

St. Luke's Health Initiatives

A Catalyst for Community Health



0 C T O B E R 2 0 0 4

ARIZONA HEALTH FUTURES Policy Primers: a nonpartisan guide to a better understanding of key terms and issues in the Arizona health policy landscape.

Controlling the Curve: Health Workforce Regulation in Arizona It is common to hear that Arizona and other states face a critical shortage of nurses, physicians and other highly trained practitioners to meet the growing demand for health care services.

What is less common is to probe beneath the surface of the demand and supply curve for health care workers in a fast growing state like Arizona and determine what role increased regulation in the form of licensing, credentialing and changing definitions of scope of practice plays in responding to – and more importantly, in controlling – the disruptive pressures of that curve. s it possible or even desirable to change current regulatory workforce practices to impact broad public policy issues of access, quality and cost in health care? Or are we left, in the words of one observer of Arizona health care wars, with the reality that "practitioners are capable of thinking about the broader public policy choices, but they need a gun to their head to do it."

In this *Arizona Health Futures* Policy Primer, veteran health policy researcher Carol A. Lockhart uses an industrial organization model to look at health workforce regulatory practices generally, and in Arizona specifically, to determine their impact on projected shortages and implications for public policy. In addition to a review of relevant historical and current research, Dr. Lockhart interviewed key informants in the context of numerous reports and recommendations for reform in the health professions. Her work addresses only the regulatory apparatus in Arizona governing health providers themselves, and not hospitals, insurance companies and other organizations operating within a vast and growing health care industry. (editor)

Backdrop: Relentless Growth

Health care in the United States has been perceived to be in a state of perpetual crisis for the past 30 years, fueled by the inherent tension between the expansion of medical services for a growing population and the need to control rising costs.

While prognosticators argued over whether the country had too many or too few physicians and other health care providers during this period, the relentless growth of the industry was beyond dispute:

- In 1970, health care represented \$73 billion in total costs and seven percent of national GDP, compared to \$1.7 trillion and 15 percent of GDP in 2003.¹
- Nationally, approximately 9-10 percent of employed persons work in the health care industry, with numbers projected to move higher in the future.
- Fully 9 out of the 20 fastest growing occupations in the U.S. are in health care, with a 28.8 percent growth rate projected between 2002-2012, contrasted to a 13.8 percent growth rate for non-health care jobs.²

Arizona exhibits a similar growth curve.

- In 1970, approximately 23,000 people in the state worked in health care jobs, which represented 4.1 percent of total jobs. In 2003, about 200,000 Arizonans worked in health care, or 8 percent of total jobs.³
- According to the Arizona Board of Regents, a total of 10 percent of state wages, or \$2 billion, was generated through health care jobs in 2002.⁴ As the accompanying chart illustrates, the great majority of the fastest growing occupations in Arizona are in health care and related fields.

Arizona's Fast Growing Health Occupations 2003-2013

Occupation Title	2003 Estimated Job Openings	2013 Projected Job Openings	Percent Change
Physician Assistants	2,341	4,178	78.47%
Medical Assistants	11,652	20,649	77.21%
Respiratory Therapy Technicians	813	1,426	75.40%
Medical Records & Health Information Technicians	3,137	5,397	72.04%
Dental Assistants	5,239	8.963	71.08%
Dental Hygienists	1.720	2.942	71.05%
Respiratory Therapists	1,285	2.197	70.97%
Physical Therapist Aides	1,336	2.227	66.69%
Physical Therapist Assistants	1.535	2.544	65.73%
Radiation Therapists	538	800	65.43%
Surgical Technologists	1 603	2 768	63 50%
Cardiovascular Technologists & Technicians	£61	2,700	61 14%
Social & Human Service Assistants	2 852	6 002	E 8 14%
Pagistarad Nursas	26 122	52,001	50.14%
Medical Scientists Except Enidemiologists	34,123	53,901	57.90%
Accupational Therapist Aides	049	1,020	57.10%
	121	190	5/.02%
Home Health Aldes	10,284	16,077	56.33%
Physical Inerapists	2,341	3,636	55.32%
Occupational Inerapists	1,003	1,550	54.54%
Nuclear Medicine Technologists	210	324	54.29%
Diagnostic Medical Sonographers	825	1,267	53.58%
Health Professionals & Technicians, All Other (OES Only)	1,645	2,522	53.31%
Occupational Therapist Assistants	232	355	53.02%
Mental Health & Substance Abuse Social Workers	1,873	2,859	52.64%
Emergency Medical Technicians & Paramedics	2,195	3,347	52.48%
Pharmacists	3,210	4,882	52.09%
Medical & Health Services Managers	4,193	6,354	51.54%
Radiologic Technologists & Technicians	4,059	6,119	50.75%
Psychiatric Aides	1,031	1,553	50.63%
Pharmacy Technicians	2,997	4,497	50.05%
Medical Equipment Preparers	818	1,225	49.76%
Nursing Aides, Orderlies, & Attendants	18,763	28,037	49.43%
Medical & Clinical Laboratory Technologists	2,076	3,090	48.84%
Medical & Public Health Social Workers	1,086	1,615	48.71%
Medical & Clinical Laboratory Technicians	4,851	7,168	47.76%
Epidemiologists	97	143	47.42%
Health Diagnosing & Treating Practitioners, All Other	811	1,187	46.36%
Psychiatric Technicians	651	951	46.08%
Healthcare Support Workers, All Other	2,880	4,201	45.87%
Personal & Home Care Aides	6,155	8,947	45.36%
Dietetic Technicians	1,006	1,458	44.93%
Rehabilitation Counselors	1.547	2,191	41.63%
Mental Health Counselors	1,809	2.561	41.57%
Psychiatrists	312	435	39.42%
Medical Transcriptionists	1.802	2,504	38.96%
Licensed Practical & Licensed Vocational Nurses	0.001	12,507	38.05%
Ambulance Drivers & Attendants Excent Emergency Medical Technicians	160	22,507	38.65%
Obstetricians & Gynecologists	200	220	27 80%
Dietitians & Nutritionists	1 066	1 467	27.60%
Dharmacy Aides	1,000	2,407	27 570/
	1,504	2,009	3/.5//0
Riochemists & Riophysicists	320	439	27.19%
	97	133	2/.11/0

Notes: Data compiled from 2003 OES survey and 2003-2013 occupational projections prepared by the Arizona Dept of Economic Security in cooperation with the U.S. Dept of Labor, Bureau of Labor Statistics. For a complete list of all fast growing occupations, visit www.workforce.az.gov. Occupational Titles are from the Standard Occupational Classification System (SOC) www.bls.gov/soc/socguide.htm. Job Openings equals openings from growth plus openings from separations.

Source: Rick Van Sickle, Job Opportunities in Arizona 2003-2013, July 30, 2004, available at http://www.workforce.az.gov/admin/uploadedPublications/1343_JobOpp03-13.pdf.

Backdrop: Relentless Specialization

An expanding health care industry has been accompanied by increased specialization at all levels. Like any industry driven by advancements in science and technology, the explosion of knowledge and technical mastery has precipitated the division of labor into ever smaller, more manageable and "productive" units – the whole connected by increasingly sophisticated system processes of integration and control.

We will return to the issue of whether health care, considered as an industry, has successfully bridged the fragmentation of specialists and subspecialists with integrated systems of coordinated care. The Institute of Medicine, among others, thinks not.⁵

For now, it's worth noting that the "problem" of increasing specialization in health care – everyone lost in the trees, no one seeing the forest – has been with us for a long time. For example, in 1933 an editorial in *The Journal of the American Medical Association* (*JAMA*) noted..."the growth of specialism, now so bitterly complained of, and the fade-out of the general practitioner."⁶ Similar comments bemoaning the rise of the specialist and the decline of the generalist have been made at every juncture of stress and strain in the American health care system.

The difference today is the sheer pace of specialization. In the training of physicians alone, the Accreditation Council of Graduate Medical Education (ACGME) accredited nearly 7,700 residency programs in 103 specialties and subspecialties in 2000; the American Board of Medical Specialties nearly doubled its certification programs from 65 to 124 between 1985 and 2000.

As one observer noted, "The forces and motivations that have caused this accelerated demand for subspecialty certificates and training programs have come largely from the constituencies of the certifying boards. *Their desire for special recognition of narrower and narrower areas of knowledge and/or techniques will probably continue.*" [SLHI emphasis]

The rapid pace of specialization hardly stops with physicians. Nurses can now specialize in a wide variety of areas (anesthesia, community health, informatics, neonatal, oncology, psychiatric, etc.), occupational therapists, nuclear medicine technologists, phlebotomists and other specialties have come on the scene in the past 30 years; dentists, pharmacists and other providers have splintered into myriad specialties; the revolution in biotechnology, genetics, informatics and other new areas of science and technology promises to foster even more areas of specialized career focus in the future.

And we haven't even mentioned the burgeoning field of complementary and alternative medicine (CAM), which has its own unique areas of practice and inquiry.

The rapid growth and fragmentation of health care into ever more narrow areas of practice and research is apparent to even the most casual observer of the American health care scene. What receives less scrutiny is the corresponding growth of professional training

is not just another service industry. Its fundamental nature is characterized by people taking care of other people in times of need and stress. Patients are ill. families are worried, and the ultimate outcome may be uncertain. *Stable, trusting* relationships between a patient and the people providing care can be critical to healing or managing an illness. The people who are the health system's most important resource." Institute of Medicine,

"Health care

Institute of Medicine, *Crossing the Quality Chasm*, 2001. programs, licensing and credentialing standards, and the entire regulatory apparatus that governs movement into, over and through the system.

What are the characteristics of this regulatory apparatus generally, and in Arizona specifically? To what extent do licensing and certification both promote and hinder access to affordable, high-quality health care? Finally, what health policy choices do they suggest for the future?

An Industrial Organization Model

It is commonplace to refer to health care as an *industry* – a set of organizations, individuals and agencies that produce similar services or products. Clearly, the social definition of "medical care" today has expanded far beyond the general training of physicians and the limited institutional practice settings over a century ago.

In his definitive study, *The Social Transformation of American Medicine*, the sociologist Paul Starr chronicles "the rise of a sovereign profession and the making of a vast industry," culminating in the growth of corporate medicine, the consolidation of hospital and insurance systems, the "decomposition of voluntarism" and "the trajectory of organization."⁸ He meticulously details how a cottage industry of solo practitioners and freestanding hospitals morphed into a health care industry that today employs approximately 11 million people, 60 percent of whom are members of over 100 largely regulated professional organizations.⁹

As Starr notes, the process was not without its irony: In their zeal to resist calls for more regulation and oversight under universal and national health insurance schemes similar to other countries – what the American Medical Association decried as "socialized medicine" – physicians helped to usher in a corporate medical model that restricted and regulated their practice all the same.¹⁰

This "vast industry" that Starr describes can be analyzed like any other industry, using a standard industrial organization model, as shown to the right.¹¹

Focusing only on those who work in the health care industry, and not on the organizations in which they practice (hospitals, nursing homes, managed care organizations, etc.), we can use this framework to determine who is practicing in the health care market, the requirements for practice, barriers to entry for others who might wish to practice, any asymmetry of information that might exist between buyers and sellers, and the regulatory apparatus that governs the whole under the pressures of supply and demand.

Number, Type and Size Distribution of Sellers and Purchasers

Type of Product Information Asymmetry

Barriers to Entry (Licenses, Patents, Cost Structure, Accreditation, Etc.)

A Few Caveats

Analyzing health care workforce regulation under an industrial organization model is not necessarily a straightforward process:

THE UNIT OF SERVICE IS OPAQUE. Consumers buy and use health and medical goods and services with the expectation they will maintain, improve or restore their physical and mental well-being.¹² Often, however, these services are *inconsistent* (vary with each visit and type of provider), *inseparable* (produced and consumed at the same time), and *intangible* (can't always be assessed by the five senses).¹³ The result is that it is difficult to define the "unit" of service in health care, although there is no shortage of definitions, regulations and guidelines that attempt to do so. This difficulty often forces researchers and economists to look for those things that they can count, such as whether services are available (how many physicians, hospital beds, etc. per specified number of people), or how often a service is used (number of physician office visits, hospital inpatient days, etc.).

'QUALITY' IS A MOVING TARGET. Just as it is difficult to define the unit of service in health care, it is also difficult to define health care quality. Definitions of quality rest largely with the structural quality of the provider – their education and training, license/certification to practice, or the structural and process quality of services offered in an institution. Further, many patients ultimately define quality in terms of their satisfaction with their care and the level of physical or mental well-being they believe they have achieved. Nevertheless, providers and health care organizations are increasingly being held to a higher and more rigorous standard of quality and are expected to practice in a manner based on evidence that the service actually produces the desired outcome. One can reasonably expect that tighter definitions of both quality and the unit of service will figure prominently in health care licensing and credentialing regulations in the future.

Distribution of *Practitioners in Arizona*

Arizona currently has 81 different health care practitioner groups that are licensed, certified, registered or required to have supervision. The laws governing their practice are found in the Arizona Revised Statutes (ARS), primarily in Titles 32 and 36. There are any number of other unregulated groups that may also offer services to benefit health, but what they cannot do is to suggest they are providing the same services as one or more of the regulated practitioners as defined and prescribed by law. If they do, they are in violation of the law (and should be reported to that practitioner regulating body).

The practices engaged in by these regulated groups are described as their *scope of practice* and define the components and parameters of the services provided to the consumer/patient. In general, scope of practice establishes the minimum standards and limits of practice set to ensure patient safety. As we shall soon see, it also defines the economic and political fault lines between various practitioner groups, both regulated and unregulated, that shift in response to supply and demand as well as to advancements in medical care itself.

A list of the 81 different health care practitioner groups that are licensed, certified, registered or required to have supervision can be found on pages 8-9.

Arizona Regulatory Definitions

PRACTITIONER An individual who has achieved knowledge and skill by practice and who is actively engaged in a specified health profession. ARS 32-3101(9)

HEALTH PROFESSIONS Professions regulated pursuant to chapter 7, 8...41 (various chapters) of this title (32), chapter 6, article 7 or title 36, chapter 17. ARS 32-3101(4)

LICENSURE OR LICENSE An individual, nontransferable authorization to carry on a health activity that would otherwise be unlawful in this state in the absence of the permission, and that is based on qualifications that include graduation from an accredited or approved program and acceptable performance on a qualifying examination or a series of examinations. ARS 32-31-1(8)

REGISTRATION The formal notification that, before rendering services, a practitioner shall submit to a state agency setting forth the name and address of the practitioner; the location, nature and operation of the health activity to be practiced and, if required by a regulatory entity, a description of the service to be provided. ARS 32-3101(2)

CERTIFICATION A voluntary process by which a regulatory entity grants recognition to an individual who has met certain prerequisite qualifications specified by that regulatory entity and who may assume or use the word "certified" in a title or designation to perform prescribed health professional tasks. ARS 32-3101(2)

REGULATORY ENTITY Any board, commission, agency or department of this state that regulates one or more health professions in this state. ARS 32-3101(12)

"Power, at the most rudimentary personal level, originates in dependence, and the power of the professions primarily originates in dependence upon their knowledge and competence."

Paul Starr, The Social Transformation of American Medicine, p. 4.

Regulated Health Professions in Arizona 2004

Categorized by Governing Entity

PROFESSION	STATE REGULATION	APPROXIMATE NO. OF ARIZONA PRACTITIONERS	EXAM***	
BOARD OF DENTAL EXAMINERS				
Dental Assistants	Certified	*	National	
Dental Laboratory Technicians	Must work under a dentist's prescription	*	*	
Dentiste		2.625	National regional state	
Dentists	Cortified	*	National	
Dental Hygionicts	Liconcod	2.2/1	National regional state	
Denturists	Cortified	*	Stata	
	Certified		Sidle	
BOARD OF NORSING	Cantificad		Chaka	
		23,729	State	
Practical Nurses	Licensed	10,143	National	
Professional Nurses (Alternately called Registered Nurses or Graduate Nurses)	Licensed	46,338	National	
School Nurse	Certified (a licensed professional nurse certified with this specialty)	583	*	
Registered Nurse Anesthetist	Certified (a licensed professional nurse certified with this specialty)	159	National	
Certified Registered Nurse	Certified (a licensed professional nurse certified by a national board with this specialty)	*	National	
Clinical Nurse Specialist	Certified (a licensed professional nurse who holds a graduate degree in nursing and is state certified as having a specialty or advanced skills)	*	National	
Registered Nurse Practitioner	Certified (a licensed professional nurse holding a graduate degree as a nurse practitioner)	2,311	*	
Specialist Registered Nurse Practitioner	Certified (a registered nurse practitioner certified by a national agency as having a specialty in one of the following ten areas: midwifery, pediatrics, family medicine, adult medicine, woman's health care, neonatal care, school nursing, psychiatry and mental health care, geriatrics, or acute care)	*	National	
BOARD OF PHARMACY				
Pharmacy Technicians	Licensed	3,908	Board-approved exam	
Pharmacy Intern	Licensed	1,011	*	
Pharmacy Technician Trainee	Licensed	1,632	*	
Pharmacists	Licensed	4,981	National, state	
BOARD OF HOMEOPATHIC MEDICAL EXAMINERS				
Homeopathic Physician	Licensed	107	State	
Homeopathic Medical Assistants	Registered	*	*	
ARIZONA MEDICAL BOARD				
Physicians	Licensed	16,000	National	
Physicians – Specialist	Certified by an American Board of Medical Specialty	*	National	
Medical Assistants	Supervised by a doctor of medicine, physician assistant or nurse practitioner	*		
REGULATORY BOARD OF PHYSICIAN ASSISTANTS				
Physician Assistants	Licensed	1,200	National	
NATUROPATHIC PHYSICIANS BOARD OF MEDICAL E	XAMINERS			
Naturopathic Physicians	Licensed	393	National	
Naturopaths – Specialist	Certified	*	*	
Naturopaths – Dispensing Natural Substances	Certified	*	*	
Naturopathic Medical Assistants	Certified	*	*	
Naturopathic Interns	Certified	*	*	
Naturopathic Clinical Trainee	Certified	*	*	
Naturopathic Preceptee	Certified	*	*	
BOARD OF DISPENSING OPTICIANS				
Opticians	Licensed	623	National, state	
BOARD OF OPTOMETRY				
Optometrists	Licensed	868	National, state	
Optometrists – Specialist	Certified	*	*	
BOARD OF OSTEOPATHIC MEDICAL EXAMINERS IN MEDICINE AND SURGERY				
Osteopathic Physicians	Licensed	1,335	National, state	
Osteopaths – Specialist	Certified by The American Osteopathic Association or The American Boards of Medical Specialty	*	National	
Osteopathic Intern, Resident, or Clinical Fellow	Registered	*	*	
Osteopathic Medical Assistant	Supervised by a doctor of osteopathic medicine	*	*	

BOARD OF PHYSICAL THERAPY						
Physical Therapists	Licensed	2,780	National			
Physical Therapy Assistant	Certified	*	National			
Physical Therapy Aide, Technician, or other Assistive Personnel	Supervised by a physical therapist	*	*			
BOARD OF PSYCHOLOGIST EXAMINERS						
Psychologists	Licensed	1.379	National			
MEDICAL RADIOLOGIC TECHNOLOGY BOARD OF EXA	MINERS	1317				
Radiologic Technologist	Certified	6.745**	State			
Practical Technologist in Podiatry	Certified	*	*			
Practical Technologist in Radiology	Certified	*	*			
Inlimited Practical Technologist in Radiology	Certified	*	*			
Mammographic Technologists	Certified	*	*			
	certifica					
Social Workers, Baccalaureate	licensed	2 800**	National			
Social Workers, Dactalaureate	Licensed	2,000	National			
Social Workers, Master	Licensed					
Social Workers, Clinical	Licensed	a = / a**				
Counselors, Professional	Licensed	2,540***				
Couriseiors, Associate	Licensed	- 0 - **				
Marriage and Family Therapists	Licensed	385^^				
Marriage and Family Therapists, Associate	Licensed					
Substance Abuse Technician	Licensed	2,038**				
Substance Abuse Counselors, Associate	Licensed					
Substance Abuse Counselors, Independent	Licensed					
BOARD OF OCCUPATIONAL THERAPY EXAMINERS						
Occupational Therapists	Licensed	1,235	National			
Occupational Therapy Assistants	Licensed	427	National			
Occupational Therapy Aides and Technicians	Supervised by an occupational therapist	*	*			
BOARD OF RESPIRATORY CARE EXAMINERS						
Respiratory Therapist	Licensed	3,300**	National			
Respiratory Therapy Technician	Licensed					
ACUPUNCTURE BOARD OF EXAMINERS						
Acupuncturists	Licensed	312	National			
Acupuncturist, Auricular	Certified	*	National			
BOARD OF ATHLETIC TRAINING						
Athletic Trainers	Licensed	540	National			
BOARD OF MASSAGE THERAPY						
Massage Therapists	Licensed	3,000	National			
BOARD OF PODIATRY EXAMINERS						
Podiatry	Licensed	331	National, state			
BOARD OF CHIROPRACTIC EXAMINERS						
Chiropractors	Licensed	1,800	National, state			
Chiropractic Assistants	Supervised by a chiropractor and has completed a training program	*	*			
Chiropractor Specialist	Certified	*	*			
Chiropractic Extern	Approved, training under a preceptor who is a chiropractor	*	*			
DEPARTMENT OF HEALTH SERVICES						
Hearing Aid Dispensers	Licensed	335	State			
Audiologists	Licensed	331	*			
Speech Language Pathologists	Licensed	1.967	*			
Emergency Medical Technicians. Basic	Certified	14.000**	National			
Emergency Medical Technicians, Intermediate	Certified	,,				
Paramedic	Certified					
First Responder	An ambulance attendant trained under a first responder instructor	* *				
	who provides patient care in accordance with the United States Department of Transportation First Responder curriculum					
First Responder Instructor	Certified by the American Red Cross or the National Safety Council or an equivalent organization	*	*			
Midwives (Lay, not Nurses)	Licensed	55	State			

* This data and information are not always available for professions that do not take a licensure exam. We have included certification numbers where available. One should remember that not all licensed professionals may be engaged in actual practice on a full-time basis.

** Represents the sum of active practitioners in all categories of this profession. E.g., Arizona has a total of 2,800 social workers at the baccalaureate, master, and clinical level; 6,745 total radiology technologists across all categories, etc.

*** Where the information is available, we have chosen to simply list whether a national exam, state exam, or some combination is required for licensure, and not get into such distinctions as whether the exam is oral or written, how many times it can be repeated, etc. Interested persons should contact the respective governing board for more information.

Physicians

In the mid-1800s and early 1900s, physicians successfully defined and reserved the practice of medicine to themselves through laws passed at the state level. These and subsequent actions over the past century have resulted in what Paul Starr calls a "sovereign profession" because of its dominant occupational control of medical care.¹⁴

This control stems from the fact that physicians have the broadest scope of practice of all health care practitioners. They are in fact licensed to practice *medicine*, and not just a specialty. Although different groups (allopathic physicians, or MDs; osteopathic physicians, or DOs) were often in conflict for control of how medicine should be defined and practiced, both are licensed to practice medicine and recognized as physicians in Arizona and nationally.

Arizona Regulations Define the Practice of Medicine as Follows:

- **PRACTICE OF MEDICINE** The diagnosis, the treatment or the correction of, or the attempt or the holding of oneself out as being able to diagnose, treat or correct any and all human diseases, injuries, ailments, infirmities, deformities, physical or mental, real or imaginary, by any means, methods, devices or instrumentalities, except as the same may be among the acts or persons not affected by this chapter. The practice of medicine includes the practice of medicine alone or the practice of surgery alone, or both. ARS 32-1410.21
- PRACTICE OF MEDICINE or PRACTICE OF OSTEOPATHIC MEDICINE means all of the following:
 - To examine, diagnose, treat, prescribe for, palliate, prevent or correct human diseases, injuries, ailments, infirmities and deformities, physical or mental conditions, real or imaginary, by the use of drugs, surgery, manipulation, electricity or any physical, mechanical or other means as provided by this chapter.
 - Suggesting, recommending, prescribing or administering any form of treatment, operation or healing for the intended palliation, relief or cure of any physical or mental disease, ailment, injury, condition or defect.
 - The practice of osteopathic medicine alone or the practice of osteopathic surgery or osteopathic manipulative therapy, or any combination of either practice. ARS 32-01800.

By virtue of licensure, a physician is permitted to practice in any area of medicine he/she chooses. Although the vast majority of physicians seek voluntary certification or credentialing of their skills in their chosen medical specialty, they are not required to do so. (Like physicians, some practitioner groups provide a certification process separate from or even adopted by state licensing, and recognized by the profession as attesting to demonstrated knowledge or competency in a specialty.)

A physician's "freedom" to practice in any specialty without accompanying training presents a potential risk to the public, since physicians can proclaim themselves as providing specialty services for which they have no formal preparation. Regulation offers help only if there is a complaint filed with the Arizona Medical Board (AMB) or the Board of Osteopathic Examiners, and an investigation is undertaken. Significant proof is necessary to result in disciplinary action by such boards, which are generally reluctant to deprive a practitioner of their livelihood. Regulation can be a weak protector if months go by before an unprepared physician is made to cease and desist from providing unsafe care.¹⁵

One should point out, however, that this alleged freedom to practice in a specialty is mitigated to a large degree by the credentialing processes of hospitals and other clinical sites. It's also important to note the issues of patient safety and treatment efficacy apply to non-physician practitioners, who may provide care for which they have minimal training with techniques that have questionable scientific validity.

Other Practitioners

Since physicians have effectively reserved the practice of medicine to themselves, all other practitioners who seek to perform any part of what might be considered medical practice must overlap with physicians and gain their approval. Non-physician health care practitioners must defend and argue for how their services might or might not be seen as the practice of medicine, and gain permission from the state – often over the objections of organized medicine – to legally practice in regulated health care settings.

The broad definition of medicine results in blurred boundaries delineating scope of practice between physicians and other practitioners, and between non-practitioner groups seeking entry to the health care market.¹⁶ For example, one issue is whether a non-physician practitioner is considered a complement or substitute for physician services:

- **COMPLEMENT** A practitioner who "complements," facilitates and extends another's practice, such as when a Physician's Assistant (PA) works with, and under the supervision of, a physician.
- **SUBSTITUTE** Practitioners who fulfill a similar purpose and often act as a substitute for physicians and therefore directly compete in the market, such as Certified Registered Nurse Anesthetists (CRNA) who can substitute for Anesthesiologists (both groups have existed for over 100 years and have the same practice standards).

Turf Wars

The fuzzy definitional boundaries delineating scope of practice between physicians and other practitioners have real economic implications for market entry and penetration, especially as non-physician practitioners take advantage of rapid advances in technology and training and seek to extend their scope of practice to areas formerly under the sole province of physicians. This results in the so-called "turf wars" between various practitioner groups – nurse practitioners and family physicians, dentists and dental hygienists, ophthalmologists and optometrists, psychiatrists and psychologists – that play out in regulatory and licensing battles in Arizona and other state legislatures. How scope of practice is defined by non-physician practitioners, and how it overlaps (or doesn't) with medicine, makes for interesting testimony in public hearings. Each of these turf battles could well be the subject of a policy study in its own right.

As one former Arizona legislator remarked, "Working with the health professions is the biggest nightmare there is. Arguments on all sides are always couched in terms of quality of care, but in the end it is about access to and control of the market."

"Working with the health professions is the biggest nightmare there is. Arguments on all sides are always couched in terms of quality of care, but in the end it is about access to, and control of, the market."

Former Arizona legislator

Common CAM Practices

NCCAM groups CAM practices into five domains, recognizing that there can be some overlap among them. Examples of CAM practices within each domain are shown below.



ALTERNATIVE MEDICAL SYSTEMS are built upon complete systems of theory and practice. Often, these systems have evolved apart from and earlier than the conventional medical approach used in the United States.

BIOLOGICALLY BASED THERAPIES use substances found in nature, such as herbs, special diets, or vitamins (in doses outside those used in conventional medicine).

ENERGY THERAPIES involve the use of energy fields, such as magnetic fields or biofields (energy fields that some believe surround and penetrate the human body).

MANIPULATIVE AND BODY-BASED METHODS are based on manipulation or movement of one or more body parts.

MIND-BODY MEDICINE uses a variety of techniques designed to enhance the mind's ability to affect bodily function and symptoms.

Source: National Center for Complementary and Alternative Medicine

Type of Products and Services

Given earlier caveats about the difficulty in defining a unit of service in health care, shifting definitions of quality and the large and myriad number of groups providing services, it is difficult to provide a comprehensive – and accurate – description of the range of health care products and services.

For example, even though there is evidence of the increasing growth of, and interest in, complementary and alternative medicine (CAM), there is not a great deal of research into its extent of use among Americans and issues of regulation, licensing and efficacy, although this is changing rapidly. For our limited purposes here, it is enough to provide a general distinction between conventional or "traditional" medicine and CAM, or "non-traditional" medicine, at least as defined and practiced in the United States, and to suggest how changing patterns in the types of medical and health care products and services impact practice and regulation.

CONVENTIONAL MEDICINE is often described as that practiced by MDs, DOs, DDs and the health professionals aligned with them (nurses, physical therapists, etc.). It is "conventional" because it is the *dominant* medical model in the U.S., and has its roots in what is characterized as a "scientific, accurate and proven" approach to the treatment of disease and other afflictions. The term 'biomedical' is often used to describe conventional medicine, to the degree that it is rooted in a structural and biochemical understanding of organisms. Other terms for conventional medicine include *allopathy, Western, mainstream and orthodox* – all suggesting the "regular" approach to medical practice by most health care practitioners.

COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM), on the

other hand, is defined as "a group of diverse medical and health care systems, practices and products that are not presently considered to be part of conventional medicine."¹⁷ It is *complementary* to the degree that it is used together with conventional medical treatments, and *alternative* to the degree that it used instead of conventional medicine. Other terms used to describe CAM are *integrative* and *holistic*. Like terms used to describe conventional medicine, each has its own definitional history in theory and practice, its own camp of adherents and detractors, and its own implications for licensing and regulated scope of practice. The sidebar to the left



taken from the National Center for Complementary and Alternative Medicine's web site provides an overview for the various dimensions of CAM.

Regardless of how one defines medical and health care services and products, they constitute a growing portion of the total American economic market – 15 percent in 2002, or \$1.55 trillion. This is illustrated by the breakdown of 2002 expenditures for products and services above.

While the great majority of the American health care dollar is spent on conventional medicine and related technology, products and services, the amount spent on CAM services is growing.

The last major study of CAM services (1997) estimated CAM expenditures at \$36-47 billion annually, or roughly four percent of total health care expenditures that year (\$1.1 trillion). Of that amount, between \$12.2-19.6 billion represented out-of-pocket expenditures by individuals and families – more than people paid out-of-pocket for hospitalizations, and half of what they paid out-of-pocket for physician services that year.¹⁹

More recently, a May 2004 report by the Centers for Disease Control (CDC), analyzing data from a 2002 National Health Interview Survey,²⁰ estimates that 36 percent of U.S. adults use CAM therapies. If megavitamin therapy and "prayer for health reasons" are included, the figure jumps to 62 percent.

Implications for Practitioner Regulation

What are the implications of increased consumer use of health care services and products generally – and CAM services and products specifically – for the regulation of practitioners? At the risk of oversimplification, here are a few preliminary predictions:

- **TURF WARS WILL INTENSIFY.** Markets respond to demand. Physicians are already engaged in turf issues (scope of practice) with other practitioners in conventional medicine (psychologists who seek authority to prescribe psychotropic medications, for instance). CAM providers are waiting in the wings, and some are already in the front door. With more consumers seeking CAM providers, more health plans and employers will be pressured to include CAM services as benefits, more CAM providers will seek licensing and credentialing for regular payment, and more accommodation will be made in the regulatory apparatus. What's new is not turf wars themselves, but the sheer number of practitioners who are engaged in regulatory change.
- MORE HEALTH CARE WILL BE DELIVERED BY NON-PHYSICIAN PROFESSIONALS. Consumer demand, advancements in science and technology, and career choices made by physicians themselves (fewer going into fields such as primary care and psychiatry, more pursuing high-tech, financially lucrative and "challenging" specialties) will open up opportunities for non-physician practitioners to move "upstream" in expanded scope of practice. In response to workforce shortages (nurses, long-term care professionals, practitioners in rural areas, etc.) legislative bodies will be pressured on two sides: expand traditional training programs (baccalaureate nursing, family physicians, etc.) and/or extend scope of practice and develop programs to train professionals and support personnel to move into critical areas of need.
- **ISSUES OF COMPETENCE AND SAFETY WILL BE PARAMOUNT.** With new groups moving into the health care arena and with traditional groups such as physicians and nurses under significant pressure to reduce medical errors and improve patient safety government officials will pursue new ways to regulate and discipline health care professionals, ensure their continuing competence (relicensing requirements, for example), and make more information available to the public.
- MARKET COMPETITION WILL DRIVE CHANGES IN HEALTH WORKFORCE REGULATION. Hospitals, clinical groups and other institutional settings for the delivery of health care services and products are under enormous cost pressures in an increasingly competitive environment. They will continue to seek regulatory changes that allow them maximum flexibility in using employees in the most efficient and effective ways, putting even more pressure on changes in scope of practice, licensing and credentialing.

Barriers to Market Entry

The conditions of market entry for health care practitioners are set by the states, each of which has its own requirements for determining and measuring competence through licensing and certification, identifying and enforcing scope of practice for the various health professions, and disciplining providers.

As the Institute of Medicine notes, the regulations are a "dense patchwork...[that] are often inconsistent, contradictory and duplicative..." As with other dimensions of industry models that are "devolved" to the state level, health care regulations are determined by the local needs, practices – and the politics – of each state. These can vary widely.

The majority of traditional health professionals are licensed. State delegation of licensure authority to state licensing boards or agencies allows them to determine the educational requirements of the practitioner, whatever testing through licensure examinations the state institutes and what, if any, oversight is required. The requirements set the conditions for an initial and continuing license, and the conditions under which it can be suspended or revoked.

This delegated authority gives licensing boards and agencies significant influence over the development and deployment of health practitioners within a state. Board decisions can even make scope of practice determinations that limit or allow practice within defined domains and locations. For example, both Physician Assistants (PAs) and Advanced Nurse Practitioners (ANPs) scopes of practice can vary depending on whether they practice in an urban or rural setting.

Practice Across States

A health practitioner working in a state must have a license for that state (except for federal government employees of Veterans Affairs, other licensed military personnel and Indian Health Services employees). People working for managed care and other health care organizations with multiple sites across states, telemedicine and internet services all present challenges to the current regulatory process. For example, one Arizona nursing dean with programs in multiple states once had over 30 different licenses. In the event of natural or human disasters, health care practitioners who wish to assist may be hindered from crossing into neighboring states without risk of violating the law.

One effort to remove such barriers to interstate work has been underway in nursing since 1996-97. Arizona is one of a growing number of states that adopted a multi-state licensing process in 2002, similar to recognition of a driver's license across state lines. A nurse receives a license in her or his home state but can practice in any other state that is part of the Nurse Licensure Compact. The Compact does not yet cover all levels of nursing, such as ANPs, because scope of practice conditions can vary widely across states. Other non-physician groups are beginning to investigate the potential for similar compacts to remove cross-state barriers to practice and allow greater mobility for health care occupations.

Conditions and Uses of Licensure

The conditions for licensure set by a board emphasize conditions for the competency of providers and quality of care. This serves the public interest to the degree that it ensures competent providers and patient safety in the hands of providers who have met increased training and practice requirements.

On the other hand, conditions of licensure can also be used to control the number of new entrants to the profession, or those coming from other states and countries. Licensure can protect and even increase the economic advantage of those practitioners already in the market, since potential new competitors can face increased licensure requirements for entry.

To minimize the regulatory influence of current practitioners on licensing boards' decisions, Arizona and other states are moving away from the once common practice of having boards made up exclusively of members of the regulated group. Public members – individuals who are not a member of the regulated group – have been added to most boards. In Arizona, they represent on average approximately one-third of total board members.

A DENSE PATCHWORK

"In general, regulation in this country can be characterized as a dense patchwork that is slow to adapt to change. It is dense because there is a forest of laws, regulations, agencies, and processes through which each care delivery system *must navigate* at the local. state and federal levels. It is a patchwork system because the regulatory and frameworks at the state inconsistent. contradictorv and duplicative..."

Institute of Medicine, *Crossing the Quality Chasm*, National Academy Press, p. 214 Even so, reports addressing health workforce issues by the Pew Charitable Trusts, the Institute of Medicine and the U.S. Department of Labor all suggest that an assessment is needed to determine whether still more public members should be involved in the regulatory process to force broader consideration of society's needs beyond the needs and desires of those in the profession. This is a contentious and moving target, and begs the question of what are "broader societal needs" in the first place.

Practitioner Education and Licensure

Each practitioner group faces essentially the same general structural barriers to entry into the health care market:

- Graduation from an approved school (defined by the regulatory body to permit the applicant to sit for a test).
- Requirements for licensure (registration or certification).
- Requirements for training or experience both before and after licensure.

The great difference, of course, is the amount of work required under each of the above for different practitioners.

GRADUATION FROM AN APPROVED SCHOOL

A regulatory board's ability to define an approved practitioner school/program allows it to shape the nature of practitioners prepared in a state. The board sets criteria that establish and define such matters as types of required courses, hours of study in particular domains, training in clinical sites and so on. Boards also specify the national, regional or state academic accrediting bodies that they find acceptable as evidence of a school's quality. Currently, there are over 50 health professional accreditation programs in the country.²¹

To the surprise – and sorrow – of some students, not all schools meet board requirements. Board representatives interviewed for this study reported on programs and schools that advertise their ability to prepare students for a specific health care career, but in the fine print they do not specifically promise that students will be able to sit for exams or meet registration requirements. With a rapidly growing health care market and increasing demand for trained workers, officials expect to see even more advertising deception in the future.

REQUIREMENTS FOR LICENSURE

Licensure is usually granted after successful completion of an exam and acceptance by the candidate's regulatory board. While educational requirements are usually rigorous, licensing exams may not act as significant barriers to practice if a person can repeatedly take the exam until he or she passes. By and large, regulated practitioners do not have limits on the number of times they can take a licensing exam.

For example, MDs and DOs do not have limits on the number of times a person can sit for a licensing exam. Each must pass distinct sections of the exam and may retake a section if they fail rather than having to repeat the entire exam.

Nurses, too, have no limits, but if a person does not pass the licensing exam within two

years of graduation from an approved school, he or she is often counseled to take a refresher course or additional training before taking the exam again.

Other professions have variations on these central themes. New chiropractic applications, for example, are good for one year, and tests can be repeated during that period, with a new application filed the following year, if necessary, until the person passes. While there is no limit on the number of times the exam can be taken, no chiropractor in Arizona has ever gone beyond the one-year application period.²²

CONTINUING TRAINING AND EDUCATION REQUIREMENTS –

Once a license is granted, most practitioner groups specify requirements for some form of continuing education (CE). In the harried world of health care professionals, content is increasingly delivered in a variety of formats, both traditional (formal classes, workshops, conferences) and emerging (video, web, teleconference, integrated work stations), and simply finding the time to update skills and knowledge is a daily challenge. Another challenge is developing criteria for the content and quality of the CE, or for proof of its effectiveness in enhancing practitioner skills. The explosion of information, knowledge and technology in health care, coupled with shifting scopes of practice and the constant development of specialties and subspecialties, makes the issue of *what* practitioners need to know in order to remain on top of their respective field increasingly problematic.

Access to Payment for Services

Physicians have the most rigorous and lengthy training of any of the regulated health practitioners. In the wake of the explosion of knowledge, technology and specialization, they have increased educational requirements for the student, academic institutions and the post-medical school training environment. Their credibility and respect have been built on this backdrop – and they are paid accordingly.

This review suggests that most allied health professionals – and CAM practitioners as well – are following the same model. By increasing the relative level of education, institutional requirements and post-licensure education, they believe that they, too, will be in a better position in the health care market to command credibility and respect and, for many, to access reimbursement by third-party payers.

Nevertheless, many of those interviewed for this report do not believe there will be a "mad rush" to expand who will be paid, no matter how rigorous their education and credentialing. As one person noted, "[Insurance companies] don't want to expand payment because they can't control utilization. They never wanted to expand. They opened up a little in the early 90s, but they are closing again."

The services covered by medical insurance have expanded over the years, but so, too, have costs and efforts to control costs, including limiting or denying payment for a number of practitioners in the health care market. Consumer demand for adding new groups to the payment mix, such as selected CAM providers and specialists, will be weighed against countervailing pressures of willingness to pay – and how those costs will be apportioned across various groups (consumers, employers, government).

In the future, changes in payment policy may be driven more by clinical decisions – **what** to pay for in order to achieve the desired preventive and clinical outcome – than by decisions about **who** to pay.

WHAT, RATHER THAN WHO

Rather than automatically opening up to new practitioners, Medicare may have set one model for the future by its decision to cover obesity-related services. This suggests that changes in payment policy may be driven more by clinical decisions – *what* to pay for in order to achieve the desired preventive and clinical outcome – than by decisions about who to pay. One HMO administrator noted, "The obesity treatment model uses non-physicians as the key provider. The physician will have a role, but I do not see us [the HMO] 'pricing up'... Medicare will take the lead."

Physicians will presumably compete to deliver obesity services, even where they have not previously. How Medicare treats payment for these services will change financial incentives under Medicare and later presumably under Medicaid and even private insurance plans, since Medicare often sets the direction for change. The expansion of the definition of services to be covered suggests there is room both for those groups that are already receiving payment for services and for those that have the expertise required to address a particular national health issue.

Information Asymmetry

At the elementary level, an industrial organization model posits an industry following the general operations of a market based on the free exchange between those willing and able to produce, and those willing and able to purchase, goods and services. We don't need to delve here into the theoretical and empirical distinctions and exceptions of various approaches to industrial organization to appreciate that when it comes to health care, this exchange is not a straightforward process.

There are at least three ways in which health care departs from many other industries operating in so called "free" markets:

1. In a free market, the consumer is usually the purchaser. In health care, the consumer is often not the purchaser.

In the health care industry, consumers often (but not always) purchase health care goods and services through a third party (insurance companies, HMOs, government) that negotiates prices with providers and arranges payment with little involvement of the consumer and little knowledge shared of how this occurs. The U.S. has a mixed capitalistic system of health care, where goods and services are purchased both in the free market and through taxes (approximately 60 percent of total health care expenditures in the U.S. are financed through public dollars if one adds the benefit employers derive from paying for health care for employees with pre-tax dollars).

2. In a free market, consumers are aware of the attributes of products. In health care, consumers are often unaware of the attributes of products.

There is considerable asymmetry of information between consumers and providers of health care services and products. Consumers often have no idea what services cost, their relative value compared to other services, other "market" choices they might have, and the cost-benefit of each. In a theoretical free market, efficiency is achieved through voluntary exchanges between informed consumers and profit-seeking producers, but neither of these two conditions uniformly applies to health care. Consumer 'choice' under absence of adequate knowledge of the attributes and consequences of those choices is a hollow promise at best. Lack of consumer knowledge places providers in a strong position to be opportunistic.

3. In a free market, producers are expected to maximize economic profits. In health care, many providers are nonprofit organizations, and pursuing profit alone is considered unethical.

While a discussion of the differences between for-profit and nonprofit providers is beyond the scope of this report, it is clear that not all providers seek to maximize profits to the exclusion, say, of supporting essential community health services for those without resources, etc. The ethical norms established in the practice of health care throughout its history, and the motivations for persons to enter the field, are grounded in serving others, and not in seeking profit. Whether this is now changing under the weight of the "commodification" of health care is, of course, a central issue.

Like the industry it oversees, regulation and licensure governing entry into the market is a mixed bag. On the one hand, licensure seeks to serve the public interest and ensure safety, while providing a reasonable expectation of quality. Since the consumer often lacks adequate information to weed out incompetent or unscrupulous practitioners, regulation provides some protection.

On the other hand, regulation and licensure create an occupational barrier to market entry and can shield privileged – and highly compensated – practitioners from competition. The disputes over definition and expansion of scope of practice among various practitioner groups are wrapped in the rhetoric of patient safety and quality, but as many have noted, they are also about market control.

Policy Considerations

In response to pressures along the supply and demand curve in the health care workforce, policymakers in Arizona and other states face a series of issues with no easy answers. All of them center on *balance*:

- Balancing the interests of society at large with the interests of specific practitioner groups.
- Balancing the interests and tradeoffs between state and federal control of health workforce regulation.

To conclude this report, we briefly summarize some of these issues and suggest the role the regulatory process can play in addressing them.

Review and Revise the Regulatory Process

- 1. CONSISTENCY AND STREAMLINING ACROSS STATES. The varying and inconsistent requirements for licensure across the states and those regulated within a state suggest the need to review and standardize regulatory language and disciplinary procedures, and to streamline the process at all levels. In a highly mobile and technology-driven society, licensing ought to facilitate practice and monitoring *across* state lines, and not just within states. Arizona is at the forefront of a growing movement for multi-state licensing compacts (such as in nursing), and policy leaders ought to consider ways to move forward with similar agreements for other practitioner groups.
- 2. CONSISTENCY AND STREAMLINING ACROSS NATIONAL BORDERS. "From 1980 to 2000, 26.7 million new, native-born workers age 24-54 provided the workforce needed for our dynamically growing economy. From now until 2021, there will be no additional native-born workers in this prime age group. None. Therefore, any *growth* in the labor force will simply have to come from older workers and immigrants."²⁴ If foreign-born workers are to transfer their acquired skills from state to state or country, or to develop new skills here, policy leaders will need to explore innovative approaches to education and reciprocity.
- **3. REVIEW MAKEUP OF REGULATORY BOARDS.** Various reports on future health workforce needs have suggested that states revisit the makeup of their regulatory boards. Some believe that boards dominated by regulated practitioners themselves simply sustain existing practices and control, and are less inclined to respond to broader workforce needs. They suggest that fully one-half of a regulatory board's membership ought to consist of non-regulated public members. Approximately one-third of the membership of Arizona health care regulatory boards are public members (some more, some less).

Ensure Practitioner Competence

4. INTEGRATE MEDICAL EDUCATION AND TRAINING. To the frustration of many in the medical community, outside groups and reviewers question whether current educational and training requirements for incoming practitioners serve either the students or the public well. In response to concerns about workforce shortages, they advocate more streamlined programs, better articulation between programs, and joint courses between different levels of practitioners with overlapping content areas in order to facilitate transfer between fields and career advancement. Work by the Maricopa Commission of Health Care Reform in the mid-1990s, which developed the Maricopa Health Care Integrated Educational System and a model curriculum, is one example.

"The rules and regulations that govern health care practice are vestiges of the last century. They need to reflect the realities of the world as we enter the new century."

Pew Health Professions Commission;²³ 1998

- 5. EXPAND CLINICAL SITES. If Arizona is to increase the number of persons in the health professions to meet a growing demand for services, clinical practice sites both in and outside of hospital settings will need to be expanded. Medical and nursing schools in Arizona already face difficulty in finding clinical sites for training, and all have expansion plans. In addition to turf wars among educational institutions and programs themselves, interviewees report difficulty in recruiting seasoned practitioners for teaching duties. Paperwork, declining revenue, closely managed costs and sheer lack of time mitigate against the "luxury" of working with students. Arizona policymakers might want to consider further study of the state's clinical practice sites and ways to incentivize expansion and staffing.
- 6. CONSIDER RELICENSING AND RECERTIFICATION. Issues of patient safety, medical error and the sheer explosion of medical knowledge and procedures over the past several decades continue to precipitate a discussion of the need for relicensing, recertification and reexamination of critical health care providers like physicians, nurses and others. With wide variations in the quality of practice, the training and credentialing of providers and continuing education, finding ways to at least initiate a thoughtful discussion of relicensing at the state level ought to be on the agenda.

Clarify and Simplify Scope of Practice

- **7. REVIEW SCOPE OF PRACTICE REQUIREMENTS.** Rapid advances in technology and workforce shortages necessitate reexamination of scope of practice regulations. Blurred and conflicting boundaries between the practice domains of various professions and specialties do not facilitate care. Arizona should review its licensure and scope of practice acts to ensure that they are flexible enough to allow health professionals to practice to the fullest extent of their training and ability. According to one informant for this report, "Narrow definitions of practice will make shortages worse with technical rules and limits on practice. A proliferation of different and narrowly defined levels of skills will leave everyone trying to protect their turf, and few paying attention to society's needs."
- 8. FOSTER COOPERATION. As difficult as overcoming turf issues may be, greater cooperation between professionals is necessary to respond to issues of quality, reimbursement and oversight within the health care industry. For example, Anesthesiologists and CRNAs undertook a joint lobbying effort in May 2004 for the first time in 100 years. Because both practice under the same standards, they were able to jointly support legislative and budget issues with greater impact than had they each acted alone. So, too, would the splintering of health care professions into ever more specialty domains profit from greater cooperation among the parts to serve the interests of the whole.
- **9. FOSTER CONTINUITY THROUGH TEAMS.** Those interviewed repeatedly suggested that one preferred solution to any workforce shortage was to use personnel in appropriate roles and teams where work could flow seamlessly from one practitioner to another. Few believe that teams in health care are working well, but they believe that they should and *can* work. This is hardly a novel observation. According to the Pew Health Professionals Commission, the goal should be continuity of care and efficient and timely use of resources to ensure that the "…expertise and instincts of a number of trained health practitioners are brought to bear in an environment that values brainstorming, consultation and collaboration. This is not a value that has been inculcated in health professional training programs of the past. Medical and professional schools should fundamentally reassess their curricula to ensure that their programs embody and apply an interdisciplinary vision."²⁷

Institute of Medicine, Crossing the Quality Chasm²⁵ "One patient, one doctor, one moment, one decision, regularly accountable to no one else. It is easy to understand why there is such a gigantic range of quality in actual medical practice."

George D. Lundberg, MD, Editor, *MedGenMed*²⁶

Support Societal Needs

- **10. TIE INCENTIVES TO NEEDS.** Meeting national and state health workforce needs through Graduate Medical Education (GME) support and various grants and stipends is nothing new. But given a rapidly changing health care environment and expanding demand for certain types of services (geriatrics, chronic diseases), many believe that in order to receive such support, practitioners should be required to "give something back" to society in return. While it continues to prove difficult to attract providers to rural areas and low-income communities, policy leaders will have to get more creative in tying incentives to societal needs. Arizona's Medicaid program (AHCCCS), for example, is exploring how it can incentivize GME programs, health plans and physicians to serve the needs of its low-income constituency.
- **11. PROMOTE CULTURAL DIVERSITY.** Arizona's population is increasingly diverse. In order for this diversity to be represented among health practitioners, a more streamlined and flexible regulatory process will need to accommodate many peoples. To cite just one example, English proficiency is a barrier to market entry, and English-as-a-second-language will need greater attention from both educators and employers. Balancing this flexibility and diversity with more uniform regulations across state and national borders is, of course, the challenge.

Wild Card

Professional sovereignty in health care arose during a period when patients were often insulated – and isolated – from direct involvement with their care, either as critical and autonomous purchasers of specific services and products, or as payers of either first or last resort.

Today, what some critics feared for the future has come true: Health care has become a commodity, the health care industry is a vast corporate enterprise, patients have become consumers, physicians have become skilled "workers," and a growing regulatory apparatus and bureaucracy of managers and middlemen sit squarely in the middle of the provider-patient relationship.

Whether by their own free choice or economic pressures from the industry, it is likely that consumers will exercise greater control over health care purchasing decisions in the future. This "wild card" of consumer choice, according to many observers, will dictate when and how care will be delivered, and by whom. How this will play out is unclear, but one reasonable prediction is that professional sovereignty will continue to erode, new practitioners will enter the industry, specialization will proceed apace, and the regulatory apparatus of licensing, credentialing and scope of practice will adjust to market demand.

Practitioners will adjust not because they want to, but because they have to. This is all the more reason for them to be actively engaged in workforce regulatory issues today.

Sources

- 1 Arizona CAN: Coverage and Access Now, St. Luke's Health Initiatives, Winter, 2004, p. 7.
- 2 U.S. Department of Labor, Bureau of Labor Statistics, *February 2004 Monthly Review*. Some believe the percentage of people working in health care-related fields is even higher than 9-10 percent, depending on whether one "counts" people in the health insurance industry, pharmaceutical industry, various technology fields with medical applications, administrative support positions, and so on. We don't need to go into the definitional issue of what "constitutes" the health care industry to appreciate its impressive growth curve.
- 3 Current Employment Statistics Program, Arizona Department of Economic Security, August 2004. Again, these numbers likely underestimate the total numbers employed in health care, due to definitional issues.
- 4 Arizona Board of Regents, The Economic Impact of Arizona's Health Care Industry: Report to the Governor's Task Force on Nursing, Feb. 18, 2003.
- 5 See Crossing the Quality Chasm: A New Health System for the 21st Century, Institute of Medicine, National Academy Press, 2001.
- 6 Quoted in Fred. G. Donini-Lenhoff, Hannah L. Hedrick, "Growth of Specialization in Graduate Medical Education," JAMA, September 13, 2000, p. 1284.
- 7 Quoted in Ibid., p. 1288.
- 8 Paul Starr, *The Social Transformation of American Medicine*, New York: Basic Books, 1982, ch. 5.
- 9 Bernard Hodes Group, Health Care Matters, 08. 2004.
- 10 Starr, op. cit., p. 445.
- R.E. Santerre, S.P. Neun, *Health Economics: Theories, Insights and Industry Studies*, Third Edition, South-Western, Mason, Ohio, 2004, p. 193.
- 12 Ibid., p. 33.
- 13 E.N. Berkowitz, et. al., *Marketing, 2nd Edition*, Homewood, IL., Richard D. Irwin, 1989.

- 14 Starr, op.cit.
- 15 There are other barriers to unsafe medical practice. For example, hospitals require that physicians have specialist credentials before allowing procedures to take place.
- 16 National Academy of Science, Institute of Medicine, Health Professions Education: A Bridge to Quality, National Academy Press, 2003, p. 107.
- 17 National Institutes of Health, National Center for Alternative and Complementary Medicine. http://nccam.nih.gov/news/camsurvey_fs1.htm
- 18 Katherine Levit, et. al., "Health Spending Rebound Continues in 2002," *Health Affairs*, Vol. 23, No.1, p. 148.
- D.M. Eisenberg, et. al., "Trends in Alternative Medicine Use in the United States, 1990-1997: Results of a Follow-up National Survey," *JAMA*, 280(18): 1569-75. Nov. 11, 1998.
- 20 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. *Complementary and Alternative Medicine Use Among Adults: United States*, 2002.
- 21 National Academy of Science, Institute of Medicine, 2003., p. 99.
- 22 Personal communications with Arizona MD, DO, Nursing and Chiropractic Boards, August 31, 2004.
- 23 Pew Health Professions Commission, *Recreating Health Professional Practice for a New Century, Fourth Report*, December, 1998, p. ii.
- 24 The Aspen Institute Domestic Strategy Group, Grow Faster Together or Grow Slowly Apart: How Will America Work in the 21st Century?, p. 11.
- 25 National Academy of Science, Institute of Medicine, Crossing the Quality Chasm, 2001, pp. 213-214.
- 26 http://www.medscape.com/viewarticle/466001
- 27 Pew Health Professions Commission, op. cit., p. v.

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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.

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