SPRING 2002

ARIZONA HEALTH FUTURES

IN THIS ISSUE:

SLHI
A Catalyst for Community Health
St. Luke's Health Initiatives

BOOM OR BUST?

The Future of the Health Care Workforce in Arizona

Where we sit determines our frame of reference:

An experienced registered nurse *fumes when her hospitalized mother refers to a nurse's aide as her "nurse."*

A successful Phoenix dentist, *upon learning of plans to develop a new dental school in the Valley, grouses that the perceived shortage of dentists is a myth. "There are plenty of dentists all up and down this street," he points out.*

A Valley radiologist *loves his work. "I'm busy, I work with great people, I make good money," he says. "It seems like it's the older docs who are having the problems."*

Boom or Bust

When it comes to the future of the health care workforce in Arizona and other states, it's either boom or bust. Some experts see harbingers of doom in the current shortage of nurses, pharmacists, physician specialists and other professionals as the health care system grows increasingly expensive and dysfunctional, aging boomers get ready to retire, and young people choose more financially rewarding and less emotionally taxing careers.

> "You cannot solve the problems of the present with the solutions that produced them."
>
> ~ *Albert Einstein*

Others see just the opposite: a revolution in the structure of the health care marketplace fueled by rising consumer demand, new workplace configurations, careers and choices for people to practice high tech-high touch medicine; a revolution in information systems, bio-science and bio-ethics that attracts millions of new professionals and could one day account for more than 20 percent of America's gross domestic product.

But it's the future, after all. Surprise rules. When it comes to health workforce projections, we've been wrong before, and will probably be wrong again. Because we can't predict the future, we have much to learn.

(Continued on next page.)

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BOOM OR BUST?

(Continued from front page.)

The Right Questions

It is in the spirit of learning that this issue of *Arizona Health Futures* looks at the current and future state of the health workforce in Arizona: where we are today, and where we might be in 10-20 years, given the projection of trends and the interpretation of economic and social factors impacting health care. We focus primarily on nurses and physicians because of space and scope considerations, but acknowledge that there are critical workforce issues in other professions, such as pharmacy.

Unlike much of the current fascination with numerical forecasts, workplace reform and professional preparation – all of it useful and necessary – we focus attention on the underlying forces in health care, and society generally, that give rise to some of the problems we're experiencing, and consider different *learning frames* on how strategic actions today might impact our choices tomorrow.

It's not whether we can collectively come up with the right answers. It's whether we are asking the right questions in the first place.

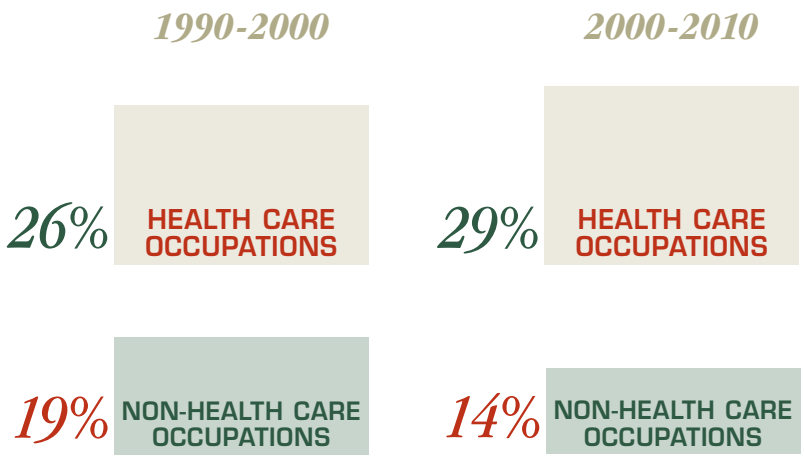
Health Workforce Projections

Health workforce projections are based on assumptions about future demand for health care, the supply of professionals and other workers currently in the pipeline to meet that demand; costs, rates of economic growth, retirement patterns, career choice patterns and a host of other factors that combine to make accurate projections a tenuous venture at best.

With that caveat, we provide a broad overview using selected baseline data and projections from the Federal Bureau of Labor Statistics (2000-2010). We also use projections from the Arizona Department of Economic Security (1998-2008) and augment this, where appropriate, with more specific projections from other Arizona sources.

It's worth noting that governmental figures can be significantly different than "hard" data reported by Arizona organizations like the Board of Medical Examiners (BOMEX), which works with licensing records. We are less concerned here with the "numbers" than we are with general employment trends.

Growth in Health Care and Non-Health Care Employment (1)



- Employment in health occupations is projected to grow from 10.9 million in 2000 to over 14 million in 2010.
- The rate of growth of new health care jobs is projected to be almost 29% over the next decade – more than twice the rate for non-health jobs.
- Health occupations are predicted to account for 15 of the 30 fastest growing occupations in the U.S.

The National Picture – in Percentage of Occupational Growth (2)

(selected occupations – in thousands)

OCCUPATION	2000	2010	% CHANGE
Medical Assistants	329	516	57.0
Physician Assistants	58	89	53.5
Medical Records/Info Techs	136	202	49.0
Home Health Aides	615	907	47.3
Mental/Substance Abuse Social Workers	83	116	39.0
Dental Assistants	247	339	37.2
Dental Hygienists	147	201	37.1
Pharmacy Technicians	190	259	36.4
Substance Abuse/Disorders Counselors	61	82	35.0
Medical/Health Service Managers	250	330	32.0
Registered Nurses	2,194	2,755	25.6
Pharmacists	217	270	24.3
Nurses Aides/Orderlies/Attendants	1,373	1,697	23.5
Mental Health Counselors	67	82	21.7
Physicians/Surgeons	598	705	17.9
Dentists	152	161	5.7

The largest number of new jobs by 2010

RN's 561,000
nurse aides/orderlies/attendants 323,000
home health aides 291,000
personal/home care aides 258,000
medical assistants 187,000

Many of the fastest growing health occupations are not the ones requiring highly advanced technical training, but are those that require intermediate and/or on-the-job training (home health aides, dental assistants, medical assistants, medical records, etc.).

A complete listing of health occupations shows major occupational growth for specialty areas such as surgical technologists, respiratory therapists, occupational therapists, physical therapists, cardiovascular technicians and audiologists, among others.

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Arizona Health Workforce (3)

(selected occupations)

OCCUPATION	1998	2008	% CHANGE
Physician Assistants	2,711	4,510	66.3
Respiratory Therapists	1,371	2,226	62.3
Dental Hygienists	2,509	3,936	56.8
Surgical Techs	1,106	1,730	56.4
Medical Records/Info Techs	2,457	3,678	49.6
Physical Therapists	2,111	3,093	46.5
Medical Clinic Technologists/Techs	6,419	8,603	34.0
Licensed Practical/Vocational Nurses	8,533	11,429	33.9
Registered Nurses	28,392	37,988	33.8
Pharmacists	2,205	2,679	21.5
Dentists	1,698	1,983	16.7
Physicians	6,984	8,045	15.2

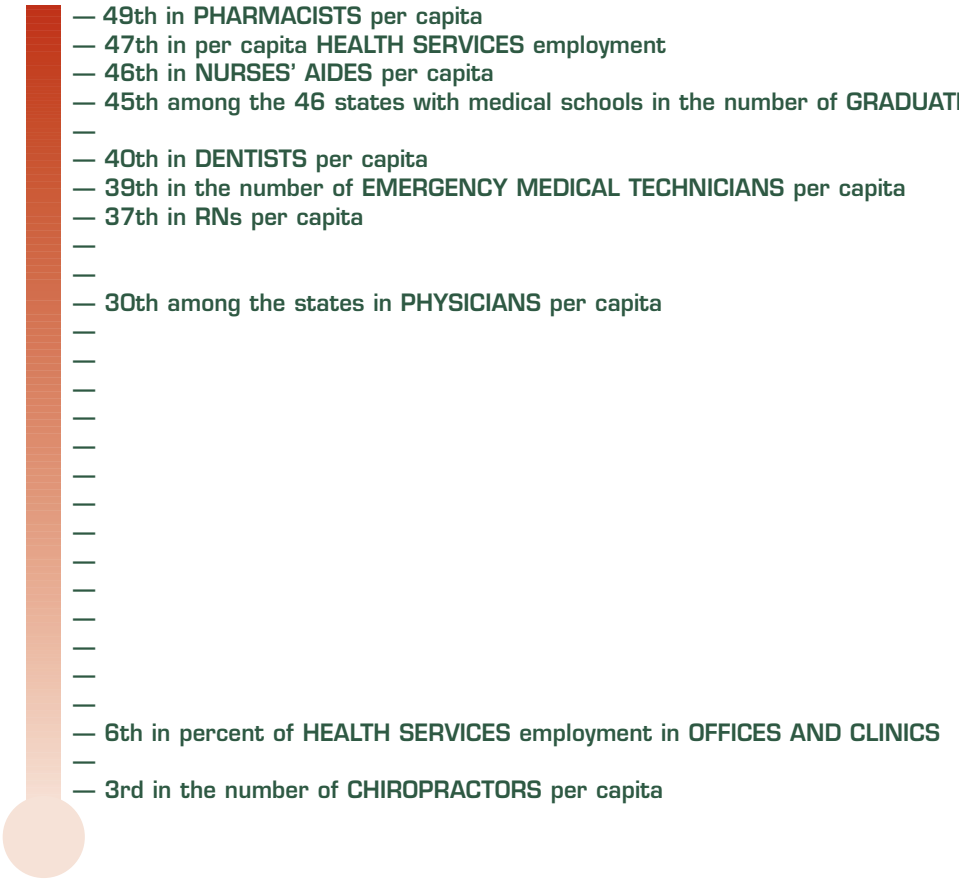
The Negativity Index

Aon Consulting's **Healthcare@Work** 2001 survey found that health care workers are more negative about their work than U.S. workers in general:

	United States @Work	Healthcare @Work
Work/life harmony	21%	30%
Career growth/development	23%	45%
Organizational affiliation	30%	52%
Compensation and benefits	28%	56%
Safety/security	24%	43%

Sources: American Society for Healthcare Human Resources Administration's *Healthcare @Work 2001* survey, July 2001; Aon Consulting's *United States @Work 2001* survey, unreleased data.

According to state health workforce profiles compiled by the Health Resources and Services Administration, Bureau of Health Professions (1998 data), ARIZONA ranked: [4]



Flawed Forecasts

Past efforts to accurately forecast health workforce supply and demand don't exactly inspire confidence.

In 1995, for example, the Bureau of Labor Statistics projected "health services" to be among the ten industries with the largest projected job growth, with registered nurses (RNs) ranked fifth in overall occupational growth. At the same time, the Pew Health Professions Commission concluded that up to 25 percent of nursing schools should be closed because of a projected surplus of nurses as well as recommending closing a number of medical schools because of an oversupply of physicians. A surplus didn't materialize.

Other past attempts to forecast workforce supply have suffered from underestimating population growth and economic expansion, not appreciating the impact of managed care, not paying sufficient attention to alternative career choices, especially for women; not factoring in changes in federal and state policies governing access and cost of care, not factoring in changes in staffing and worker productivity, and not foreseeing changes in the workplace setting that impact career selection and job satisfaction. [6]

Current projections are not immune from missing similar complexities of the U.S. economy and society.

THE BIG CHURN

Arizona is a state with a big "churn" – for every three people who come in, two go out. Not surprisingly, Arizona's health care workforce is not especially a stable one. In calculation of health care workforce turnover rates for 1998, Arizona's Department of Economic Security reported that more workers left than were hired. The median worker tenure was less than one year. [5]

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By the Numbers: Arizona's Nursing Shortage [7]

(2000 data unless otherwise indicated)

Arizona is often among the lowest ranking states when it comes to indicators of health, human services and education. The state's current shortage of registered nurses is no different:

Licensed RNs in Arizona: 33,155 (2001)

	ARIZONA	U.S.
RNs employed in nursing (2000)	90%	82.7%
RNs per 100,000 population	628	782
RN vacancy rate	16%	11%
Annual turnover rate	26.7%	15%
Change in RN employment (1996-2000)	-12.9%	-2%
Average age of working RN	46.8	42
Percentage RNs who are Advanced Practice Nurses	4%	8%
Average annual earnings, full-time RN	$42,120	$46,782

What's New?

"...what we have been considering as a shortage of [nursing] graduates is really due to the diversion of hundreds and thousands of our nurses into new lines of work."

FROM THE AMERICAN JOURNAL OF NURSING, APRIL, *1920*

Factors affecting the nursing shortage

Demographic shifts. The U.S. is shifting to increasing concentrations of ethnic and racial minority groups, while the traditional background of registered nurses is white and female.

More career opportunities for women. Many women who formerly would have considered nursing now consider careers such as law, medicine, computer programming, engineering, etc.

Negative popular image. Long hours, hard work, low pay, low value, low self-esteem.

Poor working conditions. Lack of professional autonomy, high patient loads, excessive paperwork and administration, mandatory overtime, risk of personal injury, lack of support staff, and not enough time in direct patient care are some of the reasons why 41 percent of nurses report being dissatisfied with their current jobs, and 33 percent of those under 30 plan to leave their jobs in the next year (2001). [8]

The Future

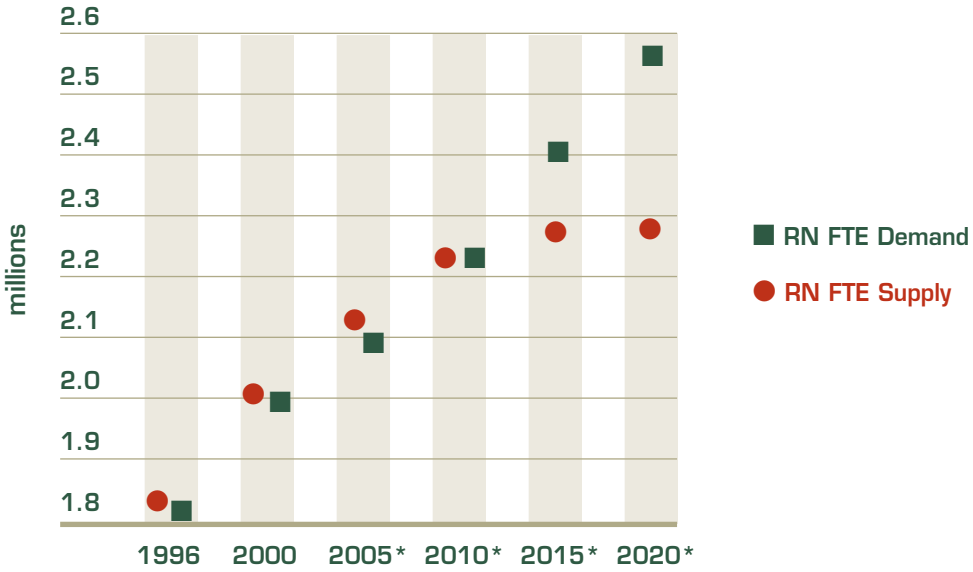
Population growth Arizona's 65+ population is expected to grow 82% through 2020, compared to 53% for the U.S. population. This will increase demand for health services, and the people to deliver them.

An aging nursing workforce By 2010, approximately 40 percent of working nurses will likely be older than 50. Younger people are not entering the field at an adequate replacement rate. The entire U.S. labor force is growing older, and there are fewer potential workers coming behind the aging boomers.

Strained educational capacity An Arizona forecasting model *(Colleagues in Caring, 1998)* points to the need for experienced nurses with a BS degree, RNs with critical care and specialty credentials, RNs with leadership and managerial skills, and more RNs in community settings with clinical autonomy. This is contrasted with Arizona BS and advanced nursing degree programs that turned away 155 qualified students in 2000 because of insufficient number of faculty, insufficient clinical sites, and state budgetary constraints. Arizona's 13 associate degree nursing programs are already close to capacity, admitting 1,078 students in 2001-2002 for 1,129 slots. The average age of faculty at Arizona nursing colleges is 53 years.

Supply & Demand of Nurses

While the need for registered nurses is rising, supply is stagnant.



*Projected

Source: *Report to the Secretary of the Department of Health and Human Services on Basic Registered Nurse Workforces*, 1996, National Advisory Council on Nurse Education and Practice.

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Workforce Redux

"There are widespread difficulties in recruiting and retaining nurses…the shortage is real, and of significant magnitude…it is primarily the result of increased demand…it is contributing to the deterioration of the work environment and may also be having a negative impact on the quality of patient care and access to health services."

Sound familiar? That's from a 1987 Commission on Nursing established by the Secretary of Health and Human Services in response to a nursing workforce shortage, rising demand, increased costs, strained working conditions and health providers on the brink of insolvency.

Fifteen years later, some things have changed and some haven't, but we still establish commissions and task forces to ask the same questions and, predictably, come up with the same answers:

Q ***Where have the health care workers gone?***

A *They've gone to opportunities someplace else.*

Q ***Why have they gone to other opportunities?***

A *Better working conditions, better pay, more autonomy, respect, etc.*

Q ***What can we do about it?***

A *Increase focus on recruitment, education, foreign workers, economic incentives, etc.*

Improve retention through better workplace conditions.

In response to these traditional questions, Arizona's Governor has created a task force to suggest ways to address the state's nursing shortage. The Arizona Hospital and Healthcare Association's *Who Will Care* campaign is focused on better public education, recruitment and workplace reform efforts. Arizona legislation has been introduced to provide tax incentives for people to become nurses, and organizations like The Goldwater Institute call for the repeal of onerous federal regulations and legislation mandating care and the introduction of market reforms like medical savings accounts to make it more attractive for physicians to practice in the state.

Nationally, the response is similar. The Department of Health and Human Services will award almost $28 million in new grants to increase the number of qualified nurses nationwide; colleges and universities will receive funds to increase the number of nurses with advanced degrees (ASU will

receive almost $600,000 in grants for basic and advanced nursing education); legislation has been proposed through several versions of the "Nurse Reinvestment Act" to create a National Nursing Service Corps and develop national and local media campaigns to promote nursing as a career.

All of this is a perfectly rational response to a set of conditions we've seen before, and will most likely see again. It's work that is useful and necessary, but it can also be argued that it simply perpetuates a status quo health system that is in dire need of innovative reform.

A Different Set of Questions

But what if we asked a different set of questions?

Q ***Do we have a shortage of health care workers, or a shortage of good jobs?***

A *We have a shortage of good jobs.*

Q ***Why do we have a shortage of good jobs?***

A *We train people as professionals, then treat them as labor.*

Q ***What can we do about it?***

A *Change professional scope of practice to harness emerging economic, technological and social trends driven by demographics and consumer demand.*

Changing professional scope of practice ultimately comes down to licensure, and this is where the major battles for workplace reform will be fought in the years ahead.

A Magnet Culture

We already know how to create good jobs. There are places in the country that have nurses *waiting* to work there, places like Hackensack University Medical Center in New Jersey. The American Nurses Association Magnet Recognition Program provides consumers with a benchmark to measure quality of care, and recognizes nursing excellence in the delivery of that care. It elevates the reputation and standards of both the nursing profession and the organization supporting it.

There are currently 45 "Magnet" hospitals in the U.S., mostly on the East Coast. They tend to be found where the managed care penetration rate is lower and hospital margins are higher. They tend not to be found in Arizona and other western states, where hospitals operate close to the bone and occasionally have to cut staff just to make ends meet.

That's not to say workplace reform isn't going on in Arizona. Desert Samaritan Medical Center's Emergency Department in Mesa implemented a new ER leadership model in 2001 that resulted in significant increases in staff and patient satisfaction, a 70 percent decrease in patients who leave without treatment, and all nursing positions filled. There are other examples as well.

Magnet hospitals are characterized by a decentralized management structure, nurse participation in decision-making, an atmosphere that values the work of nurses, a strong educational focus, clinical advancement programs for nurses, and strong communications and collaboration with physicians. More information on the Magnet hospital program can be found at **http://www.ana.org/ancc/magnet.htm.**

The Benefits of Magnet Designation (9)

- improves patient quality outcomes
- provides a competitive advantage
- is an important recognition of nurses' worth
- benefits nursing recruitment and retention
- increases utilization of the facility by consumers and health care plans
- has a positive impact on the quality of nursing care
- increases staff morale
- attracts high quality physicians and specialists
- reinforces positive collaborate working relationships
- creates a "Magnet Culture"

"We find that our graduates will work in a hospital for a year or two to get some practical experience, but then will leave to places where they have more autonomy and better job satisfaction, whether it's a health plan, a pharmaceutical company, a specialty clinic or some other setting."

BARBARA DURAND
DEAN, ASU COLLEGE OF NURSING

A View from the Trenches

Marty Enriquez is an experienced, time-tested nurse. She's been at the University Medical Center in Tucson for 13 years, the last six of which she has served as Vice President for Patient Care Services, overseeing 1,600 full time equivalent (FTE) nursing and support services positions. She's also President-Elect of the Arizona Organization of Nurse Executives.

In her own words:

"The essence of being a nurse is being an advocate for the total health needs of the patient. It's not just about performing a required set of functions.

"Compared to ten years ago, we see patients who are sicker, plus have more complex social and family issues. Being a nurse doesn't stop at the bedside.

"A patient doesn't care whether a nurse is an RN, an LPN, two year, credentialed or not. A nurse is a nurse is a nurse.

"We see two types of nurses: One type doesn't want to get involved in anything. They want to just work, collect a paycheck and go home. The other type is the professional, those who are looking to constantly grow and develop.

"Nurses have been their own worst enemies. We trash the profession constantly, always pointing out the bad and never the good. We eat our young. We don't provide a supportive environment for new nurses, or even the veterans. Physicians do less of this. They protect their own.

"There is tremendous apathy among nurses. Some think, once you graduate and get a job, you've done what you had to do. You're less interested in professional committees, getting involved in policy, taking a leadership role.

"An RN degree gets you about $35,000 to start in Arizona, and $50,000 in California. The cost of living is lower here, but it's still a factor.

"UMC and other hospitals are forced to spend big bucks on supplemental staffing. UMC is budgeted for 70 percent occupancy, but in the winter with the flu season and out-of-state visitors, occupancy can hit 100 percent. If we can't find staff, then we have to shut down beds. At 70 percent occupancy, there's a 30 FTE [full-time equivalent] shortfall, and at 100 percent occupancy you have to add another 60-70 FTE. Obviously this is a budget breaker.

"Patient ratios should be dependent on both patient needs and nurses' needs. Experienced nurses can handle more patients and are more efficient; less experienced nurses need lower ratios. There's no magic formula, although we often are forced to come up with some numerical ratio.

"UMC is going to a 1:4 nurse/patient ratio. It's the right thing to do. We need to improve the nurses' work environment by giving them more time with the patient to improve outcomes."

> *"Today, nurses spend one-third of their time charting, another third of their time dealing with systems issues like getting hold of physicians and pharmacists, and one-third of their time on patient care. It's ironic: We train for patient care and spend the minority of our time there."*
>
> *Marty Enriquez*
> *Vice President for Patient Care Services, UMC, Tucson*

The Employer Dilemma

The historical employer-employee relationship between nurses and hospitals has been broken, and recent labor union efforts to organize health care workers indicate that it won't be mended anytime soon.

Having experienced the 'downsizing' of the 90s, fewer workers (especially Gen Xers and the upcoming Gen Y) are willing to trade professional autonomy for job security. The result is a nursing workforce in which only nine percent of the workers are under the age of 30. With a myriad of other careers to choose from, young people with a talent for science and strong interpersonal skills are not likely to choose nursing or other technical health care professions.

If hospitals aren't able to recruit enough new workers, can they at least retain current workers? Studies of health care worker job satisfaction indicate that it is the working environment – not salary – that is the number one source of dissatisfaction. Within the long-term care industry, where annual turnover of nursing aides can average 100 percent, there are nonetheless model facilities in which paraprofessional staff are empowered with decision-making authority, which fosters a culture of collaboration and improves retention.

Money Talks

Still, money talks, and many large employers are beginning to see the wisdom of retaining loyal, experienced staff by increasing salaries and establishing retention incentives instead of paying large sign-on bonuses and using high-cost registry staff.

Health care institutions have created a vast 'bricks and mortar' environment with impressive capability for treating the most complex medical conditions. But they must maintain high patient volume to cover their overhead, in effect creating a system that serves the needs of a minority of patients. Not surprisingly, they are under tremendous financial pressure as more cost-effective outpatient and specialty centers take on the 'bread and butter' of routine patient conditions and procedures.

"If I were Queen for a Day, I would put professional nursing on the same level as professional medical practice. You would graduate from college, and only then would you be able to get into nursing school, where you would come out with an ND – Nurse Doctor – degree. There are a few programs like this in the country."

BARBARA DURAND
DEAN, ASU COLLEGE OF NURSING

A Nurse is a Nurse is a

To most patients, a nurse is a nurse is a nurse. They can tell when they receive good care and treatment, but not whether it was an RN/BSN, RN/ADN or LPN who provided it.

But nurses can. Through a peculiar set of historical antecedents and licensing standards run amuck, they have created a myriad of titles and roles that often contain quite different levels of training and expertise, but still contain the designation 'nurse.'

So it is that nurses prepared through four-year college Bachelor of Science programs and nurses prepared through two-year associate degree programs in community college both take the same licensing exam and get roughly comparable salaries upon graduation. They are all 'nurses.'

This is both counter-intuitive and counter-productive. It muddles professional identity, fosters turf wars among "competing" professional preparation and licensure programs, and seriously limits the ability of nurses to both reclaim and expand their critical role in providing a wide range of health care services.

A Solution?

There's a solution to nursing's identity crisis, and as unpopular and unthinkable as it might appear now, market forces will make it more likely in the future:

Cede the term 'nurse' to entry level positions. Move upstream with a new professional paradigm.

One can argue that there are roughly two types of 'nurses' now: One is a large group of nurses trained in entry-level and on-the-job programs who are providing important care that is largely routine, well established historically and clinically, and primarily focused on high touch maintenance activities. For the most part, these nurses don't necessarily aspire to move up the professional career ladder, although some certainly do; they see nursing as a "job" – a rewarding one at that – and not as a "profession." These are the people who, in our opinion, should continue to be called 'nurses.'

There is another group of nurses who complete advanced degree programs, are highly trained in both general practice and specialty areas, expect to work in settings where they can exercise professional autonomy and judgment, and expect to be treated better than 'labor' and "handmaidens" to physicians. These are the people who should consider letting go of the term 'nurse' and the rich historical tradition that goes along with it, and develop a professional "brand" that resonates with the type of complete patient care they are fully capable of delivering.

(continued)

A de Facto Reality

To some extent, this is already happening. Thousands of women who historically might have chosen nursing as a career have bypassed the field and are going directly to medical school. Twenty years ago, the number of women entering both allopathic and osteopathic medical schools was around 20 percent. Today, it's approaching 50 percent and climbing, especially in general family practice medicine.

Men continue to avoid nursing as a career, and no amount of "image" building and public relations schemes is likely to change that. There is simply too much cultural baggage associated with the term, which covers the gamut from bathing patients and changing sheets to providing expert clinical diagnoses and prescribing powerful medications. That has to change.

Huge Resistance

Hardly anyone will find the idea of jettisoning the designation of 'nurse' appealing:

- Nurses have a huge emotional investment in the term. Many at the upper level of the profession see why they have to move upstream with a different identity and different set of relationships, but being a nurse is part of "who they are." Unfortunately, being a nurse is also part of who another large group of people are who aren't anything at all like them.
- Physicians will resist the intrusion of new designations designed to expand scope of practice in what they perceive to be their professional domain. But all manner of health professionals are chipping away at traditional physician practices. This will accelerate in the future.
- Educational preparation programs, professional associations and regulatory bodies look for a reason to justify their existence first and change practice second. If they can accomplish the latter without upsetting the former, fine.

Our forecast: It won't come without a cost, but thousands of professionals who call themselves 'nurse' today will call themselves something else tomorrow.

The Shape of Things to Come?

Historically, the majority of nurses have worked in hospital settings. That's still true today, but it doesn't necessarily mean that nurses are *employed* by hospitals. Increasingly, hospitals are turning to nurse registries that provide single shift staffing, and to traveling nurses who work 40 or more hours per week for three-month blocks of time. In 1998, registry nurses filled 58,154 shifts in Arizona, a number that jumped almost 18 percent in 2001 to 68,550 shifts. As a percentage of overall staffing, traveling nurse assignments increased even more dramatically, from 1,455 13-week assignments in 1998 to 2,351 assignments in 2000 – a 62 percent increase. Increasingly, it is nurses themselves who are choosing to work as independent contractors through registries. Hospitals are then compelled to turn to those registries to alleviate staff shortages.

Is There a Physician Shortage?

Conventional wisdom over the past decade predicted an oversupply of physicians by 2000, particularly among specialists, and a shortage of primary care doctors. A growing number of researchers now dispute this, and project a critical shortage of physicians based on macroeconomic factors such as population growth and increased demand for services, physicians' work effort and the provision of services by non-physician clinicians.

The following chart illustrates one recent forecast of the projected shortages: (10)

	2000	2010	2020
Population (in millions)	286	325	345
Physicians (total)	772,000	887,300	964,700
Physicians per 100,000 pop.	270	283	280
Effective supply adjustment*		-5%	-7%
Shortage of physicians		50,000	200,000

* Adjustment due to reduced work effort, including a 10% reduction in production by physicians ages 55-65 and a 20% production reduction in women physicians.

Trend model assumes first-year residents hold steady at 23,000 annually, 20% of international medical graduates (IMGs) return to home country, and current retirement trends continue.

ON THE OTHER HAND –

According to projections from the Institute for the Future for the Robert Wood Johnson Foundation, there are approximately 600,000 physicians in the U.S. and another 170,000 in the medical school pipeline. This translates into nearly three new physicians for every one who retires. They argue that because medical schools increased their capacity in the 1970s amid predictions of a physician shortage, the general physician to population ratio increased 65 percent from 115 to 190 physicians per 100,000 population over the past 25 years, with specialists increasing from 56 to 123 per 100,000 population. (11)

While the debate over whether there's a shortage or surplus of physicians continues, it's worth pointing out that there is a reported glut of family practice physicians in attractive places to work like wealthy suburbs, but not in small rural communities; and a critical shortage of specialists in states like Arizona, which has to import physicians just to stay current with a growing population and increased demand for health care.

The regional variation in the supply and demand of physicians is stunning, and complicates attempts to develop a national physician workforce policy.

Physician Unrest

- An AMA survey revealed that 90% of physicians are either concerned or very concerned about their future.
- An increasing number of physicians feel they are working harder to maintain their current level of income.
- Physicians feel they are not empowered in the strategic decision-making processes of their organizations. They are contemplating ventures where they have a larger role and more control.
- Physicians are organizing in an effort to respond to the "disempowerment" they perceive in the current health care environment.

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*Physicians in Arizona**

A Look Back –

According to data reported by the Arizona Board of Medical Examiners (BOMEX), Arizona's population grew approximately 40 percent between 1990-2000, while the state's physician population grew 50 percent during the same period. There are, as one might imagine, huge differences between the growth in urban and rural counties. Simply adding one physician in Greenlee County between 1990-2000 increased the physician population by 25 percent!

A Look Forward –

	2002	*2004*	*Percent Increase*
Physician MDs (12)	15,542	16,488	6.0%
State Population (13)	5,199,150	5,435,675	4.5%

BOMEX counts medical licenses, which is not necessarily the same thing as the number of physicians who actually reside and practice medicine in Arizona. Informally, that number has been pegged at 65 percent of medical licensees, although no one knows for certain. BOMEX also doesn't include physicians trained as Doctors of Osteopathy (DOs), of which there are approximately 1,100 who are licensed and have Arizona addresses. (14)

Even if the growth of physicians slightly outpaces state population growth now and into the future, the numbers don't tell the story of rural and urban disparities, the shortage of physicians in certain specialty areas, and growing physician reluctance – and even refusal in some instances – to work under certain conditions (see SLHI's past two issues of *Arizona Health Futures* on trauma centers and the ambulatory care safety net). The real story in the future of the health care workforce lies in an increasingly dysfunctional workplace for both nurses and physicians, not in recruitment.

* Numbers reported on physicians in Arizona, both by BOMEX and other groups, often exclude Doctors of Osteopathy (DOs), who play a critical role, especially in primary care and in rural areas. One useful thing we might think of doing in Arizona is to create a source of health workforce, encounter and outcome information that is comprehensive and independent, and not the responsibility of any particular interest group or profession.

The physician shortage in Arizona is compounded by:

MD A higher percentage of older physicians than the national averages. In 1998 Arizona ranked 5th and 2nd respectively among the states in percent of active physicians 55 and older, and 65 and older. Arizona physicians are retiring earlier: an average of 59 years of age today compared to 63 ten years ago.

MD Lower increases in physicians per 100,000 population during rapid growth in the 1990s: Arizona physicians per 100,000 population increased 5% in 1989-1998, compared to 16% nationally.

MD Lower rates of primary care physicians than national averages (Arizona ranks 42nd among states).

MD Lower numbers of physicians trained in-state (24% compared to 44% nationally). More medical graduates leave the state than remain to set up practice.

MD Declining number of physician residents per capita (6.2% decline between 1989 and 1999) compared to a national increase of 3.9% in the same period.

MD A perceived hostile working environment – heavy patient loads, low reimbursement rates, large numbers of uninsured, excessive administrative/regulatory burden, high costs of overhead (more administrative positions, less patient care).

Swimming Upstream: *Workforce Scope of Practice*

Taking a page from the history of American economic progress and workforce policy as a guide, we can deduce one overriding principle of practice: Swim upstream or die.

Over a mere 150 years we have witnessed the wholesale transformation of a rural and agrarian economy to a post-industrial powerhouse driven by the human ingenuity of science, technology and the information revolution. In the process, huge numbers of lower level jobs have disappeared, and even larger numbers of highly technical and skilled jobs have been created.

American workers have hardly gone gently into the good night during this transformation. Factory workers have organized to protect their jobs, even as technology rendered them obsolete. Managers, salespersons, small shopkeepers and tradesmen have clung as long as possible to their work and community routines, even as larger economic and social forces pushed them aside.

Rear Guard Policies

To some extent, the current fixation with health workforce shortages is symptomatic of this same rear guard behavior as technological and market forces conspire to permanently alter the landscape.

Professional licensure is a favorite rear guard tool. Licensure of physicians, nurses, pharmacists, dentists and other health care professionals is first of all intended to protect the public from unsafe, illegal or unethical practice. But licensure also protects the proprietary economic rights of licensees by protecting their scope of practice. If other groups are allowed to enlarge their own scope of practice to do things that had been solely within the purview of the licensee, the licensee's livelihood is potentially threatened.

The key question is where we draw the line between protection of the public and protection of a professional scope of practice for the sole benefit of its licensees.

- Ph.D. clinical psychologists seek to expand their scope of practice to include the authority to prescribe psychotropic medications. Medical physicians call this unsafe, and oppose the intrusion into what is now their sole domain.
- Ph.D. nurses and nurse practitioners point to research that demonstrates no difference in patient satisfaction and health outcomes between seeing an advance practice nurse and a family physician. But only nine states permit NPs to practice independently of physicians.
- Some physicians look with alarm at the growing number of Americans who get their health care from CAM – complementary and alternative medicine providers – and oppose health plans that reimburse their members for such services. Other physicians see the writing on the wall and look for ways to incorporate CAM techniques into their own practices.

(continued)

A Relentless March

As science marches forward and increasingly sophisticated technologies are developed, clinicians are able to competently care for patients who would have previously required the expertise of a higher-level provider. The *law* of technology is always to find the most efficient and effective means toward a specified end. As health care technology continues to progress and expand, it will fall under the purview and use of an ever wider number of people – the general consumer public – who will access the latest information and technology to take control of their *own* medical care, bypassing many of the "traditional" providers in the process.

These same providers, in turn, will either expand scope of practice to both accommodate and direct the application of new technologies and the information revolution in their work, or they will fall by the wayside.

In our view, the current shortage of nurses, specialist physicians and other occupations is a predictable response to a health care system that is transitioning from a well defined and established set of *institutional* and *professional* configurations to an emerging *network* of ad hoc, transitory and just-in-time health services that will cater to a market driven by individual consumer demand.

Professionals won't change their scope of practice because they want to. They'll change because they have to.

...the current shortage of nurses, specialist physicians and other occupations is a predictable response to a health care system that is transitioning from a well defined and established set of institutional and professional configurations to an emerging network of ad hoc, transitory and just-in-time health services that will cater to a market driven by individual consumer demand.

Three Arizona Health Workforce Scenarios

(with apologies to the Beatles)

Scenarios are projections of a potential future. They are a combination of estimations of what *might* happen and assumptions about what *could* happen, but they are not forecasts about what *will* happen. Scenarios are not predictions. They are tools to provoke thought on the implication of "future histories" in our current and future strategy choices. These three scenarios of what Arizona's health care workforce might look like in 2020 are offered as *learning frames.*

Eleanor Rigby

(Ah, look at all the lonely people)

AZ Population 2020
6.5 million

AZ Health Workforce
220,000
(8% of workforce)

AZ Per Capita Health Spending
$13,000
(2000 dollars)

AZ Uninsured
1,625,000
(25%)

- ***Arizona follows the history of the entire country*** in the first two decades of the 21st Century: radical tiering of health care.
- ***Arizona population is less than predicted in 2000:*** fewer people come into the state because of lack of good jobs and inadequate education, health and social services. Public funding accounts for 60 percent of health care. Per capita health spending ($13,000) is the same as the national average.
- ***Arizona continues to be a "back office" state:*** lower wage base, few large corporations, large service industry catering to a minority class of walled-in wealthy. Employees pay larger out-of-pocket costs for health care; Arizona has one of the highest rates of uninsured in the country.
- ***AHCCCS is in shambles, breaking the state budget.*** Hospitals continue to consolidate; public hospitals close. Providers pick off the wealthy with boutique health care and highly profitable specialty hospitals and clinics (orthopedics, heart, cancer, plastic surgery).
- ***National and regional health care cartels dominate the state and drive out the smaller players.*** They keep prices high because they're the only game in town. Health plans continue to engage in adverse selection and cherry picking of beneficiaries. Large numbers of low-income persons strain the safety net, which is barely able to stay afloat by cobbling together funding sources.

(continued)

- ***Work environment suffers from excessive public regulation.*** There is a critical shortage of physicians, nurses, long term care and other health workers. They follow the money: private practices, boutique health care for the wealthy. No one wants to work with the poor. There's no money in it. Public health remains weak, unable to attract enough workers for vital public health and safety functions.
- ***Politics of health workforce is fractured:***
  - Physicians refuse to cede scope of practice, which keeps costs high, increases inefficiency and limits access. Ironically, they keep control in the name of quality, while quality suffers across the entire population because of high costs and lack of access.
  - Nurses continue to squabble among themselves, reinforcing the "labor" mentality and turning off young people who might enter the profession.
  - Lots of jobs for pharmacists because large numbers of elderly depend on drugs to treat chronic conditions and keep them out of acute care. Unfortunately, schools don't turn out enough of them; young people don't want to work in a "Circle K" world of health care.

Ob-La-Di, Ob-La-Da

(Life goes on)

AZ Population 2020
7 million

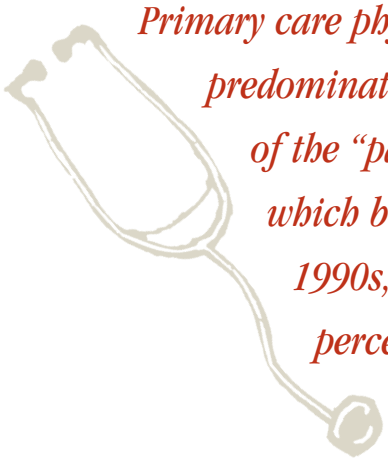
AZ Health Workforce
300,000
(10% of workforce)

AZ Per Capita Health Spending
$12,000
(2000 dollars)

AZ Uninsured
1,050,000
(15%)

- ***Arizona follows the rest of the country:*** radical tiering of health care, with some amelioration through Medicaid expansion, made possible by a relatively healthy economy. Nevertheless, the state's rate of uninsured (15%) remains above the national average of 10%.
- ***Arizona's economy and budget picture incrementally improve*** as investments are made in education and basic social and health infrastructure. Businesses continue to shift health cost and risk to employees by moving from defined benefit to defined contribution plans. Out-of-pocket costs increase, utilization rates drop, but not significantly. Medicare spending increases because of the retiring boomers; their political clout makes it difficult to restrain costs, especially for the latest drugs and technology.
- ***Care delivery is fragmented;*** cuts in disproportionate share hospital (DSH) funding and end to cost-based reimbursement for outpatient clinics make it hard for safety net providers to make ends meet. Continuing cost pressures result in more tightly controlled provider networks, although some providers remain outside the networks to pick off the low hanging fruit of healthy people, the wealthy and people seeking specialty products like chronic disease management.

- ***Consolidation occurs in acute care settings*** (emergency, trauma, surgical centers) because of economies of scale. Advances in quality control through the adoption of standardized algorithm-driven practice allow providers to hire less expensive workers (entry level nurses, technicians) and train them on-the-job.
- ***Economic pressures fuel the greater use of advanced degree nurses*** in community clinic and specialty settings, but this is offset to some extent by insufficient numbers of graduates. Field-based preparation programs begin to gradually supplement – and then compete – with traditional educational institution programs.
- ***Intimations of a physician shortage*** in the early 2000s prove premature. The problem is in geographical distribution – not enough physicians in rural settings – and in certain specialty areas. Physicians begin to cluster around smaller specialty practices that align with market niches: chronic disease management, integrated CAM practice, boutique health care. The fastest growing physician specialty is the medical manager, combining medical, law and business skills.
- ***The politics of the health workforce remain contentious, with incremental progress:***
  - Significant numbers of bedside nurses, aides, techs and long term care workers continue to organize and earn better working conditions and pay. Nurses with advanced training begin to identify more closely with physician scope of practice. Professional preparation programs follow suit. But with a steadily shrinking labor pool, the problem of integrating advanced practice nurses and physician assistants into practices continues to be lack of supply.
  - Primary care physicians are predominately female; the culture of the "paternalistic physician," which began to change in the 1990s, is finally dead. Over 60 percent of medical school students are women. Younger physicians are acculturated to working in groups, in using new technology and in being an "employee."
  - Organized medicine still has strong incentives to maintain restrictions on expanding scope of practice, but cracks begin to appear. Arizona allows psychologists and pharmacists to prescribe drugs under certain conditions.
  - General dentistry becomes less of a viable career as dental hygienists and techs take over more general dentistry functions. Dentists specialize in emerging high tech and oral surgery.



Primary care physicians are predominately female; the culture of the "paternalistic physician," which began to change in the 1990s, is finally dead. Over 60 percent of medical school students are women.

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Here Comes the Sun

(It's all right)

AZ Population 2020
7.5 million

AZ Health Workforce
420,000
(13% of workforce)

AZ Per Capita Health Spending
$11,000
(2000 dollars)

AZ Uninsured
375,000
(5%)

- ***The U.S. enacts universal health care through the expansion of a modified Medicaid program*** that provides a basic package of primary and preventive care to low-income persons and catastrophic insurance for a larger group. The plan is publicly funded but privately administered; a huge market-driven health care system sits on top of it. Basic rule: Everybody gets covered, but everybody has some "skin in the game." Even with this plan, five percent of the population slips through the cracks and aren't covered, although they could be.
- ***U.S. and Arizona economy is healthy,*** making possible investments in education, health and social services infrastructure. Arizona is at the forefront of a market-driven health care model: consumer choice, consumer dollars through medical savings accounts, tax credits, creative community risk pools. Citizens pay 50% of health dollar themselves, up from less than 20% in 2000, and start to pay attention to quality and service. Providers compete on quality and price, because consumers know quality and price. There is a huge explosion of information technology and quality assessment, as well as web-based delivery of health information and patient care.
- ***Competition and the intelligent application of new technologies*** drive efficiencies and keep a lid on costs; they also fuel the substantial integration of mental and physical health. Many health plans go out of business as consumers deal directly with providers; those that stay in the game sell prepackaged plans for specialty markets (catastrophic coverage for healthy young people, chronic disease management programs, prevention plans, primary care packages, cultural specific plans, CAM).
- ***Consolidation drives out excess capacity;*** trend to outpatient, just-in-time services continues. More providers contract directly with employers, consumer purchasing pools and new "group purchase" organizations. The electronic medical record – EMR – finally sees the light of day.
- ***Health occupations become extremely attractive and lucrative,*** as health care services capture in excess of 20 percent of GDP and a growing elderly population – active well beyond normal retirement – seeks out new services. New occupations emerge: integrated care specialists, prevention managers, behavioral technologists, quality control technicians, medical network managers, lifestyle clinicians, etc.

- ***The idea of continuous training and learning*** replaces general professional education; increasing use of apprenticeships, mentoring networks, and competing private training programs attached to large provider networks. "Career webs" replace the notion of career ladders; post baccalaureate training of NPs, PAs and family physicians begins to merge. Consumers have good experiences with NPs and PAs, and actively seek them out.
- ***Health workforce politics follows the integration across professions:***
  - Medical colleges begin to look more like business colleges. Core medical competency is augmented with information systems management, marketing, legal, etc.
  - BSN programs morph into professional programs at the graduate level. ADN programs continue to prepare nurses for specific clinical roles.
  - Competition on price and quality, combined with an aging population and a static/declining general workforce, continues to encourage standardizing functions and the application of advanced technologies. This has the effect of expanding scope of practice that was formerly the province of physicians and advanced nurses downwards to less "educated" but more highly "trained" clinicians/technicians.
  - A new class of physicians emerges – medical managers, diagnosticians, business entrepreneurs, medical marketing experts, "webdocs" – who spend little time in direct physical contact with patients.
  - "Traditional" physicians, nurses and dentists don't go away. They go instead to the boutique specialty market of upscale clinics and high-tech house calls.

A new class of physicians emerges – medical managers, diagnosticians, business entrepreneurs, medical marketing experts, "webdocs" – who spend little time in direct physical contact with patients.

Skin in the Game:

An Agenda for Positive Change

When it comes to the health care system, we're all trash talkers. Nurses, physicians, pharmacists, administrators, policy analysts, patients – we love to sit around and trash the system while we admit to our own self interests and cozy relationships that perpetuate the status quo and fuel the very thing we love to hate.

It's like the old story about the guy who beats his head against the wall all day because it feels so good when he stops.

Is there any way out of the health workforce morass? Now that we've laid out some issues that are bound to make practically every special interest group uncomfortable, we complete the circle by offering some suggestions on how we might constructively move forward. They all require that *everybody have some skin in the game.* We all have to change, to take some heat and make some sacrifices, if we're ever to improve our health care system.

Move beyond recruitment and focus on improving the workplace. Luring more people into health professions under current working conditions may have the unintended consequence of making things worse by encouraging the "management by churn" that has reduced customer service quality in other industries. SLHI supports current recruitment and public education efforts in critical shortage areas like nursing, but we know it's a short term response to a long term problem that's not going to go away simply by having more trained workers to employ. Magnet hospitals already know how to improve the workplace. More organizations need to embrace these Magnet principles.

Focus on diversity. The health care workplace doesn't look anything like the population it serves. Diversity is a business imperative into today's multi-cultural world.

Focus on regulations and licensing. Mutual recognition for RN licensure was recently enacted in Arizona, and all other health professions should follow suit. In the age of telemedicine and the Internet, interstate practice is already becoming the de facto standard. Regulatory and licensing boards must work closely with the training and delivery systems with a perspective that includes the *needs and wishes of patients* along with the training needs of providers. This will encourage training in collaborative practice, community/ambulatory care, preventive health and management of chronic conditions.

Focus on relationships. Fractured relationships between education and practice, employers and employees, physicians and nurses, inpatient and outpatient departments – the list goes on and on. First, everyone has to have a seat at the decision table. Second, management and professional associations can lead the way by training people in emerging techniques of convening and group facilitation that go way beyond Robert's Rules of Order and the competitive debate school approach to "winning" arguments. Many of us are trained talkers, but know next to nothing about how to listen.

> *"The health care system will respond quite rationally to whatever perverse incentives it is given."*
>
> JOHN RIVERS, CEO
> ARIZONA HOSPITAL AND HEALTHCARE ASSOCIATION

Focus on prevention. Here's a novel thought: keep people healthy, lower the demand for acute health care services, and thus the need for more acute health care workers. Focus on demand, not on supply. Short term, of course, this puts acute care providers in a bind because they need lots of sick patients to pay for a massive acute health care facilities and fixed costs. Long term, however, it's not unthinkable to see a shift from acute care workers to prevention and wellness workers as the system seeks out new lines of business to replace the old model. Essentially, we can't afford a massive acute care system much longer. Clearly fewer numbers of people want to work in acute care. The paradigm has to change.

Focus on creating new financial incentives. It won't be easy, but we could:

- Do away with first dollar coverage. Shift more costs to consumers. We won't like it, but we'll start to pay attention to things like quality and price. This will revolutionize the system.
- Reimburse prevention. Weight loss programs, smoking cessation, personal trainers, meditation – what if we had health plans that reimbursed reducing stress instead of picking up the pieces from high stress? If physicians actually focused on prevention – and got paid for it – the whole training and workforce ballgame would change.
- Open health plan panels to include a wider range of providers. NPs, physical therapists, nurse anesthetists and others could bill directly for services – and at potentially lower rates – instead of billing under the physician's rate. First, this would appear to be more cost effective for the entire system. Second, it would encourage more professional autonomy across health disciplines and lay the groundwork for true *collaboration*. Under the current reimbursement system, the focus and financial incentives are aligned with a *control* model.

There's something here *not* to like for most every professional health care group out there. But given our collective obsession with trashing the current system and bemoaning the health care workplace, this is one agenda for positive change.

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Analysts:
Jill Jamison Rissi, RN, MPA
Roger Hughes, Ph.D.

Graphic Design:
Dona Shaver Graphic Design

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St. Luke's Health Initiatives

2375 East Camelback Road
Suite 200
Phoenix, Arizona 85016

www.slhi.org
info@slhi.org

Phone: (602) 385-6500
Fax: (602) 385-6510

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