of working with insurance plans:

"A lot of primary care doctors just refer on because every time you get a complaint you have to write a letter back to the insurance company to respond why, and it's just easier to refer out so you don't have to do that. You are not a hero by managing everything anyway, because a lot of the time the patients want the referral, and you just get hammered by them." – internist

"In primary care I manage a rash, a depression and hypertension and memory issues, and a knee ache and diabetes, so six different issues. So I could have sent the diabetic out, and the rash, the rheumatology room, orthopedics or whatever. But I manage all of them, and I can get paid at most for four of them…..Some of my colleagues refer out because of time pressures. They don't want to deal with the rash, they just send them to dermatology." – family medicine physician

From a health plan perspective, the explosion of medical knowledge, the variability of patients and less direct responsibility for patients while in training makes it more difficult for physicians to develop a broad skill set in primary care. This, too, impacts the referral rate:

"The [managed care] gatekeeper concept assumed primary care doctors would have a broad skill set. But then the referral rates really increased. They weren't lazy or passive-aggressive – they just didn't know how to treat a lot of these problems." – health plan medical director

The referral role – a central function in the narrowly conceived throughput definition of primary care – can come to define the parameters of all relationships with specialists and subspecialists, who may perceive that they are higher up the medical food chain than primary care clinicians and therefore "own" the diagnosis:

"It's frustrating to deal with specialists, even those in your own institution, who make it sound like primary care doctors can't do what they can do. A specialist might see your patient and then send them on to see another specialist, and I think that's completely inappropriate. Or a family member will say, 'Oh, you're not seeing a specialist? You have to go,' instead of saying, 'Your regular doctor can take care of that.' Specialists have come to see themselves as owning these chronic diseases. I think that has to change, but I don't know how." – family practice physician

"Sometimes a patient will see an allergist or something, and you'll have them on one type of inhaled steroid, and they will switch them to another one to show that they know something different when, of course, we know they [the inhaled steroids] are the same thing." – pediatrician

"Nowadays pulmonologists are expecting us to refer them every kind of kid with asthma, which is crazy… and if you go toward the model where the general physician will take care of the kid with diabetes, the endocrinologists will scream."
– pediatrician/educator

Reimbursement vs. Payment

The term "reimbursement" drives doctors crazy.

The meaning of the term is clear enough: "To repay (money spent); refund. To pay back or compensate (another party) for money spent or losses incurred.

All of this is true for providers who bill through insurance companies. The rub comes when providers do work that is *not* reimbursed. Telephone advice, time spent getting authorization for referrals or exceptions to usual rules from insurers, and talking with parents about why to immunize their children are some of the many daily tasks that are not reimbursed.

With lawyers and plumbers, the clock is always running. Not so with doctors. They just want to get PAID.

Fragmentation of Care

The referral function of the primary care clinician is a symptom of a much deeper problem in American medicine: the fragmentation of episodic care and the attendant lack of continuity, communication and coordination that drives up costs, makes it harder to achieve quality outcomes, and leads to clinical frustration and burnout:

"Everything has become so fragmented. People divide up a patient now, left side and right, hands and hips, knees and shoulders, psychological and cardiac, and they just divvy everybody up and ship them off somewhere." – physician assistant

"Communication between providers is worse these days. We have lost some of the professional courtesy that used to be there. A lot of the discussions we used to have about the patient don't occur anymore. Everybody is off doing their own thing." – pediatrician

"I had a patient who was taking digitalis prescribed by her primary care doctor, and then her cardiologist gave her something else, and she didn't know what. It's not the kind of problem you want if you're a gynecology person." – nurse practitioner-gynecology

"The tragedy I see in medicine is where we are moving to a system where people have clearly defined responsibilities for a person for a specific period of time, and then we hand [the patient] off, and don't do a very good job of handing off. Marcus Welby is gone forever." – pediatrician

The fragmentation of care is brought into sharp relief by the prevalence of behavioral health conditions like depression, anxiety and abnormal levels of stress encountered in the primary care setting, and often co-occurring with chronic diseases:

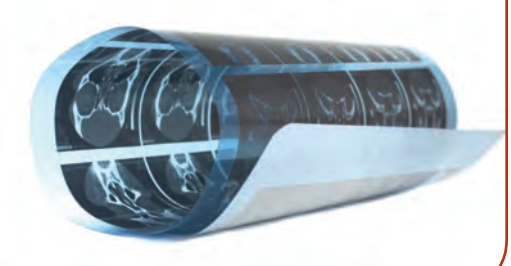
"The behavioral health piece of primary care is huge. We have problems finding behavioral health and substance abuse help, and I think that's fairly common." – internist

My *Ridiculous* World

"I had a child come into my office who was really sick, and I had to send him to the emergency room. Now, I know 80 percent of the staff [at the hospital where the child was admitted], and they know how to get hold of me, and I never heard another word. But then I started getting all of these CT scan reports, because apparently my name ended up on something somewhere, so I knew what was going on, the patient was still in the hospital, but I couldn't get any other information….And then, once he was discharged, I get a phone call from the family saying, 'He was sent to three different specialists, and we want to know why.' And my response was, 'I don't know, and I can't find out right now, so I'll get back to you when I do know.'

"I mean, this is just ridiculous, the world we live in nowadays."

– pediatrician



"We see a lot of AHCCCS [Arizona's Medicaid program] patients with behavioral health conditions. But they have a separate system for them. Physicians should be able to prescribe psychotropic medications for these people." – family practice physician

"More and more behavioral health problems are being addressed by primary care doctors, partly because of increased recognition and treatment modalities, but also because there's a shortage of behavioral health providers. Obviously there are major coordination and reimbursement issues." – internist

"You can't easily code for depression, anxiety and fatigue, which is a lot of what I see. The undifferentiated patient – how can we code to allow the time to treat? That's what we do." – family practice physician

Hospitalists and Fragmentation

The introduction of hospitalists into the care equation has impacted the primary care environment and increased fragmentation:

"The advent of hospitalists has dramatically changed the whole primary care role. It's increased fragmentation, made communication harder. That, plus the advent of more and more part-time work, which is phenomenal. These [trends] aren't going away. I would argue that they are going to increase." – pediatrician/educator

"Trying to track a hospitalist down and get them on a phone is a big chore because, you know, they are doing shift work." – internist/naturopath

"There are hospitalists, and there are office physicians, and the twain do not meet. This is sad, because there is a lot that you can do in following patients in the hospital. It just doesn't happen anymore." – family practice physician

"In the cities we have virtually thrown the primary care physicians out of the hospital… A big portion of our problem is that we have fragmented care, poor communication between the hospital provider and the physician in the field….So now I'm calling about a patient with chest pain and talking to somebody I don't know from Adam. And what ends up happening is that they don't get back to me." – family practice physician/educator

On Not Going to the Hospital

"For me, the biggest change in primary care was when I quit going to the hospital. When I admitted a patient to the hospital, I was the boss. I didn't turn the care over to the cardiologist or the surgeon. If they needed surgery, fine, but I was there and taking care of the medical problems. I was responsible for the patient, and that was important, because I set out to see that my patient got the very best care. Maybe it's an ego thing, or maybe it's the Dr. Welby thing, but I felt it was the right thing to do.

"Course, those days are gone. Primary care docs have been pretty much forced out of the hospital by the health plans. Not all of them, but many. You use the hospitalists now."

internist

Financial Drivers

Follow the money, and you will readily see why there is a growing shortage of primary care physicians. Despite the fact that recruitment for primary care doctors – family medicine, internists, pediatricians – increased 23% between 2008 and 2009, supply continues to dwindle, with fewer residents choosing to practice in traditional generalist settings.

Table 3 illustrates the significant salary disparity between primary care physicians and subspecialities.

TABLE 3 Income Offered to Selected Recruited Specialties, 2009[33]

Specialty	Low	Average	High
Family Practice	$120,000	$173,000	$245,000
Internal Medicine	$140,000	$184,000	$275,000
Pediatrics	$120,000	$171,000	$350,000
Hospitalist	$160,000	$201,000	$300,000
Orthopedic Surgery	$300,000	$481,000	$1,000,000
Cardiology	$180,000	$419,000	$880,000
Gastroenterology	$250,000	$393,000	$600,000
Anesthesiology	$250,000	$344,000	$500,000
Radiology	$300,000	$391,000	$500,000
Dermatology	$200,000	$297,000	$400,000

With medical students graduating with significant amounts of debt – an average of $140,000-180,000 and even higher in some cases – there are powerful incentives to specialize in fields where they can make two or three times as much as they can in traditional generalist specialties like family practice, plus have greater control over their practice environment:

> *"Why would you want to go into a field where you have $250,000 worth of debt and you're only going to make $150,000 or so a year? Plus be working all the time and only have 15 minutes to see a patient?"* – resident, internal medicine

"If you're in primary care, you're getting lower reimbursement, you have high overhead, and you have basically rookie folks who you constantly have to train, because as soon as you get them trained, the specialty and hospital folks are taking them away from you because they get paid better and get rid of a lot of the hassles that go on in primary care." – family practice/educator

Whacked Out

Primary care demands a vast and ever expanding breadth of knowledge and the ability to integrate information across biological, social and environmental systems. But gathering and integrating information requires listening to patients, getting to know them, and coordinating their care to ensure the best possible outcomes.

All that takes time – time that is not compensated. That's what is so whacked out in our industrialized, fee-for-service sick care system. We pay clinicians to *do* things to patients, not to talk to them and coordinate their care. No wonder primary care is increasingly an unattractive career proposition.

"It used to be that the brightest medical students went into primary care. You had to know about so many diseases and treatments. Now, the brightest are going into stuff like dermatology and radiology, because they have a better lifestyle and get paid much more." – internist

"I'd say maybe 50 percent of the clinicians I know, if there was a way to get out, they would. It's overwhelming to come out of medical school today and have to pay that off [large amounts of medical debt]. And practice today is an enormous hit on your time, and a lot of families can't do it because both parents are working." – pediatrician

"Why should a primary care physician have to make a lot of critical decisions at the very start, which is one of the hardest intellectual parts of medicine, and then get paid less than a technician who is doing a procedure day after day. There is a huge disparity in being reimbursed for procedures than for primary care, and that is simply not going to work long term." – naturopathic physician

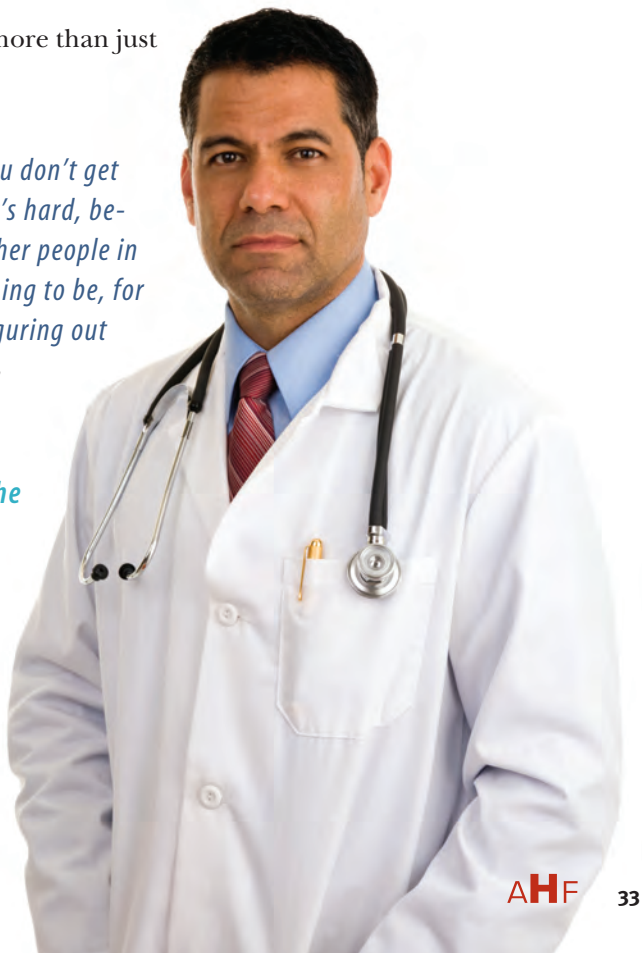
"The future for primary care physicians is grim, and that's from the perspective of trying to recruit them. We can find very, very few primary care physicians who want to do primary care work. The internists all want to be hospitalists. The family practitioners want to go into sports medicine or something else. I was just talking to a medical student who's going to owe about $190,000 when she graduates, and that interest will build up for the three years she is in residency, and then she comes out and makes $140,000 or whatever. It doesn't compute." – internist/group medical director

But for some physicians who choose to stay in primary care, it's more than just an issue of money or the hassle factors:

"You make your decision and then you make less money, and you don't get the prestige that used to be associated with it [primary care]. It's hard, because in the end you're still paying off your loans and seeing other people in the business move ahead. It's not what we all thought it was going to be, for sure, but then you make your priorities. That's the hard part, figuring out what you're going to give up, and what you are not." – pediatrician

"I know I could make more money. I know I could have a less hectic lifestyle. But I would die of boredom, doing the same thing over and over again. That's why I like primary care. I need the variety." – family practice physician

"Primary care is a calling. You have to have it in your heart, or else you would never choose it. So many primary care doctors go into it because they want to be a family doctor, and then when they finally get there, it's often not that at all." – naturopathic physician



Goodbye, Dr. Welby

"What does America think of primary care? Just look at the popular TV medical shows. It's House and ER and all the high tech, whodunit, whatisit stuff. It certainly isn't Marcus Welby."

pediatrician

Equal Pay for Equal Work

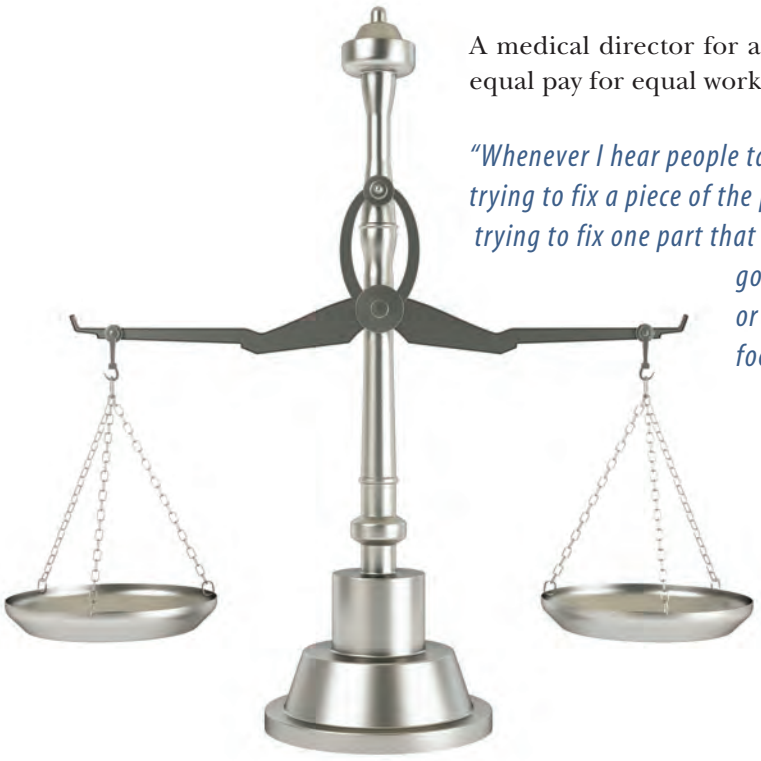
Salaries and low reimbursement were topics of concern for nurse practitioners as well. Some of them expressed frustration for not receiving "equal pay for equal work," as well as the billing practices of physician colleagues:

> *"As a solo nurse practitioner, I am concerned about the discrepancy in the reimbursement between what I get and what the physicians get for the identical service. A UTI [urinary tract infection] is a UTI, whether it's taken care of by an NP or a physician, and yet sometimes I get 40% of what the physician gets. I don't think that's fair."* – nurse practitioner

> ***"My frustration [with physicians in the practice] is that they don't do anything under my name. Previously [in another practice], if I ordered something it was under my name, and I got letters back from the specialists saying this is what we did, this is what our diagnosis is, and this is the treatment plan. But now it's all about reimbursement. They [physicians] get 40% more when they bill it under their names. And I'm the one seeing the patient – they aren't."*** – nurse practitioner

A nurse educator had a more "strategic" take on the "equal pay for equal work" issue:

> ***"Politically, this talk among NPs about equal pay for equal work is a non-starter. You know, the first thing you have to do is get in the door, then you get in the kitchen, and pretty soon you're doing all the cooking, and other people move out. It's just a gradual process. Some NPs get insulted with the terms 'extender' or 'mid-level practitioner,' and I say, just get over it. There's too much work to be done for us to be arguing over semantics. The economics of the system will drive it where it's going to go, regardless."***
>
> – nurse practitioner/educator



A medical director for a large national health plan thought that the focus on equal pay for equal work distracted NPs from the real issue:

> *"Whenever I hear people talk about getting equal pay for equal work, I think they're trying to fix a piece of the problem, and they're not creating a solution. Rather than trying to fix one part that has to do with mid-level practitioners, the solution is going to be much more in the direction of episode of care or outcomes-based solutions. That's what we ought to be focusing on."* – medical director, health plan

Training and Culture Drivers

The mental models that clinicians bring to primary care are shaped by their professional training and attendant cultures of values, beliefs and behaviors. Because we chose to interview a broad range of clinicians, and not just traditional physicians, we recorded a diversity – as well as a divergence – of opinions on how training and culture are driving changes in the primary care practice environment.

Physicians

The history of the education of physicians in allopathic (MD) and osteopathic (DO) medical schools is replete with the comparison of training philosophy and rigor, practice patterns and the distribution of graduates across the medical specialties. We noted some of the differences in the focus groups and interviews but generally concluded that the adverse business environment and practice incentives working against the selection of primary care as a career of first choice among medical students are impacting both MDs and DOs alike.

Medical School Culture

That said, there are different approaches in training and culture. The MD training culture is dominated by the specialties and biomedical research. Primary care specialties are lower in the academic pecking order. This reflects not only the financial realities of university-based training and research facilities, but also a broader American cultural fascination with high tech medicine, research, and medical subspecialists:

"The culture of medical schools comes from the university, and the university kind of ivory tower mentality tends to look down on generalists. And when you think about what generates money in a university, it's research funds. And research funds are very, very narrowly focused." – family practice physician

"There is a certain prestige factor [in medical training] that if you go into primary care, you're sort of diminishing yourself. That pecking order is reinforced by the faculty." – resident in internal medicine

"Even when I was in residency, when they [medical faculty] heard I was going into general internal medicine, I had numerous heads of department rake me over the coals for not living up to my potential." – internist

"It's generally accepted that the kids who go into family practice these days are not the A team." – hospital administrator

Colleges of Osteopathic Medicine (COM), by contrast, are generally associated with smaller private universities, not the large public and private research universities, and are focused on "bringing a patient-centered, holistic, hands-on approach to diagnosing and treating illness and injury."[34] Even though they stress primary care in training and state that the majority of DOs pursue primary care careers, the numbers have been declining: the percentage of seniors in COM institutions planning primary care specialties declined from 34.2% in 2000-01 to 29.2% in 2007-08.[35]

By way of illustration, the Arizona College of Osteopathic Medicine at Midwestern University graduated 153 students in 2009. Of these, 27 were placed in primary care residencies

in Arizona, which included 13 residents in internal medicine. The issue is that an increasing number of residents in internal medicine choose to specialize once they get in the hospital:

"I've seen a lot of students who come in saying they are interested in primary care, and then if they go off into the hospitals or go into the ICUs, and they see the flashing lights and all the excitement, and then they decide that's really want they want to do....We certainly encourage our students to take primary care residency programs...our ability to change the residency programs is very difficult because the hospitals think they own the residency programs." – DO educator

"What I have is not a job, but a practice. It is very involved, and I don't see the younger generation looking to build something like that or have to maintain it. It takes time, it takes effort. They would just as soon be hired, and that's it."

gynecologist

Generational Differences

Many of those in the focus groups and interviews spoke of distinct differences between the older, established physicians and younger physicians just entering practice, both in terms of training and culture:

"The whole thing has become a matter of seeing as many patients as possible. And generally speaking – and I hear this in accounting and in law and in medicine – younger people are not – I don't know – geared up for seeing patients. It's a motivational thing, maybe a lifestyle thing. Maybe it's a work ethic thing. And it's a skill thing. There's a skill to seeing patients quickly, being able to assess what's going on, treat them and move on." – hospital administrator

"Changes in training over the past 10-15 years are affecting care. There is less responsibility for patients, so less experience." – health plan medical director

Some clinicians expressed frustration with the way younger physicians are trained in medical colleges:

"Educators are totally clueless. I get residents from them, and they are totally clueless about reality. If you talk to any of the program directors about educating their residents about proper documentation coding, or how to properly bill – and they know nothing about that – it's poo-poo'd. They aren't taught how to be efficient in practice, so they just kind of spin their wheels." – internist

Younger physicians, as one might imagine, see it differently:

"I got chewed out not long ago for spending 45 minutes with a patient. This person had a history of cardiac disease and was complaining about chest pain. He also had diabetes and was complaining about leg pain. Plus he thought he had lung problems. And I'm supposed to use my judgment about what to focus on and run him through in 10 or 15 minutes? That's bad care." – resident, internal medicine

Plus, some older physicians see a brighter picture for younger physicians in terms of training, culture and values:

"I think the younger generation getting into medicine, with all its flaws, understands teamwork better, understands the democratization of health care better." – pediatrician/educator

"I'm seeing more physicians coming out of the medical schools being interested in establishing a relationship with patients and offering good care, instead of just running people through the grind. I'm encouraged." – internist/group medical director

The Importance of Models/Mentors

Attracting medical students to primary care is enhanced by the presence of competent and respected generalist physician role models and mentors on the faculty:

"The economy notwithstanding, one of the things I've noticed is that students go into primary care because they have someone to model after. So I fill my faculty with primary care physicians or with specialists who are interested in helping us continue to maintain primary care physician output. We've done fairly well on that score. Usually, if we say there are 50-55% who are going into primary care, by the time they're done, 49-52% are still in primary care." – DO educator

The Importance of Demographic Background

In recent decades, U.S. medical students have tended to come from urban/suburban and upper income backgrounds. By contrast, there is a positive correlation between students who come from rural backgrounds and from families with lower socio-economic status and levels of education with pursuing careers in family medicine.[36] One Arizona medical educator, who makes the case that primary care represents core health care access in rural and underserved areas, put the situation bluntly:

"If you begin to admit medical students from the 65% of the population left behind [rural areas], if you train them in health access, if you train them to provide care for that 65% of the population, and if you shift health policy to invest more than 10% of the total resources to that larger population and land area, then you can deliver good health access and primary care. But if you continue to admit students from 4% of the land area who are trained most exclusively and have the lowest take up rate for broad generalist careers, and if 90% of the resources continue to go into that 4% of the land area, then basically we are doing everything possible not to deliver good health access and primary care." – family practice physician/educator

The Explosion of Medical Knowledge

To be a competent primary care physician today requires being able to master a broad body of medical knowledge. Patients expect physicians to know their subject matter and to get the diagnosis and treatment right:

"There is just a huge pressure today to get things perfect. And in order to do that, I feel like I don't know enough. But in family medicine, one of the traditions you are taught is to go look it up. Admit that you don't know something, and then look it up." – family medicine physician

"Every single one [physician] that I see in the family practice residency is highly intelligent, but there is just low pay for what they do, and there's a huge knowledge base they have to know. And you can't specialize."

resident in psychiatry

In some medical training circles, however, the dominant view is that family medicine and other generalist specialties (general internal medicine, pediatrics) are too broad to be fully mastered. Better to specialize, plus you reap other benefits:

> ***"My friends started off in general internal medicine, but now they are going off for additional three-year residencies in cardiology. They figure they're going to make a lot more bucks and have fewer hassles, so they do it. Or they go to the hospital and get hired as hospitalists."*** *– internist/naturopath*

On the other hand, some educators think medical schools should inculcate their students with a different value set:

> *"When you [the medical student] go out, you're going to have specialists say to you, 'you're too smart to go into family medicine. But I'm here to tell you that it's harder to know a lot about a lot than it is to know a lot about a little. And I want the best of you to be family physicians."* *– DO educator*

Clinical Training Sites

Whatever else medical training institutions might do to increase the number of primary care physicians, they must offer high quality, continuous exposure to primary care clinical training sites during training through clinical rotation exposure to primary care specialties and subsequent residencies in family medicine, general internal medicine and general pediatrics.

But what, really, are we training primary care physicians *for*? One educator believes we should be training primary care providers for health access: first contact, long-term access to a "continuity" practitioner:

> ***"If you're going to train physicians for health access – and that's what primary care is – you need to train them where they are delivering health access, and that's often in rural and underserved areas. But if you're paying hospitals to do health access training, that doesn't fit, because a hospital is involved in vertical care, and primary care is horizontal, it's health access. So you basically have dysfunctional primary care training, and you drive medical students and residents away from primary care with this type of training, which often involves poor support, poor attitudes. That's a huge difficulty."*** *– family practice physician/educator*

In this view, hospital-based training is not the best place for primary care – and that includes NPs and PAs as well as physicians:

> ***"In the U.S. there is no separate training for health care access. The physician, the nurse practitioner and the physician assistant training is all hospital associated, and funded often through hospitals. Let's face it, the hospitals needs NPs and PAs, and as a broad group they can do just about any type of career, and they [hospitals] have found them to be very effective doing all kinds of hospital and specialty tasks, and they generate much more money at those tasks for the employer than they do in primary care. So there is every incentive for them to leave [primary care], to get paid better, and for the employers to generate more revenue."*** *– family practice physician/educator*

On the other hand, without training in the hospital, where physicians are exposed to sicker patients with more complex and difficult conditions, they may lose their clinical edge:

"Without exposure to hospital care – and that's both in training and the result of using more hospitalists – outpatient doctors tend to lose skills and become more like an NP or a PA." – health plan medical director

Meanwhile, a new College of Osteopathic Medicine in Arizona is getting its students into clinical training sites as soon as possible:

"Our students are here one year, and then they go out into community health centers in the second year. And then years three and four are more typical of what you would experience in a traditional medical school, clinical rotations and so forth. Plus we emphasize primary care as much as possible, realizing they still have to go through the other rotations as well. On the interview day for admission, we ask students if they will spend at least one year serving the underserved, and hopefully in community health centers." – DO educator

Nurse Practitioners, Physician Assistants

For the most part, our focus group research and interviews confirmed that nurse practitioners and physician assistants defined issues of medical training and culture in *relation* to the dominant role of physicians in the wider health care system. This was true whether NPs and PAs advocated a more independent clinical role in the practice environment, or whether they saw their role as what is commonly characterized as "mid-level" practitioners or "physician extenders."

Semantics, as we confirmed, matters among primary care clinicians.

NPs expressed a diversity of views on training and culture, and on their role in the primary care practice environment. A substantial number of them were vocal about the quality of their clinical preparation, a culture that emphasizes a patient-centered, preventive, holistic and integrated approach to health, and the suitability – indeed, the inevitability – of their role as practicing independently of physicians in primary care settings:

"I think nurse practitioners, joining with physician assistants, are pretty much the answer to the delivery of primary care. I think NPs are well-schooled and trained on knowing when their scope of practice ends, and when they need to collaborate or actually refer out to a physician colleague." – nurse practitioner/educator

"We [NPs] are the people who take care of our patients and families, and who look at everything in a holistic way and take into account the social aspects of what is going on….I have people say, how do you know when to call a doctor? But you would know that. You know your comfort zone, what you can handle, and what you should not." – nurse practitioner

Other NPs were more comfortable in their role working alongside physicians, and not practicing independently:

"I work in a practice with five MDs, and it's very unusual to be by myself. So when there's a question about something, it's nice to have somebody else in the office you can bounce it off, and we do that all the time. And since I'm not a physician myself, I kind of like writing 'per Dr. D's instructions to increase medication to 5 mgs,' instead of taking that responsibility myself." – nurse practitioner

"The research supports NPs delivering quality care comparable to primary care doctors. Plus they score high on patient satisfaction. They know when to consult with others and refer out. They work well in teams. Our training supports all this."

nurse practitioner/educator

"You want to be a complement to the physician, not a replacement. Perhaps an extension."

physician assistant

"I see patients and prescribe and order tests and all that, but I see myself as part of the team. The physician knows things I don't, and sometimes she asks me questions, too. It works best when you're part of a team." – nurse practitioner

One NP who recently finished medical school and is now a resident in psychiatry, offered this perspective on training:

> *"I've been on both sides. It's night and day between the training a nurse practitioner gets and the training a medical doctor gets. To work in conjunction with a doctor is ideal, because you have that person to use their expertise, and that is what the majority of nurse practitioners do."* – resident in psychiatry

By 2015, the American Association of Colleges of Nursing aims to make a doctorate level entry degree – Doctor of Nursing Practice (DNP) – the standard across the country for all advanced practice nurses. The two-year program, including a one-year residency – is designed to create a "hybrid practitioner" with more skills, knowledge and training than a masters degree NP.[37] Both the University of Arizona (UA) and Arizona State University (ASU) have DNP programs in place. Nurse educators think the degree will further solidify the profession's role as independent clinicians. Some of the NPs in the focus groups weren't so sure:

> *"I think it is ridiculous to ask somebody in a rural area who has been doing a good job, with high patient and provider satisfaction for 15 years, to quit her job and go back to school for a doctorate in nursing so she can come back to do exactly the same thing with no additional compensation, and she probably lost her job anyway because somebody younger and cheaper took it."* – nurse practitioner

As for PAs, we noted less diversity of opinion on training and culture issues. Aside from the hassles of dealing with high patient volume, a fragmented, inefficient delivery system, and the diminished role of clinicians who aspire to be in family practice within a specialist-obsessed culture, they generally agreed on their role within the primary care team:

> *"I see patients all day long by myself, but I can get hold of the physician if I have to. We have meetings and check up on things. It seems to work well."* – physician assistant

Complementary and Alternative Medicine (CAM) Clinicians

In the Arizona primary care workgroup assembled in 2008 to address workforce issues, a majority of the physicians did not want to include CAM clinicians because they believed they were outside of mainstream medical practice, and they did not want to "legitimize" their inclusion in any strategy to increase the primary care workforce in the state.

Here, we are less interested in unpacking the issue of efficacy and training of any particular group of clinicians in relation to another than we are in situating those groups along the continuum of clinical care as defined by consumer preferences and the dynamic of market forces in response to them. We included CAM clinicians in the focus groups and interviews because thousands of Arizonans seek out their services, some as first line and exclusive providers of primary care, and most in conjunction with services in the

"traditional" medical system of care. The CAM clinicians included those in naturopathic, homeopathic, and Chinese (Eastern) medicine, as well as one clinician in massage therapy.

The CAM clinicians acknowledged that they operate outside the "mainstream" of medicine, but stressed that their training and practice focus was primary to health across all sectors:

"Even if we end up referring patients to specialists, we work with the same basic facts for everyone, which come down to improving their diets, improving their lifestyle, and that's basic primary care that directly impacts all levels of health." – naturopathic physician

"As naturopaths, we're accustomed to sort of running outside the system to some extent. We do integrate when we need to refer, and I quickly know when I need to do that. Nobody can do it all themselves." – naturopathic physician

"They say that 65% of Americans go to natural-type physicians. They just don't tell their allopaths [physicians]. Maybe one percent of my business is the person who still needs allopathic medicine, and if you come in with a high fever and you need an antibiotic, I'd still write it. But the other 99% get natural medicine. People seek it out." – homeopathic physician

"In our clinic, I would say that 60% or more of our patients come in because they are not feeling well, and they have been seeing other clinicians like MDs and so on. Probably a quarter or less of our patients are here because we are their primary care practitioner." – naturopathic physician/educator

One clinician expressed the view that patients seek out CAM clinicians because they are trained to spend more time with a patient, and emphasize a holistic approach to healing:

"People don't have time for things. They come to me and say, 'can you give me some time?' I can spend time with them and make them feel better. I treat the whole person. They don't get much time with traditional doctors."

– Chinese medicine physician

A naturopathic physician-educator made a point to speak to those in traditional medicine who believe that many CAM therapies are not evidenced-based:

"It offends me when evidence-based medicine becomes a club to beat up on me, when the vast majority of what we [NDs] do on any given day has a very strong basis in the medical literature. I would say that probably 70% of what a naturopath does has to do with lifestyle, nutrition, exercise, stress reduction. And for everything that we do on top of that, whether it's manipulative therapies or acupuncture or herbal therapies….there's evidence for it." – naturopathic physician/educator

Finally, one clinician stressed the importance of including different perspectives and approaches in the health care system:

"As primary care evolves, physicians will continue to be key players, but there are different perspectives on what health and disease are, and many of them are valid. The focus for each is different. The training for NDs (naturopathic doctors) is different. The training for acupuncture is different. Chinese medicine is different, but there is a place in the health care system for all of those modalities." – nurse practitioner

"As a consumer, I just want it [health care] to be streamlined. I want to get in, I want to get out, I want to pay my deductible, and they take care of everything else behind the scene."

patient

Patient Drivers

We conclude this section on drivers of the current primary care practice environment with patients themselves – or what is more descriptive of our industrialized healthcare system – *consumers* of healthcare services. In this model, health care becomes a *customer service business*:

> ***"Most primary care docs don't realize they're in a customer service business."*** *– health plan medical director*

This came through loud and clear in the consumer focus groups:

> ***"I see no one but a doctor for primary care. If I pay the bill, he works for me."*** *– patient*

"I think it should be my choice that I can walk into my doctor's office, I don't care what my insurance plan says, and say, 'Hey, I need a physical. Head to toe, full GI.' I think I need that." *– patient*

Not only do patients want convenience, choice, and streamlined care, but they want to be treated as human beings and have a relationship with their provider:

> ***"We changed physicians because [with the former physician] we were just like cattle, we were just moving through, and that was it, in and out, as fast as they could move us."*** *– patient*

> *"The ideal situation is when you build a relationship with your primary care doctor, and he or she takes the time to talk about what is going on. But that doesn't seem to happen that much anymore."* *– patient*

"What I look for [in selecting a primary care provider] is someone who will actually listen to you, like he is at least willing, if not happy, to see you, and is not in there for a minute, and then he's moving on." *– patient*

Furthermore, patients noted their own ability to access medical information, make a preliminary diagnosis of their condition, and have access to a primary care system that took that into account:

> ***"We expect primary care providers to have general knowledge about a lot of things, and medicine has become so fast and specialized that it is almost impossible for them to have that kind of knowledge anymore. So we [patients] end up being our own advocates. We look things up on the Internet or ask friends, do the research to keep up and know where to get started."*** *– patient*

"Sometimes I had already figured out what I had and just told him [the primary care clinician] what I thought he needed to do. I mean, I had access at my fingertips to information that helped me solve the problem without going through a lot of tests." *– patient*

"I had a bladder infection, so I called the nurse and said I wanted this medication and here is my pharmacy number, and she just phoned it in. I knew what I had, and I wanted to take care of it. It was easiest over the phone." – patient

This "customer service" orientation of patients/consumers does not sit well with many primary care clinicians:

> *"I don't know that medicine fully fits the customer service model. There has to be an element of customer service, certainly, but there's also the element that there's someone [in medicine] who is trying to help you and who has spent years and years trying to understand what you're dealing with. I think that [element of expertise and knowledge] has been lost in this wash of information from the internet. Plus calling someone a customer versus a patient."* – internist

> *"The biggest frustration is patients coming in and expecting something. It's the phenomenon of I want what I want when I want it, and I want it immediately, instead of taking some Tylenol, everybody get some sleep, and come in first thing in the morning. We've lost a little bit of common sense here."* – pediatrician

"I just think of how many teenage girls who come in and ask for Yaz [birth control pill], and they don't need that stuff. It is just irrational to me that I have 15 and 16 year-olds asking me for a brand name drug." – pediatrician

Blue Monday

"I wanted to go back home and get under the covers this Monday morning. My very best MA – the one who points me in the right direction and keeps me on task – got strep throat from one of her children and was home sick. My receptionist's husband was in the ER with a small bowel obstruction, and one of her sons was home with a fever. Nurse number two has a satellite clock radio. It changed the time last night, and she did not realize it and was an hour late. The phones started ringing at 7:30 when I walked in the door, and all six lines were busy most of the morning. The divorced father of four of my patients who has temper problems gave me hell for not wanting to call in Tamiflu for the one son without even seeing him. He did not seem to understand that 'easy' was not in the best interest of the child. He threatened to move records, which sounded good to me.....very good." – pediatrician

Patient's expectations are influenced by the broader service- and technological-oriented culture, and less self-reliance:

"One thing that's changed over my career is that people are much less self-reliant. They want to know what's going on, and they want to know quickly, and they don't want to wait. I remember someone saying that the emergency room has become the grandmother of this generation. There's nobody around to say, 'It's okay. Your child has a fever. Or to fix this headache, you can just lie down and rest and keep the room dark, and it will go away in a day. And it's all about high tech today. High-tech is assumed by the public to be high quality." – health plan medical director

Given consumer behavior and preferences, holistic, continuous and integrated primary care may not be in everyone's desired future:

"A lot of people don't necessarily want a face-to-face relationship [in primary care]. They want to have their own control. They want to pick and choose if and when they see a physician on their own." – health plan medical director

"You don't make money by encouraging people to eat vegetables."

naturopathic physician

Even if patients establish continuous relationship with a primary care clinician, the fee-for-service and procedural-oriented system of American health care is not conducive to providing what patients need:

"It would be really nice, but nobody is going to pay me to call them [patients], and then they sit there and talk to me for 20 minutes about something that is not really the issue, but they need the comfort of it. No insurance company is going to pay me for that." – pediatrician

"It's all about generating money. It's not about changing lifestyle. You don't get paid for that." – pediatrician

In the end, perhaps we have brought this state of affairs on ourselves:

"A lot of the health care costs is driven by the patient being a victim of the system. It's like, 'Well, I need everything. Get me that MRI, get me this and that, rule out this, rule out that, or I'll sue you. Where does that come from? It comes from the patient believing the doctor can do everything, and the only reason he doesn't is because he did something wrong. Well, I'm sorry, but it doesn't work that way in health care. We have allowed this to happen. We don't teach basic understanding of how to manage your health, how to be healthy, stay healthy, and take care of yourself." – health plan director

Saying Goodbye

So where does this leave us in primary care today?

Can We Say Goodbye

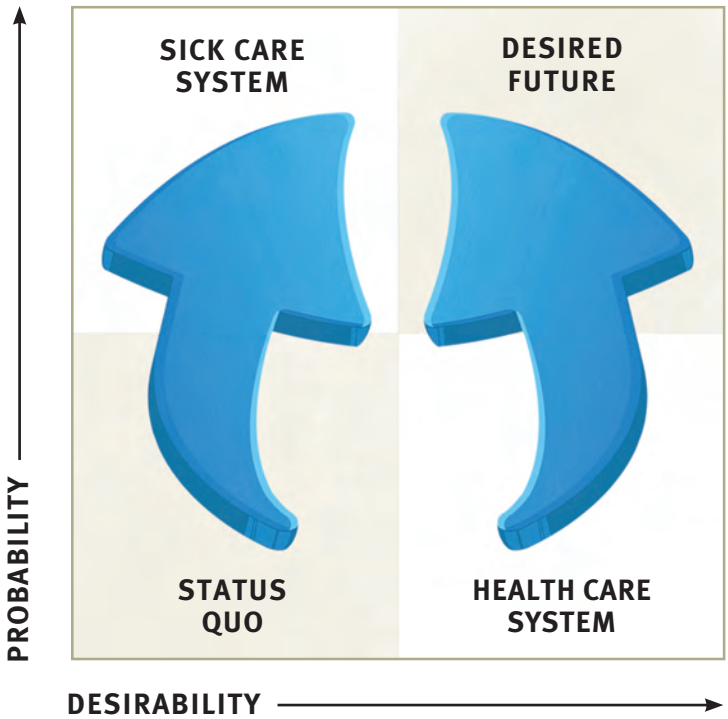
- to a fragmented, sick care system that rewards interventional – and procedure – oriented medicine, and not integrated, continuous, holistic and prevention-oriented health care?
- to a solely cure-oriented, and not care-oriented, health care culture?
- to business, financial, training and cultural drivers that inhibit effective care?
- to patients taking less responsibility for their health and expecting someone else to "fix" everything?
- to turf wars over the control and distribution of resources, and the power and respect that go with it?
- To a culture where primary care is on the bottom of the health care prestige pole?

On the Journey to Hello

- What is the patient's responsibility, the primary care clinician's responsibility, the specialist's responsibility?
- What are the optimal configurations of policy, practice, financial incentives and regulations that promote value-oriented, cost effective health care?
- Can we envision a future where primary care is not just a "first stop" in a labyrinth of specialties but actually delivers on the promise of improving health outcomes and lowering costs overall?
- Can we in fact *bend the possibility arrow* (Figure 26) to say goodbye to our current, fragmented sick care system and say hello to a true *health* system?

If so, what should we be doing now to realize that promise? These are questions we take up in Part Two of *Goodbye, Hello: Bending the Possibility Arrow.*

FIGURE 26 Bending the Possibility Arrow



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Our Mission

To improve the health of people and their communities in Arizona, with an emphasis on helping people in need and building the capacity of communities to help themselves.

The purpose of *Arizona Health Futures* is to unravel an important health policy topic of relevance to Arizonans, provide a general summary of the critical issues, background information and different perspectives on approaches to the topic, tap into the expertise of informed citizens, and suggest strategies for action.

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