# ARIZONA HEALTH FUTURES

APRIL 2007

# COLLABORATE TO COMPETE

*A Prescription for **Value-Based** Health Care in Arizona*

INSIDE:

The Quality Revolution: Historical Drivers | 4
The Fog of Quality | 8
Piercing the Fog of Quality | 10
Value Rx: A Prescription for Value-Based Health Care | 23

St. Luke's Health Initiatives

*A Catalyst for Community Health*

# *Navigating the* Health Care Waters

There's a ***revolution*** coming to American medicine. It will change the way care is delivered, how physicians are paid, and how consumers are empowered to navigate the system and take charge of their own health.[1]

Variously described as value-based health care, the health care quality revolution, high performance and other terms, the focus will shift from professional autonomy in a fee-for-service, procedures-driven world to optimal system design, information transparency and accountability that will deliver true "value" in health care: The highest possible quality at an affordable price.

## A MASSIVE Workaround

*"Medicine is nothing but a massive workaround."*

Tucson psychiatrist

But how will we get there? The issue, as one physician expressed it, is that American medicine "is nothing but a massive workaround." In the face of perverse incentives, entrenched interests, technological prowess and insatiable consumerism, we have retrospectively applied human ingenuity and resourcefulness to create a baffling and complex Rube Goldberg-like anti-system that is disturbingly inefficient, often ineffective, not nearly as safe as it needs to be, and occasionally brilliant at the same time.

No one would prospectively design a system like this, unless they had a perverse streak. The fact that it continues to function at all – and pundits have been predicting its demise for the past 40 years – is a testament to the power of the status quo.

### Collaborate to Compete

The question facing us now is whether the fabled genius of American enterprise is up to the task of transforming this massive workaround to a high quality system able to sustain itself in an interdependent world of competing interests, values and finite resources, and to nourish the health of all Americans so that we might continue to live full, productive and meaningful lives.

We believe it is – but only if we *collaborate to compete*: bring stakeholders together to develop a common infrastructure of information transparency, fairness, active consumer engagement and accountability through integrated networks of care. Only through close collaboration will we be able to position ourselves and our state to successfully compete on ***value*** in a dynamic global marketplace.

In practical terms, what might this transformation look like, and how can we begin to move the needle right here in Arizona? That is the subject of this *Arizona Health Futures* Issue Brief.

*“The high quality physician is often the one who won’t prescribe a procedure you don’t need, or antibiotics that won’t help you, but that stuff doesn’t get measured, even though it’s important.”*

Phoenix surgeon

# Purpose *and Method*

In Spring 2001, SLHI published *Got Quality? The Search for Perfection in an Imperfect Health Care System*. This was the third in a series of issue briefs on access, cost and quality – the three legs of the health policy stool – that were designed to deconstruct health system interrelationships and lay out key policy issues for state leaders to address in the immediate future.

Six years later, a torrent of water has passed under the health care quality bridge. Based on our own organization’s involvement in a number of quality-related initiatives since 2001, and given the intensity of activity at both the state and national level, we thought it would be useful to revisit this issue in light of past observations and recommendations, note what’s changed and what hasn’t, and outline a prescription for moving toward *value-based* health care in Arizona.

In our role as a facilitator and funder of a number of quality-related projects in Arizona, we have had many wide-ranging discussions with physicians, nurses, hospital administrators, health plan execs, professional association heads, advocacy organizations, academic researchers, business leaders, legislators, government officials and others knowledgeable about, and involved in, health system improvement activities. This issue brief is a distillation and analysis of those conversations around some key themes related to value-based health care.

In addition to tapping into an explosion of recent research on the subject of value and quality improvement in health care, we recently conducted two focus groups of physicians in Phoenix and Tucson, selected on the basis of diverse specialties and practice settings, to make sure we were listening to the ideas and concerns of mainstream practitioners in Arizona, where some 70 percent of physicians practice in settings of five or less. Whether there actually is a “mainstream” anymore among physicians is a topic of relevance here.

Finally, all SLHI issues briefs are designed to be exercises in *framing* complicated and contentious issues in health policy and community health in ways that inform, provoke and ideally inspire the health policy debate on how we should collectively deploy our human, financial and intellectual capital to improve the health of all Arizonans.

We still believe there is such a thing as the greater public good, and we all need to be about the business of pursuing it.

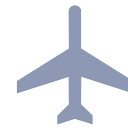
*“The physician’s waiting room is full, you can’t see him for three months without an Act of Congress. So he thinks, my quality must be pretty good. What’s the problem?”*

Tucson pediatrician

# *The* Quality Revolution

## Historical Drivers

*Every revolution has its seeds in the past. These are the historical drivers that have combined to produce the quality revolution in American health care.*



## Rapidly Rising Health Care Expenditures

In 1970, health care expenditures accounted for approximately seven percent of American GDP, or an average per capita figure of about $500 in today's dollars. Contrast this to 2004, when health care expenditures accounted for 16 percent of GDP, or a per capita figure of almost $6,300.[2]

Rapidly rising expenditures for health care are hardly confined to the U.S. Even though the U.S. is an outlier when it comes to per capita and total health care expenditures as a percentage of GDP, it is not an outlier when it comes to *how fast* expenditures are rising. For example, between 1999 and 2004, the annual rate of growth in per capita expenditures was 4 percent in Canada, 4.5 percent in New Zealand, 3.9 percent in Sweden, 5.4 percent in the United Kingdom, and 4.8 percent in the U.S.[3] Between 1990 and 2002, growth in real health care expenditures per capita for advanced industrial nations ranged from 9 percent in Italy to 57 percent in Norway. A number of countries had a higher rate of increase than the U.S.[4]

And what are we buying with all this money? That question drives the focus on quality.

"The social obligation for best

## Increased Use of Health Care Services

General price inflation has something to do with rapidly rising health care expenditures, but more of the increase can be attributed to the growing use of health care services at all levels (population increase, people living longer, etc.), driven in large part by the increased intensity of services provided to each patient. This, in turn, is fueled by rapid advances in medical technology, which has resulted in more complex – and expensive – interventions compared to the past. The rapid rise in the use of medical imaging, which in 2004 accounted for approximately $100 billion in reimbursable expenses – $350 per person in the U.S. – is one of many cases in point.[5]

Despite the fact that the U.S. spends more on health care per capita than any other country, and despite the rapid rise in the use of health care services here over the past several decades, U.S. citizens actually have fewer hospital days and physician visits than the median for other industrialized countries surveyed by the Organization for Economic Cooperation and Development. If we spend more than other countries on health care but actually use fewer services, one can reasonably conclude that the *prices* here are higher than anywhere else.[6]

And what justifies high prices? This is another key question driving the quality revolution in health care.

## Global Markets

When health care was pronounced to be in a state of crisis in the early 1970s, General Motors was paying more for employee and retiree health care benefits than they were for steel – just like today. But there was this difference: In the 1970s, General Motors didn't have strong foreign competition and could pass on those health care costs in the form of higher prices for their cars. Consumers paid the bill because they didn't have many good alternatives.

Today, General Motors and other major American employers face stiff competition in a global marketplace where goods, services and information flow more freely across geographical and governmental boundaries. Every factor of production – in this case, the rapid rise in the cost of employee health benefits – is weighed on the global scale of return on investment. Increasingly, employers question not only the *value* of what they're getting for expensive health benefits, but the historical rationale of tying health care benefits to jobs in the first place.

As a result, business leaders are now more motivated to become engaged in determining how the health care system should be optimally reconfigured to achieve greater value at an affordable cost.

practice is part of the commodity the physician sells." Kenneth J. Arrow, 1963

## The Knowledge Explosion

An explosion of basic scientific and clinical research over the past 50 years has produced an unprecedented volume of knowledge that now surpasses the ability of individual physicians and other providers to fully track, interpret and apply in practice settings.

The growth in the number of clinical trials alone has been exponential: “More than half of all clinical trials conducted between 1954, when the first trial was conducted, and 1995 were completed in the last five years of that period…MEDLINE, the biomedical bibliographic database of the U.S. National Library of Medicine, contains approximately 13 million references; more than 500,000 of these were added in 2004 alone.”[7]

The need to assimilate, interpret and apply this information has gradually led to the development of more formal algorithms of what today is referred to as evidence-based medicine, which is part of the continuing evolution of best practices over decades of scientific research and clinical experience. In that evolution, the emphasis has shifted from the eminence of the physician as the sole arbiter of knowledge based on years of training and experience to scientific evidence as codified and implemented through ever more prescribed technical routines.

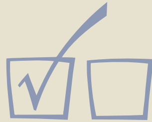
What is in dispute is whether this shift leads to better quality of care, especially as it pertains to physician-patient relationships. Regardless, there is a clear and growing focus on the components of the clinical encounter, and how they can be optimally configured to produce desired outcomes in a cost-efficient manner.

## Variations in Care

Geographical and population-based variations in the use of clinical services, medical technology and pharmaceuticals have been documented for several decades, with no appreciable difference in health outcomes.[8] Where one lives, the characteristics of the local health care system (supply of physicians, reimbursement mechanisms, availability of technology, etc.), practice configurations and even the profile of individual physicians can affect the types and frequency of services provided. Patient characteristics vary as well, and complicate the search for a tight predictability of interventions and intended outcomes – the holy grail of the scientific enterprise.

Variations in care have prompted health care purchasers, policy makers and researchers to dig deeper into the relationship between medical practice and outcomes, bringing the growing field of quality improvement and value-driven health care into sharper relief, if not resolution. Variations for which there is no defensible explanation lead to a greater focus on quality. How much variation in care can (or should be) tolerated in situations where both the clinician and the patient possess imperfect knowledge is one of the central points of contention in the quality revolution.

> “There’s two-and-a-half million articles coming out every year, there’s 20,000 journals, there’s 50 specialties…the amount of information overload is incredible.”
>
> Tucson gynecologist

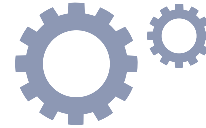


## Safety and Medical Error

Efforts to improve safety and reduce medical error in health care have been ongoing for decades, but it was the publication of the Institute of Medicine's *To Err is Human: Building a Safer Health System* in 1999 that galvanized attention in the medical community, followed by the IOM's *Crossing the Quality Chasm* in 2001.

IOM's report stressed that more than one million people in the U.S. suffer from preventable medical injuries, and close to 100,000 die from them.[9] The identified problem was not necessarily lack of medical knowledge, but rather system design and inadequate dissemination and implementation of ideas and practices known to improve safety and reduce error. A broad range of organizations at the national level began to undertake safety initiatives (Institute for Healthcare Improvement, National Quality Forum); here in Arizona both the Arizona Hospital and Healthcare Association (*Safe and Sound* campaign) and the Arizona Medical Association (*Arizona Partnership for Implementing Patient Safety*) have coordinated patient safety initiatives in recent years, among others.

The pressing need to promote safety and reduce medical error fueled a broader and more intense focus on improving quality at all levels of the health care system, whether it was reducing medical errors through computerized prescription order entry, reducing hospital infection rates or monitoring whether physicians prescribed beta blockers following myocardial infarction or routinely screened women for breast cancer. Today, many believe that the best way to promote a culture of patient safety and reduce medical error is to focus on quality improvement *per se* – both at the system and individual level – and not to focus on eliminating error alone.



## The Industrialization of Health Care

In the seminal work, *The Social Transformation of American Medicine*, the sociologist Paul Starr chronicled "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."[10]

All of the above historical drivers of the quality movement in health care can be said to be part of this larger "industrialization" process, in which health care becomes a commodity, patients become consumers, physicians and other medical professionals become workers (labor), provision of care becomes modes of production, and variations in practice tend over time to collapse into standardized algorithms of care.

In one sense, what we think of as a "revolution" in quality is the predictable consequence of the industrialization process: the search for ways to make the "product" better by utilizing more efficient and effective production techniques. Quality control, quality checks, safety and the reduction of error are components of fail safe system design – the province of engineers – and not the autonomous judgment of individual actors in the system, who are increasingly asked to play a defined role in the production process, and not to act on independent judgment and experience.

And what happens to the *profession* of medicine in this industrial process? This is the battlefield on which the quality revolution unfolds.

"If the goal is zero errors, you will get zero risk takers." Phoenix surgeon

# THE FOG OF QUALITY

**A HIGH QUALITY VISIT?**

*"A 50-year-old woman in basically good health but with hypertension and very high cholesterol would repeatedly not take her medication, despite respectful education. There were no side effects from the meds. After several visits I got mad and told her quite directly that she was repeatedly making the same mistake and endangering her health. She asked that her records be transferred. Was that a high quality visit?"*

Phoenix internist

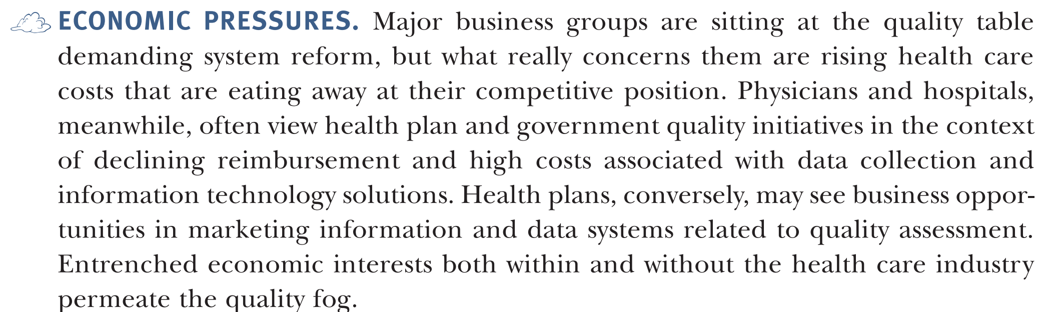
*"Between the health care we have and the care we could have lies not just a gap, but a chasm."*

Institute of Medicine, 2001

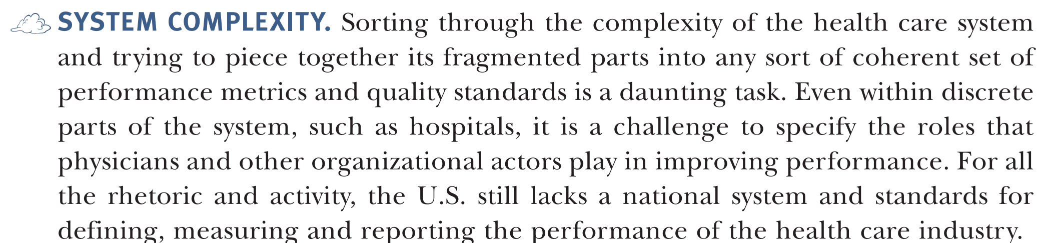
Bring up the subject of improving the quality of health care, and in no time at all you are immersed in a fog of competing perspectives, perceptions and interests that obscures a clear way forward.

Since our initial attempts to peer through this fog,[11] the pace of quality improvement efforts has picked up considerably. National, regional and local initiatives have literally mushroomed overnight, ranging from the development of quality metrics at the clinical level to pay-for-performance demonstration programs, the promotion of electronic health records, information transparency initiatives, safety initiatives, hospital quality improvement projects, community quality collaboratives, health plan high performance networks, quality scorecards and the like. In the words of one observer, the quality revolution in health care is at "the end of the beginning." We have made a good start, but we have a great deal further to go.[12]

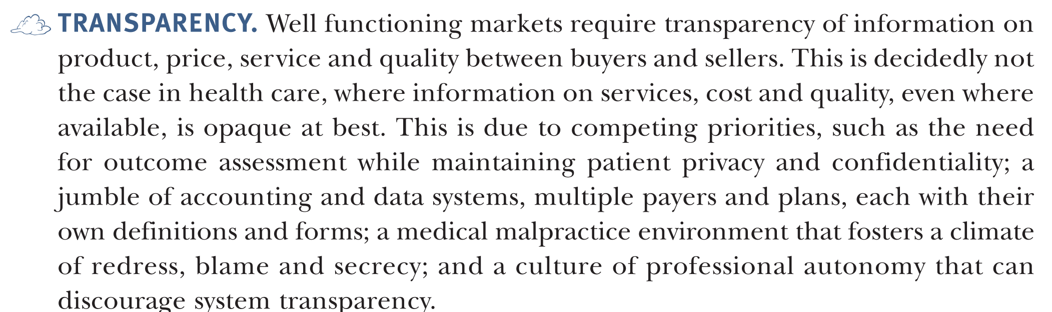
Despite the progress, the fog is as thick as ever. These are some of the contributing factors:



**ECONOMIC PRESSURES.** Major business groups are sitting at the quality table demanding system reform, but what really concerns them are rising health care costs that are eating away at their competitive position. Physicians and hospitals, meanwhile, often view health plan and government quality initiatives in the context of declining reimbursement and high costs associated with data collection and information technology solutions. Health plans, conversely, may see business opportunities in marketing information and data systems related to quality assessment. Entrenched economic interests both within and without the health care industry permeate the quality fog.



**SYSTEM COMPLEXITY.** Sorting through the complexity of the health care system and trying to piece together its fragmented parts into any sort of coherent set of performance metrics and quality standards is a daunting task. Even within discrete parts of the system, such as hospitals, it is a challenge to specify the roles that physicians and other organizational actors play in improving performance. For all the rhetoric and activity, the U.S. still lacks a national system and standards for defining, measuring and reporting the performance of the health care industry.



**TRANSPARENCY.** Well functioning markets require transparency of information on product, price, service and quality between buyers and sellers. This is decidedly not the case in health care, where information on services, cost and quality, even where available, is opaque at best. This is due to competing priorities, such as the need for outcome assessment while maintaining patient privacy and confidentiality; a jumble of accounting and data systems, multiple payers and plans, each with their own definitions and forms; a medical malpractice environment that fosters a climate of redress, blame and secrecy; and a culture of professional autonomy that can discourage system transparency.

**TECHNOLOGY.** Compared to other industries, health care has been slow to adopt modern information technology that has the potential to capture, monitor and analyze data in real-time settings. This is beginning to change, but there is still an overreliance on retrospective data capture, with its inherent weaknesses of timeliness and potential subjectivity; competing information systems, data standards and reporting requirements; information system silos that don't always talk to each other, and insufficiently trained staff to meet increasing measurement and reporting requirements. All of this contributes to the fog of quality.

**TRUST.** There are any number of knotty issues around the definition of terms like 'health,' 'quality' and 'outcome,' not the least of which are who defines them (ownership), who is responsible for applying them, and how they are judged accordingly (fairness). All of this comes down to trust, which has to be earned. Physicians may distrust what they perceive as narrow definitions of quality that come from health plans, or being held accountable for outcomes over which they have limited control; hospitals may distrust the motives and practices of certain highly paid specialist groups; participants in quality improvement efforts may distrust government-driven metrics and motives, and so on. Trust results from open communication and relationships established over time. Both can be in short supply in a quick-fix, bottom-line culture.

**MEASURES.** The selection of measures in quality improvement programs is hardly a straightforward process. There is a basic tension between those doing the measuring, and those being measured. Physicians might feel more comfortable with measures of clinical care that are risk-adjusted for caring for sicker patients; health plans and employers may prefer measures related to efficiency and their relation to cost of care. There are related issues of the timeliness and relevance of measures (real-time clinical assessment vs. historical administrative data), measuring care across providers, institutions and time; measurement at the individual or group level, and distinguishing between condition-specific measures like pneumonia and more general measures that might capture the quality across multiple conditions, such as hospital infection rates.

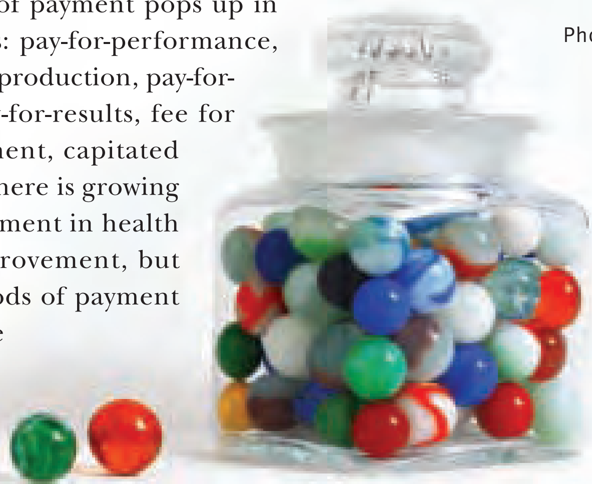
**REPORTING.** Agreeing on measures of quality is one thing; agreeing on reporting results is quite another. Many providers, for example, are concerned about reporting results at the individual, as distinct from the group or institution, level. Some believe that quality improvement is possible with reporting results internally, and not publicly; others believe that you get the greatest response when you share the results with consumers. Then there are those who argue that the complexity of care and patient variability render all report cards on provider performance essentially meaningless.

**PAYMENT.** Let us count the ways the method of payment pops up in discussions about quality improvement efforts: pay-for-performance, pay-for-participation, pay-for-reporting, pay-for-production, pay-for-procedures, pay-for-value, pay-for-quality, pay-for-results, fee for service, bundled payments, prospective payment, capitated payment, salary – no doubt there are others. There is growing recognition that the dominant methods of payment in health care do not necessarily promote quality improvement, but there is less agreement on exactly what methods of payment do – and how we transition from a fee-for-service model that continues to provide a very good living for many people.

**THE CRAMMED MARBLE JAR**

*"I personally believe that in the crammed marble jar of my moment with the patient, if I can achieve a reasonable compromise of what I believe to be pretty good medicine and what the patient really wants, and I have avoided creating malpractice issues for myself, and the patient can walk out the door feeling that I've heard them and trusting that I've been truthful with them, and I've put their best interests first, then I'm okay with the quality of the job I did."*

Phoenix internist



# *Piercing* the Fog of Quality

Piercing the fog of quality requires reproducible measurement of its component parts:[13]

- **OUTCOMES** Changes in health status as the result of health care interventions (recovery rates, mortality, health status, etc.).
- **PROCESS** Interactions between patients and clinicians (immunization rates, compliance with evidence-based protocols, etc.).
- **STRUCTURE** The capacity of the health care system to deliver care (staffing, equipment, number of surgeries performed annually, etc.).

Measurement efforts are underway at all levels. Some of the more prominent ones include:

- **The Centers for Medicare and Medicaid Services (CMS)** has routinely collected data for a number of years now on markers of the quality of inpatient and outpatient care, using evidence-based process measures (breast cancer, diabetes, myocardial infarction, pneumonia, stroke, etc.). These data sets are publicly available and used widely by researchers, agencies and companies "to study patterns of care and to derive measures of quality and safety."[14]
- **The Hospital Quality Alliance**, a collaboration between CMS and numerous other organizations, has developed a set of markers on the quality of hospital care, available on their Hospital Compare web site.[15]
- **The Ambulatory Quality Alliance (AQA)**, another federal-private collaboration, has issued a "starter set" of 26 clinical performance measures for ambulatory care (see sidebar on page 11).[16]
- **The Agency for Healthcare Research and Quality (AHRQ)**, the federal agency responsible for much of the publicly supported health care research in the country, has produced an evidence-based set of 26 inpatient quality indicators, 29 patient safety indicators, and 16 prevention quality indicators – all which can be extracted from administrative data.[17]

*"Health care access is unequal and causes major problems. The system values autonomy and individualism, not protocol and process."*

Phoenix neurologist

## Six Aims for Improving Health Care

SAFE
TIMELY
EFFECTIVE

EQUITABLE
EFFICIENT
PATIENT-CENTERED

Institute of Medicine, 2001

- **The National Committee for Quality Assurance (NCQA)**, a nonprofit organization that accredits health plans, provides the Health Plan Employer Data and Information Set (HEDIS), which captures quality indicators of the plans' outpatient care and generates various benchmarking reports.[18]
- **The Medicare Care Management Performance Demonstration Program**, another CMS initiative, rewards physicians for the adoption of information technology and its application to improve chronic disease outcomes.[19]
- **The Medicare Group Practice Demonstration Program (CMS)** measures and rewards physicians in selected large group practices for coordination of care and chronic disease outcomes.[20]

*"Quality is in the process; value is in the outcome. Process is not necessarily connected to the outcome."*

Tucson psychiatrist

- **The Physician Voluntary Reporting Initiative (CMS)** provides incentives for physicians to voluntarily report on measures designed by the American Medical Association and various medical specialty societies.[21]
- **The Better Quality Information (BQI) for Medicare Beneficiaries (AQA, CMS)** is a national demonstration project over six selected sites (including Arizona) to test a national framework for increasing transparency in health care quality measurements related to efficiency, effectiveness and cost.[22]
- **Leapfrog** and **Bridges to Excellence** are two national initiatives consisting of coalitions of major business partners and other groups that are focused on developing measures of health care quality and safety for hospital and ambulatory care respectively.[23]
- **Commercial health plans, government agencies and multi-stakeholder groups** are involved in over 100 quality improvement incentive programs (pay-for-performance) covering nearly 50 million Americans. This is expected to grow to 160 programs and 80 million covered lives by 2008.[24]

"A narrow definition *of quality in health care* is like installing better sonar on a submarine finder while the *ship is sinking* because the bottom is rusted out."

Phoenix internist

## AQA Starter Set
### Clinical Performance Measures[25]

**Prevention Measures**
1. Breast Cancer Screening
2. Colorectal Cancer Screening
3. Cervical Cancer Screening
4. Tobacco Use
5. Advising Smokers to Quit
6. Influenza

**Vaccination**

7. Pneumonia Vaccination

**Coronary Artery Disease**

8. LDL Cholesterol Drug Therapy
9. Beta-Blockers after Heart Attack
10. Beta-Blocker Therapy – Post MI

**Heart Failure**

11. ACE Inhibitor/ARB Therapy
12. LVF Assessment

**Diabetes**

13. HbA1C Management
14. HbA1C Management Control
15. Blood Pressure Management
16. Lipid Management
17. LDL Cholesterol Levels
18. Eye Exam

**Asthma**

19. Use of Appropriate Medications for Asthma
20. Asthma Pharmacologic Therapy

**Depression**

21. Antidepressant Medication Management (acute)
22. Antidepressant Medication Management (continuing)

**Prenatal Care**

23. Screening for HIV virus
24. Anti-D Immune Globulin

**Measures Addressing Overuse/Misuse**

25. Appropriate Treatment for Children with Upper Respiratory Infection
26. Appropriate Testing for Children with Pharyngitis

PHVMI

PHOENIX HEALTHCARE VALUE MEASUREMENT INITIATIVE

In early 2005, SLHI facilitated a meeting of a number of national health plans, employers, quality improvement coalitions and organizations, state-based health care providers and professional associations to determine the feasibility of launching a pay-for-performance demonstration program with potential for national replication.[26]

Why Arizona? It was the existence of *Arizona HealthQuery (AzHQ)*, a fully functional integrated database of over six million public and private health care records,[27] that proved to be the initial attraction. The plans and large employers reasoned that *AzHQ* could be harnessed to develop measures of health care quality more quickly and efficiently than other means, and that these measures could then be deployed by the various partners in their own quality improvement efforts.

*"We have a job description in our office for 'Nurse on Hold.' This is the person who is in charge of getting the prior authorizations from the health plans. It has a big cost and little value. Where's the quality measure on that?"*

Tucson internist

## A Work in Progress

Eighteen months later, the project remains a work in progress. Here is a short summary of the highlights and lessons learned so far:

1. The initial meetings of the stakeholders resulted in changing the focus from *pay-for-performance* to developing metrics of value, or the total cost/benefit equation. Physicians were particularly concerned about a narrow focus on reducing costs, and on themselves as the principal health system clinical actors, without also considering the "performance" of health plans, hospitals, employers and consumers across the entire system of care, and how the optimal interaction of all system components is the proper locus of attention. The group agreed, and the project was officially christened the *Phoenix Healthcare Value Measurement Initiative (PHVMI)*.

   **LESSON:** When speaking to physicians, the rhetoric of pay-for-performance doesn't get you as far as focusing on quality and value.

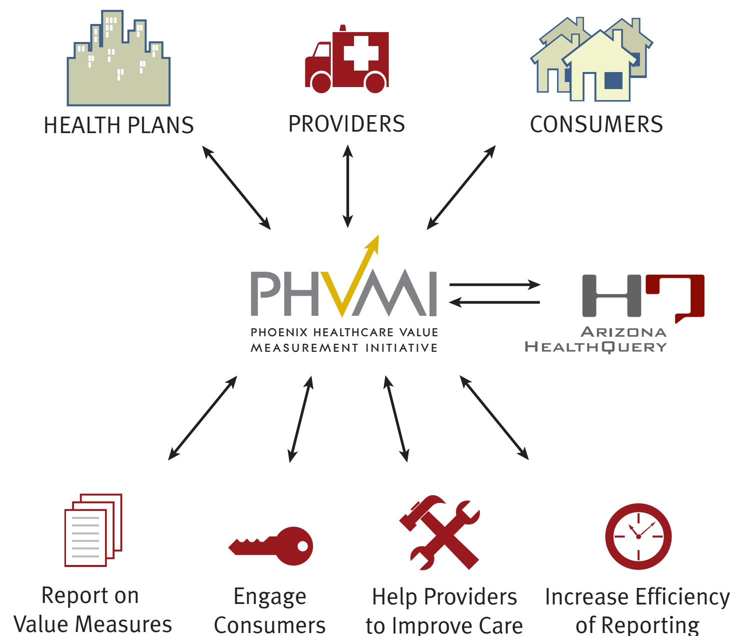
2. There was spirited discussion around the issues of process measures and outcome measures. A consensus emerged that while the group would initially seek to take advantage of national quality metric initiatives (in particular, the AQA starter set of 26 ambulatory care measures), they would also pursue linking those processes to metrics of both health care costs and costs incurred in the form of workplace absences and loss of productivity.

   **LESSON:** Don't let the best become the enemy of the good. Move deliberately from the less controversial to the more complex. *Progress*, not perfection, is the point. Participants acknowledged that process measures aren't necessarily related to outcomes, but those that are more firmly established in the clinical practice literature provide a way to get started on establishing the reporting mechanisms and teasing out system relationships that promote value.

3. The group discussed the advantages and disadvantages of using existing administrative data to populate the metrics. Health plans and employers tended to prefer this approach, as the data are already being collected and are less labor-intensive to "mine" than using clinical data that, in the absence of real-time electronic capture, has to be extracted manually from charts. Providers, especially physicians, noted that administrative data systems were usually incomplete and often inaccurate, but because of the cost and time involved in capturing clinical data, they concurred that it was a place to begin.

   **LESSON:** Money and infrastructure matter. When we began to discuss what the *PHVMI* might cost to implement, and how the budget should be allocated across participants, the advantages of using administrative data quickly became apparent.

4. The subject of public reporting and provider quality "report cards" made the provider groups uncomfortable, especially at the individual reporting level. Physicians found them meaningless at best and dangerous at worst, given patient variability, teasing out "performance" in cases across multiple health professionals, institutions and systems; and the often tenuous relationship between narrowly conceived metrics and desired clinical outcomes. Hospitals, in turn, were more comfortable with reporting structural metrics, such as infection rates, than they were with metrics on specific conditions that involved the interplay of multiple clinicians and departments, and even other institutions. The health plans and employers pushed back on this, stressing that regardless of the difficulties and ambiguities, public reporting on quality metrics was "inevitable," and the group needed to come to some understanding of just what information on health care quality was to be shared with the public – and how.




**LESSON:** Rushing to public reporting without establishing the validity of the results and the trust of those being measured is a huge mistake, especially when the reporting is voluntary. Building trust and confidence takes time, and in the rush to get "product information" to consumers, time is perceived to be in short supply. The issue of what should be reported publicly, and what should be reported internally, will continue to be a point of contention for some time.

5. The existence of a broad-based coalition of national and regional health care stakeholders in the *PHVMI* precipitated its selection in March 2006 as one of six national demonstration sites for what is now known as the CMS/AQA *Better Quality Information Intiative (BQI)*. While there is some overlap between the PHVMI and the BQI, the latter is more narrowly focused on a subset of the AQA's starter set of ambulatory care metrics and limited to the CMS population. Ideally, the PHVMI hopes to incorporate the CMS population and data set into its broader data base of health plan, employer, provider and Medicaid information and to develop a robust set of value measures across multiple points of the health care system. Negotiations to pursue this are currently underway.

**LESSON:** What federal leaders like the President and the Secretary of Health and Human Services say they intend to do is one thing; what federal rules, contract requirements and just the creaking of the bureaucratic machinery will allow them to do is another. Working with the federal government requires patience.

The *PHVMI* moves forward. We are revising it as we go along, much like the broader health care quality movement itself. Given the externalities, this gradualist approach is the only practical way to proceed.

# Pay-For-Performance: The Future, or a Fad?

*Pay-for-Performance (P4P)* refers to a variety of payment structures that offer financial rewards for meeting specific goals tied to improving quality of care, such as providing certain preventive measures, following best practice algorithms, utilizing health information technology, and so on. Despite the common perception that P4P is a relatively recent innovation, "roughly one in five physicians outside of solo practice is already compensated on the basis of their quality of care, a percentage that has changed little over the past decade," and "nearly one in 10 physicians reported that quality incentives are a very important component of their compensation."[28]

So why all the fascination with P4P now?

- **$ COSTS.** Employers and health plans are motivated to improve health outcomes and reduce costs – the best of all possible worlds. Tying P4P approaches to tiered networks and contracting strategies is seen as one way to drive business to those who are the most effective and efficient providers of care.

## OVERHEARD: Notes on Quality Improvement

"Classic physician culture is about pedigree, not performance."

"The quality community is trying to redesign the plane that hospitals and physicians are flying while it's in the air."

"We shouldn't practice to the measure, but measure to improve practice."

"For physicians, 'Quality is what we do. We just need to work harder.' This is a fundamental cultural issue that begins with training."

"CMS is trying to do quality metrics out of billing data, but billing data is a gaming environment. Hospitals are trying to comply with existing measures, and not generating industry-leading ideas."

"We should focus on tools and measures that give providers the opportunity to do the right thing, as distinct from how they are doing. These are most likely going to be composite measures."

"You get improvement by getting physicians to use measures, not necessarily by creating new measures".

From a national conference on Health Care Data Collection and Reporting, November 2006.

## P4P

| TODAY | | TOMORROW |
|---|---|---|
| Pay-for-Production | ☞ | Pay-for-Performance |
| Pay-for-Procedures | ☞ | Pay-for-Participation |

- $ **QUALITY.** The IOM report on the quality chasm in health care galvanized attention on the process and procedures of medical care in the U.S. Among other things, the IOM found that the dominant fee-for-service payment arrangements may actually produce *disincentives* for quality (pay-for-procedures, pay-for-production). This stimulated interest in both the scientific best practices literature and the popular press on ways to link payment to performance on quality measures.
- $ **CMS.** As the elephant in the U.S. health expenditures room, CMS zeroed in on new methods of payment as a way to improve quality and address runaway costs that threaten to bankrupt public systems of care. Its promotion of various P4P programs for physicians and hospitals over the recent past has set the stage for other health care actors to play a part.
- $ **TRANSPARENCY.** The forces driving greater transparency of information at all levels of the health care system focus increasing attention on the performance of the system's components relative to expectations, inputs and outputs. Transparency invites inquiry, with both desirable and undesirable consequences, depending on one's vantage point. Once the components of the clinical encounter are "unbundled" and made transparent, the attention shifts to ways to redesign the payment system to incentivize the more efficient and effective production of services.
- $ **TECHNOLOGY.** Advances in the application of information technology to improve production and performance in other industries has fueled interest in the health care industry as the next frontier for commercial applications. The data gathering, analysis and dissemination of health care performance metrics are projected to be situated within a vast electronic infrastructure, which itself is the purview of another vast industry seeking to expand its business. It's interesting to speculate on how much of the recent attention on P4P is driven by the market forces of expanding technology.
- $ **CONSUMERISM.** Another topic of speculation is the impact of the so-called "consumer movement" on P4P – consumers demanding more information on cost, performance and quality, and more choice and control in their use of health care services. The consumer revolution is trotted out with predictable regularity by the forces of health care reform, especially those that favor market-based approaches, as the tsunami that will rush over those providers who don't measure up on various performance metrics and render them obsolete in the new age of "quality." The issue is how much of consumerism as a market force promoting P4P is driven – and hyped – by payers and other advocates of health system reform, and how much is a direct expression of actual consumer interests and intentions.[29]

*"I'd trade any pay for performance in an instant for integrated payment for the care of populations."*

Don Berwick, MD, CEO, Institute for Healthcare Improvement

### Pay-for-Population

What we should *really* be talking about is how we transition from the current fascination with pay-for-performance to a *pay-for-population* approach within a high-performance health system in the U.S.[30] This is the only real way to get the maximum benefit at the lowest possible cost, reduce disparities, and achieve a fully integrated system.

Obviously there are major challenges – determining the measures, coming up with the right financial incentives, achieving vertical integration across the system, figuring out how to reallocate resources in the face of intense special interests – but how are these any different from difficulties with a pay-for-performance approach based on individuals?

## P4P: WHAT DOES THE PUBLIC THINK?

Not much, according to a 2004 poll.[31] While 81% of consumers believe bonus pay for meeting additional goals or doing superior work is a good idea, only 51% think it's a good idea when applied to physicians, as compared to teachers (84%), line workers (89%) or retail sales clerks (87%).

The reason: People think physicians are paid well already, plus they are bound by the Hippocratic Oath to deliver quality care and shouldn't get paid more to do things they should be doing anyway.

# P4P Prospects

The future of P4P in health care will most likely be mixed. Here is a synopsis of the central issues, and one interpretation of where P4P may be headed:

- **The effect of financial incentives on improving quality.** The evidence so far is sketchy, and recent studies suggest that it is modest at best.[32] Some believe that money is not the principal motivator at the individual physician level for engaging in quality improvement programs – a sense of professionalism is.
- **The impact of pay-for-reporting.** At this stage of the game, physicians and hospitals could be said to being paid for reporting on the use of quality metrics, most of which are focused on the processes of care, and not outcomes. This is not necessarily a bad thing. As providers become more comfortable with publicly reporting on measures of care, we would anticipate a greater sense of trust and buy-in as metrics are collaboratively improved and the emphasis begins to shift to outcomes, information technology (IT) and cost-efficiency.
- **Large and small practices, individuals and groups.** So far, the evidence suggests that P4P as it applies to physicians is an approach best suited to larger practices and groups, and is harder to implement at the individual or small practice level. Some speculate that this could widen a quality gap between larger and smaller practices.[33] Hence, many believe we should focus on medicine as a *team* sport: provide financial incentives at the group, not the individual level; link smaller practices together in "value" systems through information technology; and design incentives so they reward all components of high value care, and not just the "best" providers.
- **The issue of risk adjustment.** Designing P4P programs that account for variations of risk in patient panels – some physicians and hospitals treat sicker patients with multiple and complex diseases – is not an easy task, especially when the metrics rely primarily on claims, and not clinical, data. Without risk adjustment, however, some fear providers may simply avoid treating sicker patients in order to get high performance ratings. We clearly have some way to go with program design and IT diffusion before we get risk adjustment right.
- **Teaching to the test.** What gets measured, gets done. Conversely, what doesn't get measured may not get done. The danger with narrow reporting systems is that providers may focus their attention on the metrics being tracked and pay less attention to other equally important measures of quality of care that aren't being tracked. But then, adding more measures to report across the system (assuming we could devise them) increases the time and cost of collecting, analyzing and reporting data. This isn't a reason for not doing P4P, but it is a reason for being guarded about its more narrow interpretations as an indicator for total quality of care.
- **Public or internal reporting.** At this stage of P4P development, we can see a number of reasons why participants may want to focus on internal reporting to employers, plans and providers to improve their own systems, and not to rush the production of quality report cards for consumers. If the goal of P4P is to actually improve quality – and not simply to steer consumers to providers that the "raters" deem to be "cost-effective" – then we should focus on internal dissemination and further refinement first, and public dissemination only when there is general agreement that the metrics are ready for prime time.

- **Multiple P4P programs.** In the absence of any general agreement about P4P program design and best practices, a variety of organizations are testing different approaches, and providers are often faced with having to collect and submit data across a bewildering field of players – an expensive and time-consuming proposition. This is one good reason why employers, public and private payers, and providers serving a common medical market should coordinate their efforts and devise common data sets that aggregate information across multiple participants. This is what the PHVMI is designed to do in Phoenix.

## Will P4P Reduce Costs?

Not necessarily. According to researchers at the Dartmouth Medical School, only a relatively small portion of health care costs is influenced by effective care. Most of health care spending falls into the categories of *overuse* and *misuse*.[34]

Providing incentives for providers to do the "right thing" (prescribe beta blockers after a heart attack, etc.) may result in more effective care and better outcomes, but it won't make much of a dent in rising costs if we don't also find ways to stem the overuse of expensive procedures that aren't always related to better outcomes (supply-induced care) or the misuse of care that involves significant tradeoffs and isn't always based on patient values and preferences (preference-sensitive care).

- **Multiple P4P metrics.** The same issue exists for multiple metrics as for multiple programs: too much confusion, fragmentation and expensive redundancy. National measures should be tested first, especially those that enjoy some measure of acceptance and for which data is readily available (AHRQ inpatient quality indicators, National Quality Forum, Ambulatory Quality Alliance, Hospital Quality Alliance, Leapfrog, etc.). Simply getting more providers to report on these is an important first step along the road to a value-based health care system.

- **The Reward Structure.** What exactly are we trying to do with P4P programs? Improve quality across all providers and patients? Reward only the "best" and penalize the "poor?" Set benchmarks that everyone must meet? Further, how much of a financial reward makes a difference? Frankly, we know very little about any of this. Most P4P programs for physicians target 5-10% of associated fees, and 1-2% for hospitals. Less than 25% of these programs reward improvement; the great majority reward meeting fixed thresholds of performance.[35] Many believe we will make more progress by encouraging improvement uniformly and explicitly across systems of care rather than setting individual benchmarks that all must meet. More careful program design and evaluation are needed.

- **The cost-benefit issue.** Health plans and employers often tout the goals and benefits of establishing P4P programs but focus less on their costs. Providers, on the other hand, focus more on their costs in terms of time and compliance (lost revenue) and less on the benefits, which many providers believe accrue primarily to payers who are interested in reducing costs first and in improving quality second. This is a bit of a caricature, but it's not far off the mark.

- **The issue of sponsorship.** Given the perception of different motives for entertaining P4P initiatives, it's not news that providers tend to distrust those sponsored by health plans and employer coalition, and prefer those sponsored by provider groups. Efforts sponsored by neutral third parties may be preferred but can also be viewed as less credible in terms of expertise in health care delivery and measurement.[36]

*What exactly are we trying to do with P4P programs?*

*"In 1968, a study came out demonstrating that the administration of prophylactic antibiotics prior to a vaginal hysterectomy reduced postoperative infection. Forty years later, we still don't get it right. To me, that's appalling."*

Tucson gynecologist

- **The issue of trust.** In the end, the success of P4P programs – indeed, of all health care quality improvement efforts across system stakeholders – comes down to establishing trust between the participants. The essence of trust, in turn, lies in constant communication, patience and timing.

We continue to believe that P4P approaches should be encouraged in the market, and the results clearly evaluated and broadly disseminated. Until substantial progress is made on these issues, however, it seems unrealistic to expect a clear and major shift in their successful implementation and adoption.

"The best quality is what I'm doing at the time. Physicians are very egocentric. Many don't see the bigger picture, and how they fit into it."

Phoenix oncologist

## Incentives: *A Physician's View*

"The patient is not incentivized to participate willingly in health care delivery. Why does the overweight patient not pay more for her insurance? Why does the patient who doesn't get an annual exam not pay more? Or the patient who doesn't take his medications, or who smokes?

"The physician, too, is not incentivized to participate in quality health care delivery. How outrageous that Medicare does not cover annual physical exams. How absurd that the AHCCCS program reams me for not ordering enough HGBA1Cs on my diabetics, but does not reimburse me to run them.

"Process vs. outcome. I have counseled many patients to lose weight. Very few do. I suspect that was good process. Incentivizing actual weight loss – which means measuring outcomes – is much more likely to improve the health of Americans."

Phoenix internist

## *Payment* Structure

Like Goldilocks, we don't want the health care payment structure to be too hot or too cold, but "just right:"

### Too Hot

**FEE-FOR-SERVICE.** If physicians and other providers are paid a separate fee for every service, test or procedure they provide, they have incentives to do *too much* for patients.

### Too Cold

**CAPITATED PAYMENTS.** If providers are paid a set amount per patient per month (referred to as capitation), they have incentives to do *too little*.

### Just Right?

**BLENDED PAYMENTS.** Combine the best of fee-for-service and capitation in some kind of optimum blend through such vehicles as "evidence-based case rates," or ECRs, which might be "constructed from good clinical practice guidelines to establish a budget for all the providers treating the patient."

One such approach currently under development is the ***Prometheus*** *(Provider payment Reform for Outcomes Margins Evidence Transparency Hassle-reduction Excellence!)* payment system.[37] Prometheus relies on sophisticated "plug and play" software to translate the clinical guidelines into ECRs, establish the ECR budget and track the process of care, allocate portions of the ECR to the providers who "bargained" to render them, provide feedback to providers all along the "value chain," and then calculate a "quality score" for both the parts and the whole of the episode of care.

In other words, Prometheus is P4P on steroids.

Case rates and episodes of care are much in the mind of health care reformers these days – the oft-cited work of Michael Porter on "value-based competition" is one example,[38] and the Institute of Medicine's recent report, *Rewarding Provider Performance*,[39] makes much of them as well. The idea has been around awhile, but aside from Medicare integrated DRG payments for hospital inpatient care (which have their own set of problems), implementation has been spotty.[40] The economic forces behind the dominant fee-for-service model are considerable, and the payment system will not be "transformed" overnight.

Still, "new payment incentives must be created to encourage the redesign of structures and processes of care to promote higher value."[41] This experimentation must continue.

*"Physicians are focused on quality. Someone else is going to have to figure out the payment issue."*

Phoenix pediatrician

*"There are many mechanisms for paying physicians; some are good and some are bad. The three worst are fee-for-service, capitation and salary."*

J.C. Robinson, 2001

*"Technology is a big part of the solution. If I can get data in real time, see what impact it is having on my practice, see it aggregated across other providers and even across the country, and be able to adjust my practice patterns and actually measure its outcome – that's huge. There's way too much information, too many things to measure and follow, for anybody to make significant headway without the technology."*

Phoenix internist

# Emerging Lessons on Integration and Infrastructure

We have culled the following observations on the importance of integration and infrastructure to quality improvement efforts in health care:

- **SIZE MATTERS.** All things considered, the quality of care in larger integrated medical groups is higher than in individual practice associations.[42] That doesn't mean that quality improvement initiatives can't be effectively mounted in small groups, but their success will be enhanced by both clinical and electronic linkages to the larger integrated care process.
- **MEDICINE IS BECOMING A TEAM SPORT.** The days of one physician-one patient are numbered. Studying the team factors that spell success in the care process will drive greater integration in the future.
- **QUALITY CONTROL PRECEDES QUALITY IMPROVEMENT.** "Quality Control is that infrastructure that enables you to identify and consistently manage routine operations on a quality foundation."[43] The size and shared resources of larger integrated structures make quality "production" control more feasible. Quality improvement rests on this infrastructure.

## Lessons from Banner Health

The recent experience of Banner Health illustrates the advantages of system integration, size and active quality management in achieving better health outcomes at reduced expense.

Banner Health, which is based in Phoenix and runs 20 hospitals over seven states, covers 26,000 employees and their family members in Arizona alone in a self-insured arrangement. Unlike many other large self-insured employers, however, Banner runs its own health plan and provider networks as one integrated whole. While Banner is hardly immune from rising health care costs, their annual medical plan cost per employee is predicted to be $8,493 in 2007, compared to an Arizona average of $9,432 – a 10% difference.[44]

Arguably, some of the difference may be due to employing a better educated and healthier population. A closer examination, however, reveals the benefits of actively managing members with chronic diseases such as diabetes, increasing the use of urgent care facilities and reducing the inappropriate use of emergency room care; employing health coaches, establishing a "Clinic Without Walls" program for high service users, changing the benefit structure to promote the optimal use of pharmaceuticals and prevention services, and engaging providers in active case review and follow-up, among other things.

It helps to have an integrated health plan and delivery system, compared to a more fragmented "brokered" approach. Intermountain Healthcare and Kaiser Permanente are two other cases in point.

**TECHNOLOGY MATTERS.** Getting the right process/outcomes electronic tracking systems in place is critical to success but is also enormously difficult, as large health systems that have spent millions on inadequate systems can attest. Many practices do not have the resources to run sophisticated data systems, and simply installing a computer system with an EHR won't get you there.

**THE INTEGRATED CONTINUUM OF CARE MATTERS.** The integrated care trajectory around the patient – the physicians and nurses, the support staff, the administrative routines, follow through and checking up – is the only level at which we can truly measure quality and get at the value of the health care experience. Focusing on individual performance and not paying close attention to the linkages across the system – and having the robust data systems to track and assess them – won't take us very far and may in fact be counterproductive.

"Culture trumps strategy *every day.* More and more docs are just proceduralists. They don't know a thing about the *integration of care.*"

Tucson family physician

## Is There a Business Case for Quality?

*"Clinical quality improvement is a fast way to the poor house if you haven't figured out a structured way to harvest back some of those savings in administrative tasks."*

Brett James, M.D., Intermountain Institute for Healthcare Delivery Research

The business case for quality improvement in health care can be made if the organization that makes the necessary investment (technology, training, services, etc.) realizes a financial return on the investment within a reasonable time frame. There are all sorts of reasons to invest in quality – improved health and productivity, professional ethics, philanthropic motives – but the private sector is unlikely to actively pursue quality initiatives if it doesn't make financial sense to their bottom line.

As it stands, there are significant financial obstacles to making major investments in quality improvement within a production-based payment system that fails to pay for quality while paying for defects.[45] What profit is there in cutting your inpatient readmission rates if you depend on those readmissions to fill up your beds and surgical suites? Further, if you made major investments in quality improvement, such as installing a sophisticated electronic tracking and metric system, would consumers know the difference and reward you with increased volume of services?

The business case for quality improvement is a hard sell unless there are major changes in the way we pay for health care. Paying for value, paying for quality – that's the challenge facing the system today.

## Consumers: *Missing in Action?*

*"Maybe we should develop global health care budgets for individual consumers based on their medical profile. That would get their attention."*

Health plan administrator

For all of the talk about the centrality of the consumer in improving the quality of health care, a minority are actively engaged in "shopping for value" or pay much attention to various quality scorecards and ratings systems supplied by health plans or quality rating groups.

And why should they? Their employer still picks up the lion's share of their premiums, they select their physicians and often get what they consider to be effective care without waiting months for an appointment; their out-of-pocket costs remain reasonable in the scheme of things, and they continue to bask in the illusion that someone else is picking up the tab.

### Pain is on the Way

Third-party reimbursement has sheltered consumers from the economic realities of health care for decades. They will not go gently into the good night of "personal responsibility," "skin-in-the-game" and "shopping for value" until they feel considerably more pain than they're feeling now.

All of this is predicted to change. Pain is on the way. More employers are passing along rising premium costs to their employees, benefits are being trimmed, the ranks of the uninsured are growing. In HMOs and other plans where P4P programs and rating systems have taken hold, consumers are getting an education on using quality metrics to make service decisions. Commercial plans and employers are directing their members and employees to web sites that rate physicians and hospitals on various process measures; various quality initiatives are underway across the country that target consumer education and involvement; commercial enterprises like HealthGrades[46] that market ratings of hospitals, nursing homes and physicians to consumers, payers and providers alike look for opportunities to expand their services.

Meanwhile, most of us continue to rely on our own informal networks for health care advice – family, friends, local physicians – because of relationships and trust established over time. Findings from SLHI's own public opinion work in Arizona[47] suggest that while consumers are distrustful of health plans and believe that quality of care is declining across the board, the majority are satisfied with their own physicians and health plans, and wish to continue those relationships. A future in which they shop for health care services like they might a car is not a prospect many of them would presumably relish.

This is because most Americans consider health care to be a right or entitlement – not a consumer product.

At the same time, more consumers are accessing thousands of Internet sites for a wide variety of health-related information. As plans, providers and payers get better at this, it's not hard to imagine that the sophistication and use of quality-related information and decision support tools will increase exponentially in the future.

The consumer revolution in health care is coming. We just don't know when.

# Value Rx: A Prescription for Value-Based Health Care in Arizona

# Principles of a *Value-Based* Health Care System

We propose the following general principles for creating a value-based health care system in Arizona:

- **SOLIDARITY.** Everybody is in, everybody is covered. You can't opt out. You can't be denied coverage. This reduces the huge failure costs borne by other actors in the system.
- **PERSONAL RESPONSIBILITY.** Wellness and prevention. Incentives to keep us all alert, focused and involved in promoting good health at the individual and community level.
- **INTEGRATED CARE.** The coordination of effective care across the continuum. The integrated care trajectory around the patient is the only level where quality can truly be assessed.
- **A TOTAL PERSPECTIVE PAYMENT SYSTEM.** One that reinforces the integrated care continuum and rewards quality. Moving away from fee-for-service alone.
- **TRANSPARENCY.** Policies that promote the collection, analysis and accessibility of relevant information to inform public and private choice; efficiency and effectiveness. The extensive use of health information technology; public reporting of quality measures to promote clinical improvement and public accountability.
- **PATIENT PRIVACY AND CONFIDENTIALITY.** Fail-safe systems to protect patient rights, privacy and confidentiality.
- **SYSTEM IMPROVEMENT.** A relentless focus on improving quality and safety, reducing error, waste and unnecessary care; and lowering costs. A total value perspective.

"There really is a recognition among many physicians that quality improvement needs to be built into the practice, and the whole training, certification, and practice modalities need to be changed. This won't happen overnight."

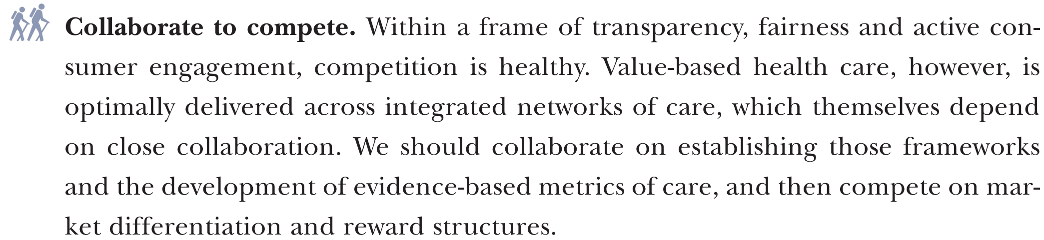
Tucson internist

# Strategic *Imperatives*

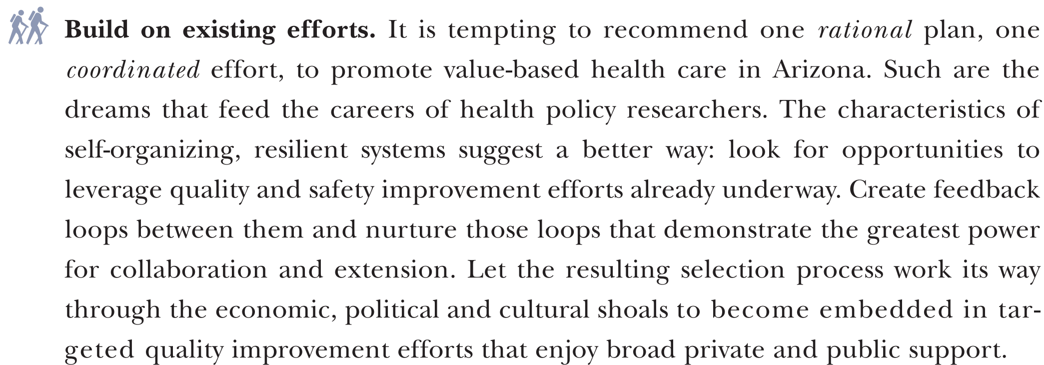
There is no final destination in value-based health care. It is the *journey* that defines the end: *continuous quality improvement.*

These common sense strategic imperatives will serve Arizona well along the way:

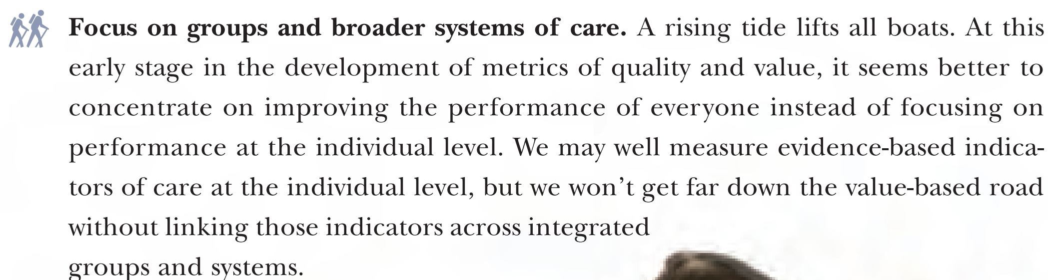
*Continuous Quality Improvement*



**Collaborate to compete.** Within a frame of transparency, fairness and active consumer engagement, competition is healthy. Value-based health care, however, is optimally delivered across integrated networks of care, which themselves depend on close collaboration. We should collaborate on establishing those frameworks and the development of evidence-based metrics of care, and then compete on market differentiation and reward structures.



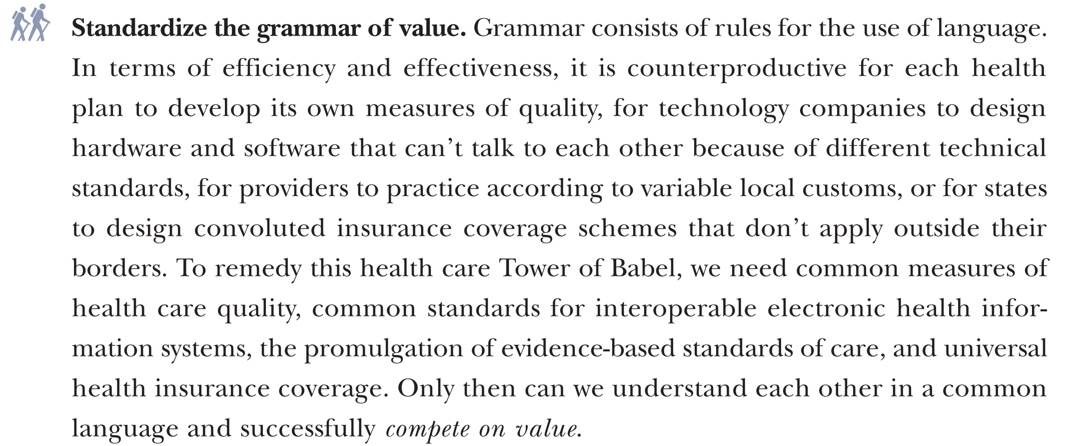
**Build on existing efforts.** It is tempting to recommend one *rational* plan, one *coordinated* effort, to promote value-based health care in Arizona. Such are the dreams that feed the careers of health policy researchers. The characteristics of self-organizing, resilient systems suggest a better way: look for opportunities to leverage quality and safety improvement efforts already underway. Create feedback loops between them and nurture those loops that demonstrate the greatest power for collaboration and extension. Let the resulting selection process work its way through the economic, political and cultural shoals to become embedded in targeted quality improvement efforts that enjoy broad private and public support.



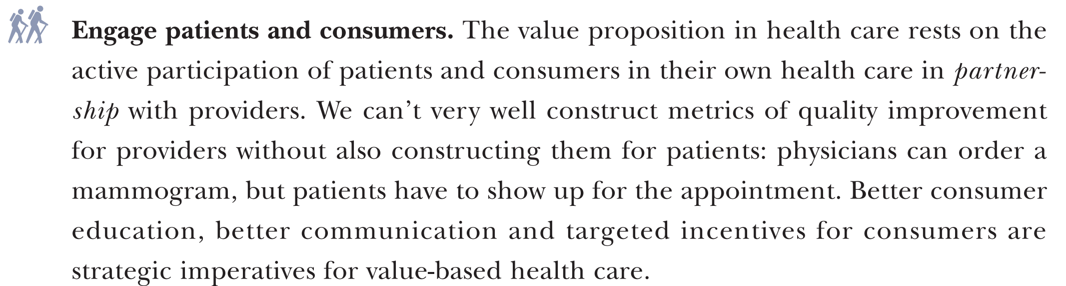
**Focus on groups and broader systems of care.** A rising tide lifts all boats. At this early stage in the development of metrics of quality and value, it seems better to concentrate on improving the performance of everyone instead of focusing on performance at the individual level. We may well measure evidence-based indicators of care at the individual level, but we won't get far down the value-based road without linking those indicators across integrated groups and systems.

*"The alternative to a value agenda is basically the unraveling of the insurance system."*

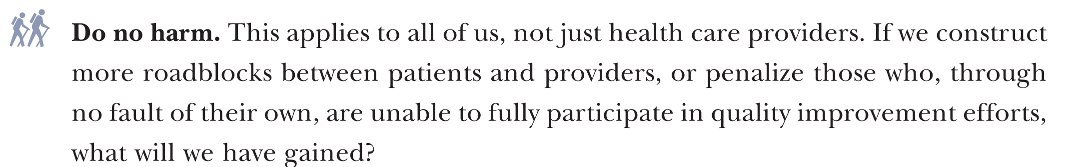
Margaret O'Kane
President,
National Committee
for Quality Assurance



**Standardize the grammar of value.** Grammar consists of rules for the use of language. In terms of efficiency and effectiveness, it is counterproductive for each health plan to develop its own measures of quality, for technology companies to design hardware and software that can't talk to each other because of different technical standards, for providers to practice according to variable local customs, or for states to design convoluted insurance coverage schemes that don't apply outside their borders. To remedy this health care Tower of Babel, we need common measures of health care quality, common standards for interoperable electronic health information systems, the promulgation of evidence-based standards of care, and universal health insurance coverage. Only then can we understand each other in a common language and successfully *compete on value.*



**Engage patients and consumers.** The value proposition in health care rests on the active participation of patients and consumers in their own health care in *partnership* with providers. We can't very well construct metrics of quality improvement for providers without also constructing them for patients: physicians can order a mammogram, but patients have to show up for the appointment. Better consumer education, better communication and targeted incentives for consumers are strategic imperatives for value-based health care.



**Do no harm.** This applies to all of us, not just health care providers. If we construct more roadblocks between patients and providers, or penalize those who, through no fault of their own, are unable to fully participate in quality improvement efforts, what will we have gained?

# Value-Based Health Care: *A Systemic Model*

A systemic model of value-based health care is optimally derived by ***linking*** community health and the health care system:

- The concept of 'quality' in the formal health care delivery system is defined as the degree to which health services increase the likelihood of desired health outcomes and are consistent with current professional knowledge.[48] The problem is that you can get the highest quality of care in the world and still have poor outcomes, whether as the result of the limits of human knowledge, unhealthy behaviors or just plain bad luck. The more we ***link*** efforts to encourage healthy behaviors and healthy communities with quality medical care, the greater the likelihood of getting the outcomes we desire at reduced system cost. The effect of smoking cessation on reduced costs for cardiovascular care is one of many examples.
- Operationally, quality is tied to resource constraints, which in turn are ***linked*** to what we can afford at the individual, organizational, community and broad society levels. Resource constraints involve economic tradeoffs at these multiple levels, which play out in a competitive market and public policy. A ***total value perspective*** across competing perspectives and interests makes those multiple levels apparent and invites an examination of ways to improve total system performance relative to resource constraints at all levels.

The schematic on the following page illustrates one version of how these linkages might be configured in Arizona. Additionally, we offer mini-scenarios and case points to discuss the central principles and functions of value-based health care.

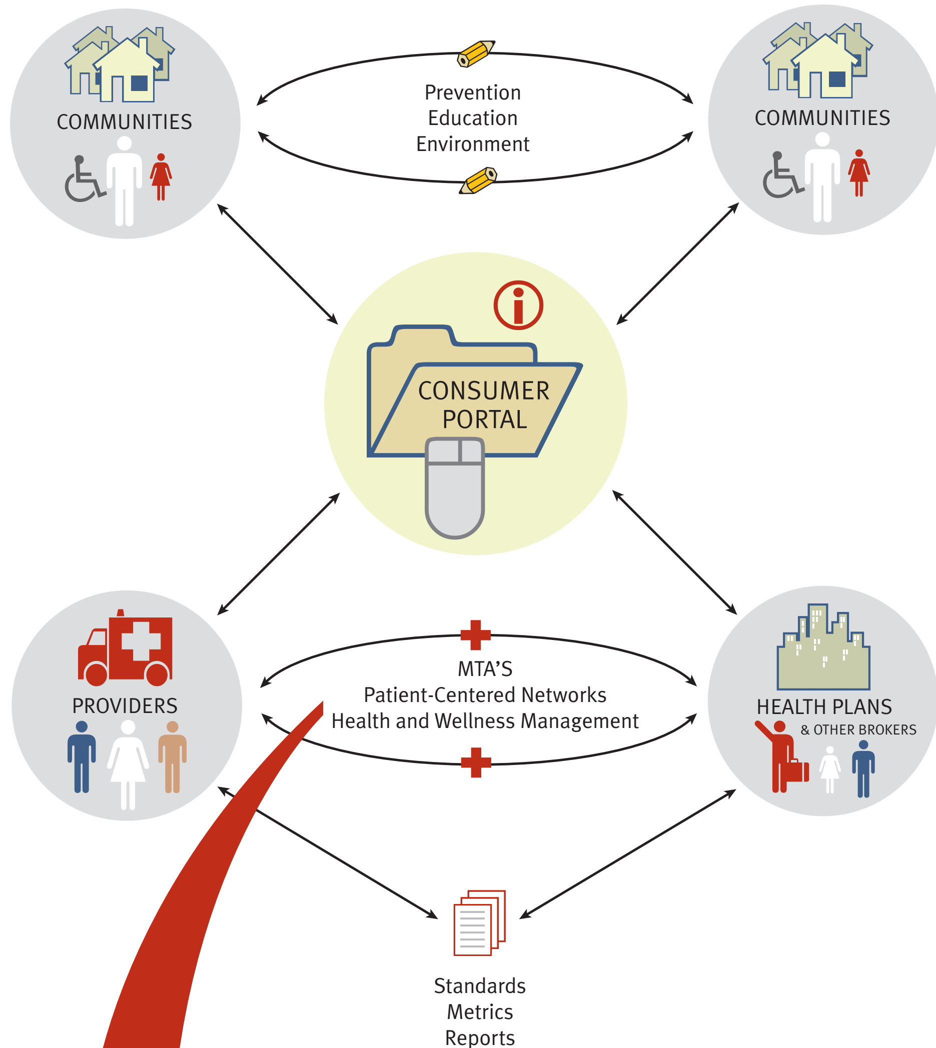
$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$

## Four Cornerstones

These are the four interconnected cornerstones espoused by the Department of Health and Human Services to build a value-driven health care system in the U.S.:[49]

- **CONNECTING THE SYSTEM.** Promoting electronic health records. Developing standards to connect all health information systems to securely communicate and exchange data.
- **MEASURE AND PUBLISH QUALITY.** Work with physicians and hospitals to define benchmarks of quality care. Disseminate and promulgate them.
- **MEASURE AND PUBLISH PRICE.** Agreement is needed on what procedures are covered in each episode of care. Calculate costs for identical services, relate to price and make this information available.
- **CREATE POSITIVE INCENTIVES.** All parties – providers, patients, insurance plans and payers – should participate in arrangements that reward both those who offer and those who purchase high-quality, competitively-priced health care.

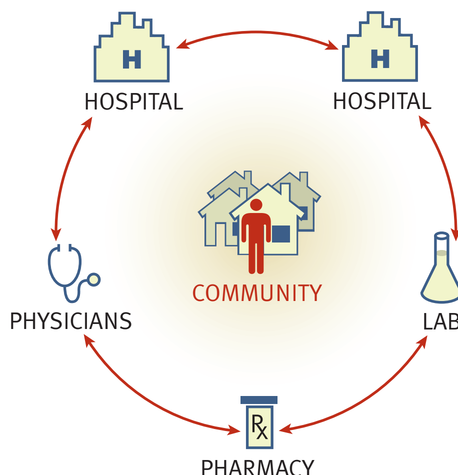
*A systemic model of value-based healthcare is optimally derived by linking community health and the health care system. This schematic illustrates one version of how these linkages might be configured in Arizona.*




## Medical Trading Area (MTA)

### A Shared Electronic Health Information Exchange

An MTA is usually a geographical area defined by where a population cluster receives its medical services. It is an area in which groups of physicians, hospitals, labs and other providers work together to serve a population of consumers.[50]



SCENARIO ONE – COMMUNITIES

## Az WellNet

Circa 2030

Maggie Z. is a certified fitness coach specializing in older populations. This morning she is leading an exercise class of 20 Avondale residents with advanced arthritis who have either self-selected the program through membership in *AzWellNet* – a statewide community electronic wellness collaborative with dynamic local nodes of real-time practice and services – or been referred by their local health provider network.

Following exercises, each member swipes her *AzWellCard* across an electronic scanner linked to the *Az Health-e-Connection Network*. The computer runs a pre-authorized program that prints out each participant's health profile related to arthritis. Maggie gathers the group in a circle, and they talk about their progress. Are range-of-motion scores improving? For those taking some of the new medications, are there side effects? Are there other self-care methods they might explore?

Maggie takes them to an interactive web site on innovative home and product design for persons with physically limiting diseases and disabilities. They talk about things they can do themselves and with others in the community to maintain their health. One member complains about not having any place for leisurely walking without a lot of cars and noise. Maggie tells her to show up at tonight's City Council meeting, where future urban design is on the agenda.

"Get involved, connect," Maggie says. "It's the only way to get anything done."

### COMMUNITY CASE POINTS

- Rich community networks of place, practice, knowledge and action.
- A focus on education, prevention, and the natural and built environment.
- A strength-based, community asset development approach.
- Private-public wellness collaboratives: volunteer associations, private businesses, government, providers, education and advocacy groups.
- Seamless electronic integration. High tech, high touch or low touch, virtual or real, depending on interests and needs.
- Community health reports, publicly accessible with strong individual confidentiality and privacy.

SCENARIO TWO – CONSUMERS

## Bill's Checkup

Circa 2030

Bill M. is elated. After a year of participating in a community wellness program, he's lost weight, reduced his blood pressure and even lowered his cholesterol. Not only does he feel great, but he qualifies for reduced premium rates in his individual health plan.

Today is his annual checkup. A piece of cake, since he's already done most of it virtually. His high performance health network, which he selected on the basis of its high Q-scores and advice of friends, equipped him with a wearable body area sensor network to monitor basic physiological data, as well as home devices to support electro-cardiogram and blood work, the results for which are then available for input through the *Az Health-e-Connection* general portal and distributed to his local provider network for analysis. His on-line health coach already followed up with the results and markers for next year; now he's off to see Marlene P., M.D., his personal care manager and wellness guru.

Bill and Marlene talk for over 30 minutes. Depression and cancer both run in Bill's family, and they discuss the pros and cons of doing selected genetic scans. Marlene sends him the links for the virtual offices of specialists for more information; he may have his avatar (virtual self) drop by one of them later in the day.

### CONSUMER CASE POINTS

- Greater consumer involvement in, and responsibility for, personal health care.
- Incentives for consumers to adopt healthy lifestyles and behaviors.
- Transparency of information on quality, cost and choice for better care decisions.
- One common electronic portal through which to access multiple plans, providers and health information.
- Obligatory health insurance coverage, broad community rating, individually tailored plans based on interests, health and economic profiles.
- Merging of financial and health services for one-stop consumer "health and wealth" shopping.
- Publicly financed, comprehensive safety net services for those who need them.

SCENARIO THREE – PROVIDERS

## Doctors for a Difference

Circa 2030

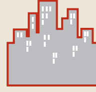
Dr. Michael J. is the CVO – Chief Value Officer – of *Doctors for a Difference(DD)*, a nonprofit, mission-driven 300-physician multi-specialty practice in the greater Phoenix area. Formed on a rising tide of interest in mission-driven health care as a reaction to industrialized medical practices, DD operates under consolidated contracts and joint ventures with two major hospital-community wellness networks, three private financial services-health plan companies, and *HealthyAz*, the state public insurance program (Medicaid and Medicare merged in 2016). The practice operates facilities in low- and middle-income communities, and ranks among the best in the nation in terms of prevention services, chronic disease management, and the integration of medical and behavioral health services.

Dr. J. logs onto the *Az Health-e-Connection* network and checks practice v-scores (value ratings on process/outcome measures) against 10 other integrated multi-specialty networks in Arizona. They consistently do well, but they could do better. He compares the v-scores to DD's clinical efficiency metrics tracked internally and thinks of what he's going to say at the meeting this afternoon to a group of physicians who are dissatisfied with the quality of work being done by a growing number of specialized technicians with less training and clinical experience than themselves.

It's a perennial problem: finding the right balance between the professional autonomy of mission-driven physicians and the economic necessity of reducing throughput costs without sacrificing quality. All the quality metrics in the world can't give Dr. J. a definitive answer.

### PROVIDER CASE POINTS

- Larger, integrated networks linking inpatient, outpatient, home, community and web-based care.
- Few solo practitioners, although many operate as independent contractors and move across multiple networks. By necessity, most operate in teams.
- Payments from evidence-based case rates, with incentives for efficiency and effectiveness.
- Extensive use and public reporting of quality and efficiency metrics, primarily at the group and network levels.
- Greater consolidation on the hospital front; a few large mega-facilities for large theater operations and greater reliance on fluid networks of outpatient surgical suites and ambulatory clinics.
- Greater use of highly specialized technicians; physicians increasingly play a sophisticated case manager role.
- Providers linked with health plans through patient-centered networks with a focus on health and disease management.
- Transparency of information through one common electronic patient health record that is accessible – with safeguards – through the statewide *Az Health-e-Connection* network.
- Exchange of medical information/services (lab results, radiology review, ordering/tracking pharmaceuticals, psychiatric consultation, etc.) across medical trading areas (MTAs) and telemedicine, all linked through integrated local area networks (LANs).



SCENARIO FOUR – HEALTH PLANS

## The Transaction is King

Circa 2030

*(APS, April 30)* Four corporate giants announced today a strategic partnership that is predicted to shake up the $7 trillion healthcare industry. IBM, Citigroup, Wellpoint and Revolution Health will combine selected service lines and roll out a new set of products and services designed to appeal to both consumers and healthcare groups that want one-stop shopping and hassle-free transactions.

Dr. Susan J., Wellpoint CEO, said the proposed ICWR Partnership signals the beginning of the end for traditional financial and health service companies. "The transaction is king," she said. "We saw it coming years ago with the advent of universal insurance in 2016, the end of employer-sponsored coverage and the coming of age of the individual insurance market. Consumers want to bundle their financial and health services, and providers want seamless transactions to improve quality and efficiency of care. Together, we can supply all of it."

The partnership combines IBM's electronic pipeline technology, Citigroup's extensive health savings accounts and related financial products, Wellpoint's health management expertise, and Revolution Health's vast online network of health and wellness information and services. The plan is to roll out a series of new health and wealth brands in select global markets over the next several years.

Other American and international corporations are expected to follow suit.

### HEALTH PLANS CASE POINTS

- Employers gradually get out of the business of offering health insurance coverage.
- Health plans shift from risk management to the generation and management of patient-centered provider networks, health and wellness services, and related information on health quality, cost and choice.
- Core public insurance programs and a rich individual plan market are available through new arrays of health plans and financial institutions.
- Health plans collaborate on creating standards for assessing and reporting on health status, quality improvement, provider performance and information processing.
- Plans compete on building provider networks and product/service differentiation.
- Plans and provider networks utilize one common electronic health record standard that is customized across various local information networks.

SCENARIO FIVE – GOVERNMENT

## Arizona Healthy Communities Data Cooperative

Circa 2030

(ADHS): The Arizona Healthy Communities Data Cooperative (AHCDC) announced today that it has been selected to receive a $20 million federal grant to develop a Southwest Regional Health Data Exchange to inform regional health care, community and environmental planning.

In announcing the award, the federal Department of Health and Human Services singled out AHCDC's data analytics capabilities and track record in implementing successful public-private partnerships to address health and community planning issues throughout Arizona as the deciding factors in its selection. The grant will extend this voluntary model by linking broad community health planning projects in Arizona, New Mexico, Nevada, Utah and Oklahoma.

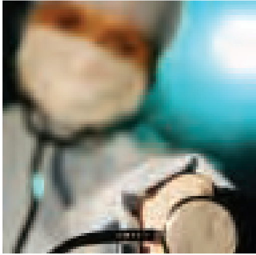
For over twenty years, AHCDC's reports and planning forums have informed such diverse issues as healthcare workforce planning, community design, environmental quality, health facilities development, insurance coverage, public health planning, disease registries, disaster preparedness, health care and community health quality improvement efforts, and more. Created in 2008 with both public and private funding, AHCDC maintains active links to updated data repositories across the *Az Health-e-Connection* electronic exchange, a series of contracts with *Arizona HealthQuery* and other data analytic services, and an innovative planning process that bridges public and private interests.

Housed in the Arizona Department of Health Services, AHCDC is a not-for-profit cooperative with a separate Board of Governors representing government, community, business, health care, university and not-for-profit stakeholders. Its close financial and governance ties with *Az Health-e-Connection* were instrumental in building planning bridges between various government agencies and private interests. Because of those bridges, AHCDC enjoys broad bipartisan support.

### GOVERNMENT CASE POINTS

- Strong investment of both financial and human resources in state health care and community health infrastructure: electronic, analytic, planning and regulatory.
- Policies that encourage and extend data collection, sharing and analysis.
- Policies that protect and promote consumer privacy and confidentiality.
- Investing in public-private planning collaboratives that link health care and community health goals and interests.
- Strong interagency collaboration and data sharing.
- Linking health care and community health data analytics to state economic and quality of life goals.

# Value-Based Health Care: *A Strategic Model*



To create value-based health care in Arizona, we must focus on the integration of quality improvement efforts across *all* sectors of the community, and not just limit our efforts to the health care delivery system alone. We conclude with the following suggestions, summarized in the following strategic model diagram:

## Value-Based Health Care:
### A Strategic Model

| STAKEHOLDERS | INDIVIDUAL/CORPORATE STRATEGIES | COLLABORATIVE STRATEGIES | RESULT |
|---|---|---|---|
| Employers/Plans | Payment Structure, Incentives | PHVMI, AzHQ, Other Quality Initiatives | |
| Providers | Quality Improvement Strategies | Patient Safety, Medical Trading Areas | |
| Consumers | Education, Health Behaviors | Community Health Initiatives, Networks | Improved Health, Productivity and Quality of Life |
| Communities | Education, Healthy Environments | Community Health Initiatives, Networks | |
| Government | Planning, Infrastucture, Health Information Consolidation | *Az Health-e-Connection*, Public-Private Partnerships, Public Health | |

*The PHVMI and AzHQ are two collaborative efforts that should be promoted.*

### Employers/Health Plans

Every private health plan and some employers operating in Arizona are engaged in quality improvement and wellness efforts, whether through incentivizing healthy behaviors in their members, undertaking quality improvement initiatives with their provider networks, modifying payment structures to reward or encourage quality improvement, and other strategies. These should continue and be encouraged on an individual and corporate basis wherever possible.

At the same time, there are strong reasons for employers and health plans to collaborate with each other, and with hospitals and physicians, on developing common metrics of quality, and on sharing health care information to inform broad-based community health efforts. The *PHVMI* and *AzHQ* are two collaborative efforts that should be promoted in that regard; there will be others as well. Collaborative projects can be accomplished with full safeguards for patient privacy and confidentiality, and for proprietary corporate interests.

## Providers

Like employers and health plans, all hospitals and many physician groups in Arizona are engaged in various quality improvement and safety efforts. These, too, should be supported and extended wherever and whenever possible. The focus should be on continuous quality improvement in clinical design and safety, the reduction of unnecessary or nonproductive care, the promotion of medically necessary and effective care, and better health outcomes based on best practice standards.

In addition to collaborating with employers and health plans on developing system-wide metrics of quality and value through such projects as the *PHVMI* and *AzHQ*, providers should continue to collaborate with each other through quality and safety initiatives mounted by associations and quality improvement groups (ArMA, AzHHA, HSAG, etc.), and through the development of medical trading areas (MTAs), as outlined in the *Az Health-e-Connection Roadmap*. Whatever the venue, it is critically important that providers play a leadership role and invest in the technological infrastructure necessary to move the value agenda forward. Not only can this lead to economies of scale and increased productivity, but it will also hasten the day when consumers seeking care are more directly linked to physicians and hospitals.

*Providers should continue to collaborate with each other through quality and safety initiatives... and through the development of medical trading areas.*

## Consumers

Consumers need to become more actively involved in, and responsible for, their own health care. While we remain agnostic about the *means* of providing affordable and effective health insurance coverage for everybody, we are committed to the *end* of achieving it. In any approach, consumers must be incentivized to engage in healthy behaviors, to be active partners with providers in treatment and prevention activities, and to be knowledgeable in the use of relevant information on quality, cost and choice. The prerequisites are the transparency and availability of that information in the first place, and relentless consumer education.

Most people are not helpless and in constant need. They bring a wealth of strengths and assets to the table. These can be harnessed through consumer collaboratives consisting of partnerships with community nonprofit organizations, churches, health plans, businesses, the media, provider groups and government. The key to developing these collaboratives are rich knowledge and practice networks, which themselves depend on the availability of relevant and useful consumer information and people to staff and work them. Some of these will be successful commercial enterprises; others will be successful community health initiatives and collaboratives that focus on specific aspects of value-based health (disease support groups, nutrition and exercise, age-related concerns, etc.). We should seed these with private and public investments.

*Strengths and assets can be harnessed through consumer collaboratives consisting of partnerships with community nonprofit organizations, churches, health plans, businesses, the media, provider groups and government.*

*Focus on healthy environments and community education.*

## Communities

Healthy environments in which to live, work and play provide the context for value-based health care. Things as basic as the quality of the air we breathe, the water we drink, the food we eat, the roads we travel, the homes we live in, and the social relationships that sustain us should not be considered *apart* from health care, but rather a *part* of the total value proposition we are trying to achieve. Many cities and towns in Arizona are already involved in healthy community and quality of life initiatives. These should be supported and extended. At the same time, the increasing pace of activity in quality improvement efforts in the health care system itself provides new opportunities for greater education and involvement at all community levels.

A focus on healthy environments and community education also has a public policy dimension. Legislative and policy leaders need to hear from communities themselves about the importance of health insurance coverage, the development of a rich base of relevant information for community, regional and state health planning efforts and resource allocation; and the development of innovative public-private partnerships to drive a value-based healthcare agenda forward. A laissez-faire approach to health planning won't cut it in today's emerging global marketplace and the intense competition for finite resources. Consumer and community advocacy on these issues is vital.

## Government

Arizona government officials and state legislators need to be actively involved in, and committed to, a value-based healthcare agenda. The writing is clearly on the wall: Unless the state makes significant and lasting investments in its education, health and environmental infrastructure, we will be unable to maintain a high quality of life sufficient to attract the human and financial resources necessary to grow and sustain Arizona in the future.

*A $30 million investment, for example, works out to only .1 percent of a $30 billion statewide industry.*

- **In the area of infrastructure,** we recommend a significant state financial commitment in pursuing the goals outlined in the *Arizona Health-e-Connection* roadmap for developing a statewide system of health information exchanges and electronic medical records. A $30 million investment, for example, works out to only .1 percent of a $30 billion statewide industry. Together with private investment, it would significantly leverage the state's ability to attract quality healthcare providers to meet the needs of a growing population, and to achieve efficiencies in cost and increased effectiveness in health outcomes through system integration.

- **In the area of information,** we recommend that the state enter into a public-private partnership to consolidate existing sources of information on health status, community/environmental health, and health care system data on access, quality and cost. This data can be analyzed and updated on a regular basis to inform a wide variety of public and private policy choices, community health resource allocation, workforce development, quality improvement efforts and more. The partnership could be built on an existing model like *AzHQ* or some other public-private approach.

- **In the area of planning,** we recommend that the state take the lead in initiating an ongoing series of voluntary planning forums that bring together the stakeholder groups described above. This could occur under the recently formed *Arizona Health-e-Connection* organization, the proposed public-private health data initiative, a government agency like AHCCCS or ADHS, or a community-based organization. We have provided the rationale and one possible model for a collaborative planning process elsewhere.[51]

- **In the area of regulation,** we recommend a formal review of state regulations governing all aspects of health care, environmental quality, community health and development to determine the degree to which they promote or hinder an integrated value-based health care system as described in this report.

The goal we all seek is improved health, productivity and quality of life for Arizonans. These strategies, which bridge the interests and issues of providers, consumers, communities, employers, health plans and government, will move the state forward. We should collectively commit ourselves to them now.

# Collaborate to Compete: *An Agenda for **Value-Based*** Health Care in Arizona

1. **COVER EVERYBODY.**
2. **CREATE AN ARIZONA HEALTH CARE INFORMATION TECHNOLOGY INNOVATION FUND.** Situate it within the new Arizona Health-e-Connection organization and seed it with significant public and private investment. Award innovation grants for health information technology and health information exchanges.
3. **CREATE THE ARIZONA HEALTHY COMMUNITIES DATA COOPERATIVE (AHCDC)** as a public-private partnership to link existing health data repositories and create new ones to inform the development of quality metrics, community health planning, health workforce planning, environmental planning and more.
4. **CONSIDER LEGISLATION** that would mandate or otherwise encourage the submission of health care claims and clinical data to the AHCDC. Build transparency into the process in a manner that protects patient privacy and proprietary health plan and provider contractual information.
5. **MOBILIZE PHYSICIANS, HOSPITALS AND OTHER PROVIDERS** to collectively develop, disseminate, implement and ultimately own metrics of care that improve system effectiveness, efficiency and value. Collaborate on developing the value infrastructure. Compete on quality and market differentiation.
6. **EDUCATE AND MOBILIZE CONSUMERS** to demand and use transparent health information and the HIT infrastructure to improve access, quality and cost-effectiveness of care. Focus on wellness and prevention. Encourage greater personal responsibility.
7. **DEVELOP HEALTH PLANNING COLLABORATIVES** at the local, regional and state levels. Link them up in networks of knowledge, practice and action. Educate and advocate for healthy, sustainable, resilient communities.

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## *Our Mission*

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

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

*Arizona Health Futures* is available through our mailing list and also on our web site at **www.slhi.org**. If you would like to receive extra copies or be added to the list, please call 602.385.6500 or email us at info@slhi.org.

ARIZONA
**HEALTH**
FUTURES

Comments and suggestions for future issues, as always, are welcome.

St. Luke's Health Initiatives is a public foundation formed through the sale of the St. Luke's Health System in 1995. Our resources are directed toward service, public education and advocacy that improve access to health care and improve health outcomes for all Arizonans, especially those in need.

*Analyst:*
*Roger A. Hughes, Ph.D.*
*Elizabeth McNamee, MPH, FACHE*

*Graphic Design:*
*Chalk Design*

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

2929 N Central Ave
Suite 1550
Phoenix Arizona 85012

www.slhi.org
info@slhi.org

602.385.6500
602.385.6510 fax

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