

# Arizona Health Care Market Report 2008

AUTHORED BY  
Allan Baumgarten and Associates

FUNDED BY  
St. Luke's Health Initiatives

DECEMBER 2008





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### **About the Author**

Allan Baumgarten is a Minnesota-based consultant and analyst on health care policy and finance and the author of *Minnesota Health Market Review* and annual health market studies in California, Colorado, Florida, Illinois, Kentucky, Michigan, Ohio, Texas and Wisconsin. Additional information about his research is available at [www.allanbaumgarten.com](http://www.allanbaumgarten.com).

### **About the Sponsor**

St. Luke's Health Initiatives (SLHI) is an Arizona public foundation based in Phoenix. It works to improve the health of Arizonans and their communities through health policy, public education and advocacy; technical assistance for nonprofit organizations, and community innovation and development. For additional information, please visit [www.slhi.org](http://www.slhi.org).

### **Acknowledgments**

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## Contents

<b>1</b>	Report Summary	
<b>5</b>	Introduction	
<b>7</b>	1.0 Overview	
	1.1 Key Findings . . . . .	<b>7</b>
<b>9</b>	2.0 Market Structure	
	2.1 Health Plans . . . . .	<b>9</b>
	EXHIBIT 1. Arizona Health Plans at a Glance	
	EXHIBIT 2. Arizona Health Plan Market Share	
	2.2 Providers and Systems . . . . .	<b>13</b>
	EXHIBIT 3. Personal Health Spending by Category in Arizona	
	EXHIBIT 4. Arizona Hospitals and Systems Overview	
	EXHIBIT 5. Arizona Physicians: Distribution by Practice Size, Specialty, Population and County	
	2.3 Health Insurance Coverage . . . . .	<b>21</b>
	EXHIBIT 6. Sources of Health Insurance Coverage, Arizona vs. United States	
	2.4 Purchasers . . . . .	<b>22</b>
<b>23</b>	3.0 Market Analysis	
	3.1 Health Plan Enrollment . . . . .	<b>23</b>
	EXHIBIT 7. Arizona Health Plan Enrollment	
	EXHIBIT 8. Health Plan Enrollment (in millions)	
	EXHIBIT 9. Health Premiums for Non-HMO Insurers	
	3.2 Medicare Plans . . . . .	<b>26</b>
	EXHIBIT 10. Enrollment in HMO Medicare Advantage Plans	
	EXHIBIT 11. Sources of Prescription Drug Coverage for Arizona Seniors	
	3.3 Medicaid—AHCCCS . . . . .	<b>28</b>
	EXHIBIT 12. Enrollment in Medicare Managed Care Plans	
	EXHIBIT 13. Enrollment in AHCCCS Plans	
	3.4 Health Plan Revenues and Net Income . . . . .	<b>30</b>
	EXHIBIT 14. Health Plan Net Income	
	EXHIBIT 15. Health Plan Net Income Trends	
	3.5 Health Plan Premium Revenue and Expenses. . . . .	<b>33</b>
	EXHIBIT 16. Health Plan Net Income by Line of Business	
	EXHIBIT 17. Commercial Premium Revenue Per Member Per Month	
	EXHIBIT 18. Medical Loss Ratios and Per Member Per Month Medical Expenses for Commercial Enrollees	
	EXHIBIT 19. Medical Loss Ratios for AHCCCS Plans	
	EXHIBIT 20. Administrative Expenses for Health Plans	
	EXHIBIT 21. Use of Capitation by Arizona Health Plans	
	3.6 Net Worth and Reserves . . . . .	<b>36</b>

## Contents, cont.

<b>3.7 Health Plan Effectiveness and Utilization of Care . . . . .</b>	<b>37</b>
EXHIBIT 22. Net Worth and Surplus for Arizona Health Plans	
EXHIBIT 23. Utilization of Inpatient Hospital Care for Commercial Enrollees (per 1,000 members)	
EXHIBIT 24. Utilization of Ambulatory Care for Commercial Enrollees (per 1,000 members)	
EXHIBIT 25. Utilization of Mental Health and Chemical Dependency Care for Commercial Enrollees	
EXHIBIT 26. Selected Effectiveness and Utilization of Care Measures for Commercial Enrollees	
EXHIBIT 27. Prescription Drug Expenditures for Commercial Enrollees	
EXHIBIT 28. Selected Effectiveness and Utilization of Care Measures for Commercial Enrollees	
<b>42 4.0 Hospitals and Regional Submarkets</b>	
<b>4.1 Phoenix Area Hospitals and Systems. . . . .</b>	<b>42</b>
EXHIBIT 29. Phoenix Area Hospitals and Systems	
EXHIBIT 30. Revenues, Expenses and Net Income of Phoenix Area Hospitals and Systems	
EXHIBIT 31. Inpatient Occupancy and Payer Mix for Phoenix Area Hospitals and Systems	
EXHIBIT 32. Major Physician Groups in Phoenix Area	
EXHIBIT 33. Revenues, Expenses and Net Income of Tucson Area Hospitals and Systems	
<b>4.2 Tucson Area Hospitals and Systems . . . . .</b>	<b>48</b>
EXHIBIT 34. Inpatient Occupancy and Payer Mix for Tucson Area Hospitals and Systems	
EXHIBIT 35. Major Physician Groups in Tucson Area	
EXHIBIT 36. Revenues, Expenses and Net Income of Various Arizona Hospitals and Systems	
<b>4.3 Other Major Hospitals in the State . . . . .</b>	<b>50</b>
EXHIBIT 37. Inpatient Occupancy and Payer Mix for Various Arizona Hospitals and Systems	
EXHIBIT 38. Major Physician Groups in Other Parts of Arizona	

## Report Summary

St. Luke’s Health Initiatives, a Phoenix health foundation, commissioned this report as a resource for understanding trends and issues in Arizona health care markets. The author is Allan Baumgarten, a Minnesota-based researcher and analyst who has prepared similar market studies in 10 other states. *Arizona Health Care Market Report* is based on research conducted in 2007 and 2008, including an analysis of data on health insurers and hospitals and interviews with more than 30 persons, including leaders in provider systems, health plans and government agencies.

## Market Structure

The report focuses on the flow of dollars among the organizations that are involved in the financing and delivery of health care in Arizona. [Section 1](#) of the report provides an overview of the major findings and themes in the report, while [Section 2](#) provides additional detail about health care organizations in the state.

According to research by the federal Centers for Medicare and Medicaid Services, about \$23.576 billion was spent on health care by Arizona residents in 2004. That is about \$4,100 per capita, less than the national average of \$5,283. *Exhibit A* shows that hospital care (36%) is the largest spending category, followed by physician and other clinical care (29.1%). The federal

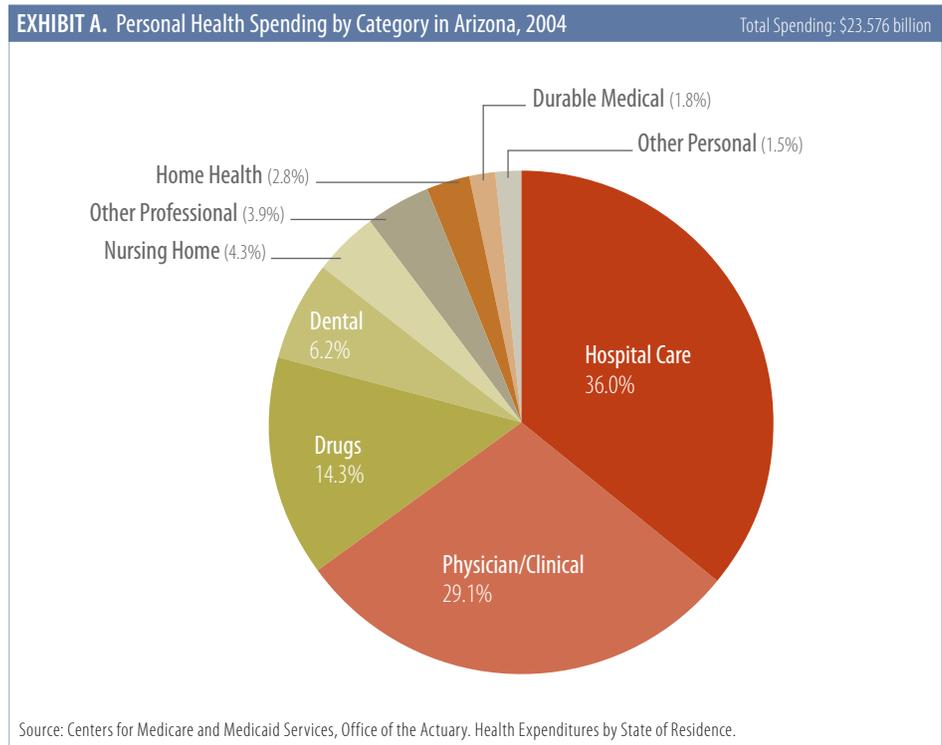
### Other State Health Market Reports

Three other state market reports by Allan Baumgarten are available in PDF format for free download.

*Kentucky Health Care Market Report 2007* is available from the Foundation for a Healthy Kentucky in Louisville. The foundation was created when Anthem Blue Cross Blue Shield was converted to a stock company.

*California Health Care Market Report 2006*, the fifth annual report in that series, is available from the California HealthCare Foundation in Oakland. It was created when Blue Cross of California converted to become WellPoint Health Networks.

*Texas Managed Care Review 2006* was published by Allan Baumgarten with support from GlaxoSmithKline. His Texas report was first published in 1998.



Medicare program paid 21.2% of total health expenses and the joint federal and state Medicaid program (known as AHCCCS in Arizona) covered 18.5%. Private insurance, mostly employer-sponsored, and other sources covered the rest.

About 48% of Arizona residents had insurance coverage through their employers in 2006, while Medicare covered 11.6% and Medicaid provided coverage to 16% of the population. Nearly 20% of Arizona residents did not have health insurance, higher than the national average of 15.3%. And while the state has an extensive network of safety net providers, including public hospitals and community health centers, access to care is an important issue.

### Health Insurance and Health Plans

*Exhibit B* provides an overview of the largest health insurance companies in Arizona, divided into three categories. The first category includes health care service organizations, which offer different kinds of managed care plans, where consumers receive better coverage if they get their care from a contracted network of physicians and hospitals. Note that the analysis in this report and the enrollment numbers shown in Exhibit B are limited to insured plans. More than 1 million Arizonans are enrolled in group plans where the employer self-insures the health benefits.

The second group includes companies that contract with AHCCCS, the Arizona Medicaid

program for acute care or long-term care. Almost all of the care received by AHCCCS recipients is organized through managed care arrangements.

In the third group are national accident and health insurers that do significant business with employers and seniors (Medicare Advantage and prescription drug plans) in Arizona. They also provide administrative services for self-insured employers, which is an increasingly important line of business for those companies and Blue Cross plans around the country.

These companies are a mix of national and local and investor owned (for profit) or nonprofit. Local units of government or public hospitals own some of the AHCCCS plans. The biggest health plan company in the state, measured by 2007 revenues is UnitedHealth Group, which does business here in all three categories: as UnitedHealthcare and PacifiCare (and its Secure Horizons Medicare plan); two AHCCCS plans, Arizona Physicians IPA and EverCare; and UnitedHealthcare Insurance Company. Mercy Care Plan, an AHCCCS contractor managed by a unit of Aetna Health, is second, followed by Blue Cross Blue Shield of Arizona.

**EXHIBIT B. Largest Health Insurance Plans in Arizona, 2007**

Health Care Services Organizations	Insured Enrollment	Revenues	Net Income	Margin
Aetna Health	96,887	\$347,956,799	\$21,142,560	6.1%
Blue Cross Blue Shield of Arizona	407,174	1,285,908,240	95,602,514	7.4%
CIGNA Healthcare	97,335	625,827,122	14,207,357	2.3%
HealthNet	106,466	594,789,098	17,312,301	2.9%
PacifiCare/UnitedHealthcare*	172,569	1,296,392,321	50,085,356	3.9%
<b>AHCCCS PLANS</b>				
Arizona Physicians IPA	281,282	\$1,150,379,000	\$22,085,000	1.9%
Health Choice Arizona	123,302	408,406,329	13,540,948	3.3%
Mercy Care Plan	294,137	1,622,751,000	54,935,000	3.4%
Phoenix Health Plan	97,844	290,566,614	13,073,695	4.5%
<b>Other Health Insurers</b>	<b>2008 Medicare Part D Enrollees</b>	<b>2007 Arizona Health Premiums</b>	<b>Premium Increase 2007/2006</b>	
Aetna Life	2,877	\$220,566,364	31.5%	
Connecticut General (CIGNA)	1,870	220,996,193	75.4%	
Health Net Life Insurance	17,677	237,033,368	31.7%	
Humana Insurance	50,436	334,063,335	16.2%	
United Healthcare Insurance	26,173	968,968,522	5.0%	

\*Includes both health plan companies, operating under separate licenses

Source: Health plan and insurance company annual statements; also enrollment reports (December) and audited financial reports for AHCCCS plans for fiscal years ending in 2007. Some of the AHCCCS plans have fiscal year-ends in months other than December.

## Hospitals and Physicians

As in other states, health plans and hospitals sought to gain the economic upper hand in the past 20 years. As these health plans grew in the 1980s and 1990s, they posed a challenge to hospitals and physicians. Providers found themselves agreeing to unfavorable contract terms out of fear of losing access to large numbers of patients. Hospitals responded by organizing into larger systems and using that size to regain economic power in their dealings with health plans. Some Arizona hospitals entered the health insurance business themselves.

*Exhibit C* shows the major hospitals and systems in Arizona, summarizing data from Section 4 of the report. Banner Health is the largest system in the state, with eight acute care and specialty hospitals in the Phoenix area. The system grew to 10 Phoenix hospitals when it acquired the two Sun Health hospitals in 2008. Based on revenues, Banner now controls about 37% of the hospital market in Maricopa County. Catholic Healthcare West is second in revenues, followed by Scottsdale Health.

EXHIBIT C. Largest Hospital Systems in Arizona, 2006				
	Staffed Beds	Inpatient Days	Net Patient Revenues	Margin*
<b>PHOENIX AREA</b>				
Banner Health	2,272	677,955	\$2,022,635,551	4.8%
Catholic Healthcare West	724	223,606	893,197,208	9.0%
Scottsdale Healthcare	726	195,794	672,242,908	5.5%
Sun Health (Acquired by Banner Health in 2008.)	535	148,561	431,443,326	1.6%
<b>TUCSON AREA</b>				
Carondelet Health Network (Acquired Tucson Heart Hospital in 2006.)	630	138,384	459,165,942	9.0%
TMC Health Care	592	152,932	392,089,800	-3.4%
University (of Arizona) Medical Center	347	102,024	382,439,041	6.1%

\*Based on net patient revenues

Banner and the other hospital systems are in the midst of a huge construction boom, adding new hospitals in developing areas and constructing new patient care towers and specialty centers. Although this construction is generally seen as keeping pace with the state’s population growth, it also carries risks, including escalating construction costs, a shortage of nurses and

other personnel to staff the new facilities and a possible shortfall of patients and revenues. In addition, the economic distress at the end of 2008 means that some of these projects will be delayed or canceled.

In the Tucson area, hospitals operate in three systems plus the University of Arizona Medical Center. The two Carondelet hospitals comprise the largest system here, and Carondelet added full ownership of Arizona Heart Hospital in 2006.

Access to physicians is uneven around the state. And while the number of physicians has grown by several thousand in the past five years, ratios of physicians to the local population are still below national averages. Although there are some prominent physician groups in the state, both single specialty and multi-specialty, most doctors work in small practices.

Integration of hospitals and physicians has been limited in Arizona. While some hospital systems have begun (or resumed) acquiring physician practices and employing physicians, other systems have focused on building relationships with independent physicians. Physicians face several challenges, including the capital needed for information technology, but don’t seem interested in two possible strategies—align with hospitals or with larger groups of physicians.

## Market Trends

This analysis uses data from annual statements of the health plan companies and audited financial statements and enrollment reports for the AHCCCS plans. It examines enrollment trends, market share, financial results and measures of effectiveness and utilization for health plans. For additional detail on enrollment in health plans and their finances, see [Section 3](#).

Nearly 2 million Arizonans were enrolled in managed care plans in 2007. Enrollment in commercial (employer-sponsored) health plans has declined as employers move away from HMO benefit plans that are comprehensive and more expensive. Some employers have moved to self-funded arrangements or to high deductible health plans sold by other insurers. That decline has been largely offset by growth in AHCCCS enrollment, which is now at about 1.1 million. In Arizona, almost all Medicaid enrollees, both for acute care and long-term care, are enrolled in managed care arrangements.

Enrollment in Medicare Advantage plans for seniors has also grown in the past two years. Penetration of those plans is relatively high in Arizona, with an average of 33% of seniors enrolling in Medicare HMOs. Other Medicare plans, including PPOs and private fee-for-service plans, have also grown here, though not to the same extent as in some other states. The new fee-for-service plans have grown to over 33,000 lives in a few years.

The health plans in the state reported strong profits in 2007, their highest in recent years. On average, they earned margins of 5.0%. Both commercial and Medicare Advantage lines of business were strongly profitable in both 2006 and 2007. While the quarterly statements for 2008 show these strong profits continuing, some of the health plans are showing reduced revenue or even losses on their investments. The AHCCCS plans were also profitable in 2007, though not as much as the other companies. Their average margins were 2.7%.

Data from the NCQA Quality Compass reports show that Arizonans are generally very satisfied with their health plans and health care, although levels of satisfaction were generally below national averages. In particular, they praised the communications skills of their physicians. Quality Compass data were also used to examine the extent to which commercially insured persons are receiving mental health services. On average, just under 5% of enrollees received some kinds of mental health service in 2006, mostly outpatient or emergency department care.

## Hospitals

The analysis of hospital data is based on Medicare cost reports for 2006 fiscal years. Profitability has been generally strong in recent years, enabling hospitals to plan new hospitals and construct new patient towers and specialty centers. The full analysis of hospitals and systems in Arizona appears in [Section 4](#).

Phoenix-area hospitals had net income of \$374 million, or 5.7% of net patient revenues in 2006, an improvement over 4.9% in 2005. While most of the hospital systems made money on operations, other revenues from philanthropy, investments and government aid were very important to some of the hospitals. In the Tucson area, average hospital margins were lower, at 3.7% of net patient revenues. Among other major hospitals in the state, five had margins of more than 10% in 2006.

The blows to the state and national economy suffered in the second half of 2008 compounded the risks of falling patient flow and reduced the availability of credit. Hospitals may experience reduced profitability and will slow or even halt major building projects.

The average inpatient occupancy rate for Phoenix area hospitals was 72.8% in 2006. Capacity has grown in recent years, with new hospitals opening. That is slightly higher than the average occupancy rate of 71.4% in the Tucson area. On average, 23.2% of inpatient days for Phoenix area hospitals were covered by the federal Medicare program, less than 27.1% in Tucson. In both areas, other payers, including commercial health insurers, covered the largest number of hospital days.

## Introduction

When this national election year began, health care was high on the list of pressing issues, perhaps at the top of the domestic agenda. The economy has crashed since then and health care seems to have fallen well behind the distressed economy and the wars in Iraq and Afghanistan. But we suggest that the three-legged stool of health care—cost, access and quality—is central to the nation’s economy. Further, the links between the economy and health care are very direct, and health markets in Arizona illustrate that clearly. Health care is about global competitiveness and local real estate development, and it is about state budgets and national investment priorities.

For example, almost all health insurance in the United States is organized through employers and government programs. The steadily increasing cost of health coverage jeopardizes the ability of employers to remain competitive and profitable in their respective industries. And the erosion of employer-sponsored health care puts additional pressure on state budgets to provide coverage for low-income households. Further, physicians and hospitals, which have embarked on multi-million dollar construction programs, are affected when their patients no longer have coverage or are now required to pay a large deductible to have access to care.

This study, *Arizona Health Care Market Report 2008*, presents an analysis of health care markets in Arizona, with a focus on organizations that insure and finance health benefits and deliver health care. It is intended to be a resource for a variety of audiences, drawing together comprehensive data on health care insuring and delivery organizations and an objective analysis of the forces that are driving changes in the marketplace.

The report is based on two kinds of research. First, the author assembled data, mostly from public sources, on Arizona health plan companies, hospitals and physician organizations. That data was analyzed to measure market share, financial results and measures of care utilization and effectiveness. Health plan data were obtained from the Arizona Department of Insurance and the administration of AHCCCS (the Arizona Health Care Cost Containment System, the state’s Medicaid program). The hospital analysis is based on Medicare hospital cost reports that were obtained from the federal Centers for Medicare and Medicaid Services. Data on utilization and effectiveness of care within health plans and enrollee satisfaction were drawn from NCQA’s (the National Committee for Quality Assurance) Quality Compass® data set, which the author has licensed.

## Report Organization

This report follows a template developed by the author to analyze health markets in Minnesota when he was research director of the *Citizens League*, a public policy organization in the Twin Cities. That became the basis for market analysis reports in nine other states: California, Colorado, Florida, Illinois, Kentucky, Michigan, Ohio, Texas and Wisconsin. The report is organized in four major sections.

**Section 1, Overview**, highlights the major trends and key findings presented in the report.

**Section 2, Market Structure**, introduces the organizations that sponsor and administer health insurance and benefits and that deliver health care services, including the health plan companies and hospital systems in Arizona. This section also includes an overview of physician distribution and organization in the state.

**Section 3, Trend Review**, presents an extended analysis of health plan companies in Arizona that contract with employers, the state’s Medicaid program (AHCCCS) and the federal Medicare program, including trends in their enrollment, market share, financial results and measures of care effectiveness. Sidebars in this section compare Arizona health plans with their counterparts in four other states in which the author publishes market studies: Colorado, Michigan, Minnesota and Texas.

**Section 4, Regional Markets and Provider Systems**, presents an analysis of the hospital systems in the Phoenix and Tucson metropolitan areas and major hospitals in other parts of the state, comparing them on inpatient occupancy, payer mix, revenues and net income. This section also includes an overview of the major physician groups in each region.

## Navigation

This edition of *Arizona Health Care Market Report* was created as an interactive PDF, which enables the reader to navigate easily within the publication as well as to relevant web sites through live links (called out in **blue** within the text, **grey** within the tables and **green** within the sidebars).

### What is Managed Care?

Managed care refers to health benefits plans or organizations that integrate the financing and delivery of appropriate health care services to covered individuals using the following basic elements:

- Arrangements with selected providers to furnish a comprehensive set of health care services to members;
- Explicit standards for the selection of health care providers;
- Formal programs for ongoing quality assurance and utilization review; and
- Significant financial incentives for members to use providers and procedures associated with the plan.

Managed care has evolved, and health plans have reduced their use of medical management tools to control utilization and costs. They have also expanded their provider networks, to offer broader choices. And they are less likely to pay providers using capitation contracts that created incentives for the providers to hold down utilization of care.

The managed care industry and HMOs have been the targets of strong negative rhetoric lately, not just in the news media but also in movies and on late night TV talk shows. The industry has shied away from the terms HMO and managed care, preferring alternatives like health plans, comprehensive care or coordinated care.

Source: America's Health Insurance Plans, [www.ahip.org](http://www.ahip.org)

Second, the author conducted more than 30 interviews, mostly in person, with leaders in health organizations, and government agencies and others who are knowledgeable and thoughtful about trends and issues in Arizona's health markets. The interviewees are not quoted directly in the report, but their perspectives are woven together with the data analysis to draw a picture of where Arizona's health markets are today and the direction in which they may be headed.

St. Luke's Health Initiatives of Phoenix commissioned this study and will make it broadly available on its [web site](#). It has also sponsored research on numerous related topics, including the health care work force, the safety net in Maricopa County, and health care spending in the Arizona. The assistance of the state agencies and the willingness of the interviewees to share their thoughts are both very much appreciated. Health plans, hospital systems and other reviewers saw a draft of this report, and every effort has been made to ensure the accuracy of the information presented here.

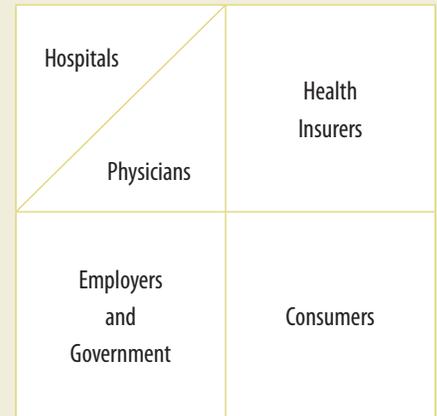
## 1.0 Overview

This report focuses on the interactions between different segments with Arizona’s health markets. The diagram in the sidebar suggests a market made up of four segments: (1) hospitals and physicians; (2) health insurers and other benefit administrators; (3) plan sponsors, namely employers and government and (4) consumers. Each quadrant interacts with the others, sometimes in unexpected ways. For example, a hospital that believes that it is not paid adequately by the government Medicare or Medicaid programs will try to shift some of its costs to employers buying commercial health insurance.

### 1.1 Key Findings

- **Hospital systems are expanding rapidly and this new inpatient capacity is generally seen as “catching up” to rapid population growth after a decade of little new building. Still they face risks of overbuilding.** Particularly in Maricopa County, the major hospital systems are competing to be the first (or second or third) to open new hospitals in developing areas. In some cases, new hospitals replaced older hospitals, but in other cases they created significant new capacity. Besides trying to extend their reach geographically, hospital systems are also establishing and expanding centers for specialty care. The risk is that the anticipated flow of patients and revenues will not materialize, especially given a slowing of population growth and a sharp decline in the local economy.
- **Relations between health plans and hospitals are central to the operation of the market.** Since the emergence of managed care in the 1980s, health plans and hospitals systems have each tried to gain and exert leverage in their dealings. In the 1990s, hospitals and physicians would sign agreements that they thought were unfavorable because of concerns that they would lose access to patients otherwise. Providers responded by consolidating into systems in order to match the size and power of the health plans. In the Phoenix area, there is no single answer but it seems that today hospitals generally hold the upper hand now in negotiating terms and payments. One of the large systems has been able to impose standard terms for all of its managed care contracts, irrespective of the number of patients that an insurer might control.
- **Medical costs are relatively low in Arizona.** National studies show that the cost of health care and coverage is lower in Arizona. Average per capita spending was \$4,100, well below the national average of \$5,283. That doesn’t mean that the affordability of health coverage is not an issue here. In fact,
- **The percentage of the population that is uninsured is higher than the national average, but has come down in the past 10 years.** Affordability of health coverage is an important issue here, particularly for small employers and individuals. The percentage of the state’s population without coverage was 19.6% in 2006, well above the national average of

### Arizona Health Market Segments



15.3%. Still, the proportion has gone down in the past 10 years. Voters approved a major expansion of eligibility for the AHCCCS program (Medicaid), which along with other initiatives has significantly expanded coverage. And while employer-sponsored coverage has declined in other states, it has been fairly stable here. Still, more people rely on government sources of insurance here and private employers play a smaller role in providing coverage.

- **Work force issues are key here.** There are literally thousands more doctors in the state in the past five years, but the supply is still below national averages. And whether there will be enough nurses and others to staff all the new hospitals is very unclear. A new medical school branch has opened in Phoenix to train additional physicians who, hopefully, will continue their training in the state and work in Arizona. Still, questions remain about the commitment to building the faculty and facility needed for the new medical school and the willingness of the local medical community to partner fully in this venture.
- **Most physicians practice independently or in small clinics (though the data seems unclear).** Physicians across the country face pressures to find capital for new information technology and more integrated practice. In other markets, those pressures have led to closer ties with hospitals and the migration of doctors into group practices. That does not appear to be the case in Arizona. Efforts to expand the use of information technology by physicians in Arizona will have to reflect a continuing preference for small practices and limited access to capital.

- **Medicaid (Arizona AHCCCS) is seen as more integrated with both private and public providers serving that population.** Hospitals here generally agree that AHCCCS is a “reasonable” payer, though they may have payment issues with some of the AHCCCS health plans. And the expansion of AHCCCS to serve seniors and persons with disabilities in long-term care settings has set Arizona apart from the other states that have taken only small steps to using managed care for those recipients. Further, AHCCCS is seen as less biased toward institutional care than Medicaid programs in other states.
- **Mental health services seem to operate in very separate public and private sectors.** Four regional behavioral health authorities organize mental health and substance abuse services in their areas for clients in public programs, including AHCCCS. They contract with community providers, including community health centers, to serve those patients. The regional authorities operate separately from the AHCCCS health plans, leading to possible problems with coordination of care. A largely separate sector of private providers serves persons with commercial insurance coverage or who pay privately for care.

## 2.0 Market Structure

Like the journalists' maxim from the 1970s, this analysis "follows the money." In the case of health care, the money begins with the health plan sponsor, either an employer buying health coverage or a government agency for Medicaid or Medicare. Sponsors contract with intermediaries—health insurers or other benefit plan administrators that, in turn contract with the providers of care—physicians, hospitals, skilled nursing facilities and vendors of pharmaceuticals, devices and medical equipment. The money passes through the hands of intermediaries (and some of it sticks) and then reaches the providers of care. This is sometimes referred to as the "health care food chain."

In the 1990s it was common for health plans here to contract with independent physician associations (IPAs) or other organizations that were intermediaries between the health plans and independent physicians and clinics, negotiating contract terms and providing some other administrative services. While that model is still widely used in some states, particularly California, that is not the case in Arizona. Instead, insurers generally contract directly with physicians and clinics.

### 2.1 Health Plans

There are two major categories of health insurers under state law. Under Arizona law, health insurers providing coverage to employer groups or contracting with the federal government to enroll seniors in private Medicare plans are licensed as Health Care Services Organizations (*Arizona Revised Statutes, Title 20, Article 9*) There are currently 12 licensed health plan companies in this category. These are considered managed care plans in that they provide differential benefits, depending on whether or not a provider is part of a contracted panel. They may also share risk with providers through capitation or other contract terms. They are selling HMO benefit plans that have historically been comprehensive with only modest enrollee cost-sharing. Several also sell Medicare Advantage or Supplement plans, and some sell dental and other coverages.

A second group consists of 13 companies or local governments that contract with the state to enroll beneficiaries of Arizona's Medicaid program, known as AHCCCS. In addition, a state government agency contracts with AHCCCS to provide residential services to persons with development disabilities. Many of the AHCCCS plans were formed in the 1980s, when Arizona, the only state without a state Medicaid program, developed a new Medicaid program that was constructed around mostly private managed care companies contracting with the state.

*Exhibit 1* provides an overview of the health plan companies and AHCCCS contractors, including links to their respective Internet web sites, their 2007 insured enrollment and financial results. (The sidebar provides links to additional Internet resources, including professional associations, higher education systems and state agencies.) In addition to these health plans, there are national insurance companies selling health coverages to individuals and groups in Arizona. Additional information about those

### Arizona Health Sources on the Internet

See also Exhibits 1 and 4.

Arizona College of Osteopathic Medicine  
[www.midwestern.edu/azcom](http://www.midwestern.edu/azcom)

Arizona Department of Insurance  
[www.id.state.az.us](http://www.id.state.az.us)

Arizona Health Care Cost Containment System  
[www.azahcccs.gov/site](http://www.azahcccs.gov/site)

Arizona Hospital and Healthcare Association  
[www.azhha.org](http://www.azhha.org)

Arizona Hospital Choice  
[www.azhospitalchoice.org](http://www.azhospitalchoice.org)

Arizona Medical Association  
[www.azmedassn.org](http://www.azmedassn.org)

Arizona State University Center for Health Information & Research  
[chir.asu.edu](http://chir.asu.edu)

University of Arizona College of Medicine  
[www.medicine.arizona.edu](http://www.medicine.arizona.edu)

University of Arizona Rural Health Office  
[www.rho.arizona.edu](http://www.rho.arizona.edu)

Maricopa Integrated Health System  
[www.mihhs.org](http://www.mihhs.org)

**EXHIBIT 1. Arizona Health Plans at a Glance**

Health Plan	Arizona Headquarters	Ownership/Management	Year Organized	2007 Arizona Insured Membership	Change from 2006	2007 Net Income	Margin
Abrazo Advantage Health Plan, Inc. www.abrazohealth.com	Phoenix	Abrazo Health Care; part of Vanguard Health System, Nashville, TN	2005	3,335	-3.3%	\$19,211,946	48.8%
Aetna Health Inc. (an Arizona corporation) www.aetna.com	Phoenix	Aetna Health, Inc., Blue Bell, PA	1992	96,887	-5.1%	21,142,560	6.1%
Arcadian Health www.arcadianhp.com Operates in northern Arizona as Desert Canyon Community Care.	Prescott	Arcadian Health Plan, Inc., Oakland, CA	2005	2,832	28.5%	159,169	0.7%
Blue Cross Blue Shield of Arizona, Inc. www.azblue.com	Phoenix	Blue Cross Blue Shield of Arizona	1939	407,174	1.3%	95,602,514	7.4%
CIGNA Healthcare of Arizona, Inc. www.cigna.com	Phoenix	CIGNA HealthCare, Bloomfield, CT	1979	97,335	-13.2%	14,207,357	2.3%
Great-West Health Plan (One Health) www.greatwest.com Formerly known as One Health Plan. CIGNA acquired Great-West in 2007	Scottsdale	Great West Healthcare, Greenwood Village, CO	1998	NA	NA	51,771	NA
Health Net of Arizona, Inc. www.healthnet.com	Tempe	HealthNet, Woodland Hills, CA	1980	106,466	18.1%	17,312,301	2.9%
Humana Health Plan, Inc. www.humana.com Humana financial data is for multiple states and is not comparable.	Peoria	Humana Health Plan, Louisville, KY	1984	30,469	36.6%	NA	NA
PacificCare of Arizona, Inc. www.pacificare.com Founded in the 1980s as FHP of Arizona.	Phoenix	Member of UnitedHealth Group, Minnetonka, MN	1997	152,219	-13.8%	42,541,334	3.6%
SCAN Health Plan Arizona www.scanhealthplan.com	Phoenix	SCAN Health Plan, Long Beach, CA	2005	591	NA	-1,053,742	-17.9%
Sun Health MediSun, Inc. www.sunhealth.org Markets Medicare plan as MediSun. Banner Health acquired Sun Health in 2008.	Sun City	Sun Health	1985	13,346	1.5%	2,612,502	1.5%
UnitedHealthcare of Arizona, Inc. www.uhc.com United acquired HealthPartners of Arizona in 1998. HealthPartners was the managed care company owned by Samaritan Health System (now Banner Health) and TMC HealthCare.	Phoenix	UnitedHealthcare, Minnetonka, MN	1984	20,350	-9.6%	7,544,022	7.1%
<b>AHCCCS HEALTH PLANS</b>							
Arizona Physicians IPA, Inc. www.myapipa.com Formed by entrepreneurs, acquired in 1985 by HealthPartners of Arizona, a partnership of Samaritan Hospitals (now Banner Health) and TMC Health Care.	Phoenix	Americhoice; a United Health Group company, Minnetonka, MN	1983	281,282	0.5%	\$22,085,000	1.9%
Bridgeway Health Solutions of Arizona, LLC www.bridgewayhs.com	Tempe	CenCorp Health Solutions, a subsidiary of Centene Corporation, St. Louis, MO	2006	1,522	72.8%	287,005	0.6%
Care 1st Arizona www.care1st.com	Phoenix	Care 1st Health Plan, Monterey Park, CA	2003	34,190	8.8%	1,920,249	1.2%
Cochise Health Systems www.co.cochise.az.us/cass/chs.htm	Bisbee	Cochise County	1993	925	1.4%	4,280,329	12.8%
Evercare Select www.evercareselect.com	Phoenix	United Health Group, Minnetonka, MN	1989	4,530	-20.3%	4,459,202	2.4%
Health Choice Arizona www.healthchoiceaz.com	Tempe	IASIS Healthcare, LLC, Franklin, TN	1990	123,302	11.2%	13,540,948	3.3%
Maricopa Health Plan www.mhpaz.com University Physicians Health Plans entered into an agreement to manage Maricopa Health Plan beginning in 2005.	Phoenix	Maricopa Integrated Health System, Phoenix, AZ	1982	34,629	3.9%	-4,306,665	-3.4%

**EXHIBIT 1. Arizona Health Plans at a Glance**

Health Plan	Arizona Headquarters	Ownership/Management	Year Organized	2007 Arizona Insured Membership	Change from 2006	2007 Net Income	Margin
Mercy Care Plan www.mercycareplan.com Southwest Catholic Health Network Corporation; Catholic Healthcare West Arizona and Carondelet Health Care Corporation of Arizona are sponsors.	Phoenix	Managed by Schaller Anderson of Arizona, which Aetna acquired in 2007.	1983	294,137	7.9%	\$54,935,000	3.4%
(VHS) Phoenix Health Plan, LLC www.phoenixhealthplan.com	Phoenix	Abrazo Health Care; part of Vanguard Health System, Nashville, TN	1983	97,844	6.4%	13,073,695	4.5%
Pima Health Plan www.pimahealthsystem.org	Tucson	Pima Health Systems and Services, Pima County	1982	33,422	7.0%	1,829,046	0.7%
Pinal/Gila Long Term Care pinalcountyaz.gov/departments/longtermcare/pages/home.aspx	Florence	Pinal County Administrative Services, Division of Long-Term County	1982	1,309	5.5%	4,281,368	8.5%
SCAN Long Term Care www.scanhealthplan.com	Phoenix	SCAN Group, Long Beach, CA	2006	1,418	301.7%	1,020,483	2.2%
University Family Care www.ufcaz.com Also owns Caduceus Indemnity Insurance Corp. In October of 2005, Maricopa Integrated Health Systems (MIHS) and University Physicians Health Plans (UPHP) entered into an agreement for UPHP to manage MHP.	Tucson	University Physicians Healthcare	1983	17,161	-4.2%	-11,229,581	-3.6%
Yavapai Long Term Care www.co.yavapai.az.us/ltc.aspx	Prescott Valley	Yavapai County Department of Medical Assistance, Long Term Care Division	1993	912	-3.4%	2,319,255	6.5%

Source: Author's analysis of health plan annual statements, AHCCCS and Department of Economic Security enrollment reports and audited financial statements of AHCCCS plans. Financial data for AHCCCS plans based on fiscal years ending during 2007.

companies, many of them subsidiaries of companies like Aetna and UnitedHealthcare, is found in Section 2. There are another dozen or more health insurers in the state selling dental- or vision-only coverage, but they are not within the scope of this report.

The number of health plans has remained relatively stable in the past 10 years, with three new Medicare plans licensed since 2005 (Abrazo Advantage, Arcadian and SCAN) but some others acquired. Arizona health plans are large and small, local and national, provider owned or owned by national managed care companies. Local plans include Blue Cross Blue Shield of Arizona and Sun Health MediSun as well as AHCCCS plans like University Family Care.

National companies are increasingly prominent here, including UnitedHealthcare and Aetna. Following a series of acquisitions, both are now in all three major lines of business here: commercial, Medicare and Medicaid. In 1998, UnitedHealthcare acquired Arizona Physicians IPA, which was owned by Health Partners of Arizona, a health plan owned by Samaritan Health System (now Banner Health) and TMC HealthCare in Tucson. Arizona Physicians IPA is the largest AHCCCS plan. UnitedHealthcare acquired PacifiCare, with its large Secure Horizons Medicare plans in 2005. To gain regulatory approval for the PacifiCare acquisition, United was required to divest some of its

Tucson area enrollees. CIGNA picked up those members. For both Medicare and Medicaid products, United has created specialty companies within the company. Americhoice is its Medicaid company and it has combined its Medicare Advantage and Supplement plans as Secure Horizons, which is within United's Ovations company.

In 2007, Aetna Health acquired Schaller Anderson, an Arizona-based company that manages MercyCare, the AHCCCS health plan owned by the Catholic Healthcare West hospitals in Arizona and the Carondelet hospitals in Tucson. MercyCare is the largest provider-owned health plan company in the state, with more than 290,000 enrollees. The Abrazo/Vanguard hospitals, a large system in the Phoenix area, operate Abrazo Advantage, a Medicare Advantage HMO plan, and Phoenix Health Plan, an AHCCCS contractor.

In other recent transactions, CIGNA has acquired Great-West, a life and health insurance company with a small Arizona health plan. Banner Health has returned to the HMO business—by acquiring Sun Health, it gained its Medicare Advantage HMO known as MediSun. While the national trend has been for hospitals to sell or close their health insurance companies, Arizona hospitals largely stayed in that business.

**Types of Managed Care Plans**

**Health Maintenance Organizations (HMOs):** Prepaid plans that provide comprehensive care to enrollees. Historically, HMO plans have not included significant consumer cost sharing, although that is changing with the introduction of plans with higher deductibles and health savings accounts. An HMO employs or contracts with health care providers. Through those contracts, providers may assume some financial risk for the utilization of care by given enrollees.

**Preferred Provider Arrangements or Organizations (PPOs):** Used by insurance companies and self-funded employers as a vehicle to contract with a limited panel of providers who agree to a fee schedule (discounted) in anticipation of receiving an increased volume of patients. In *self-funded plans*, the employer assumes the risk for the costs of medical care, rather than paying an insurer a premium to assume the risk. Those plans are generally not subject to state laws on mandated benefits and allow employers more flexibility in plan design.

In Arizona, managed care plans are licensed under state law as **Health Care Services Organizations**. They sell insured benefit plans that combine aspects of HMOs and PPOs. In addition, organizations contracting with AHCCCS, the state's Medicaid program, are overseen by AHCCCS and are not subject to Department of Insurance regulation

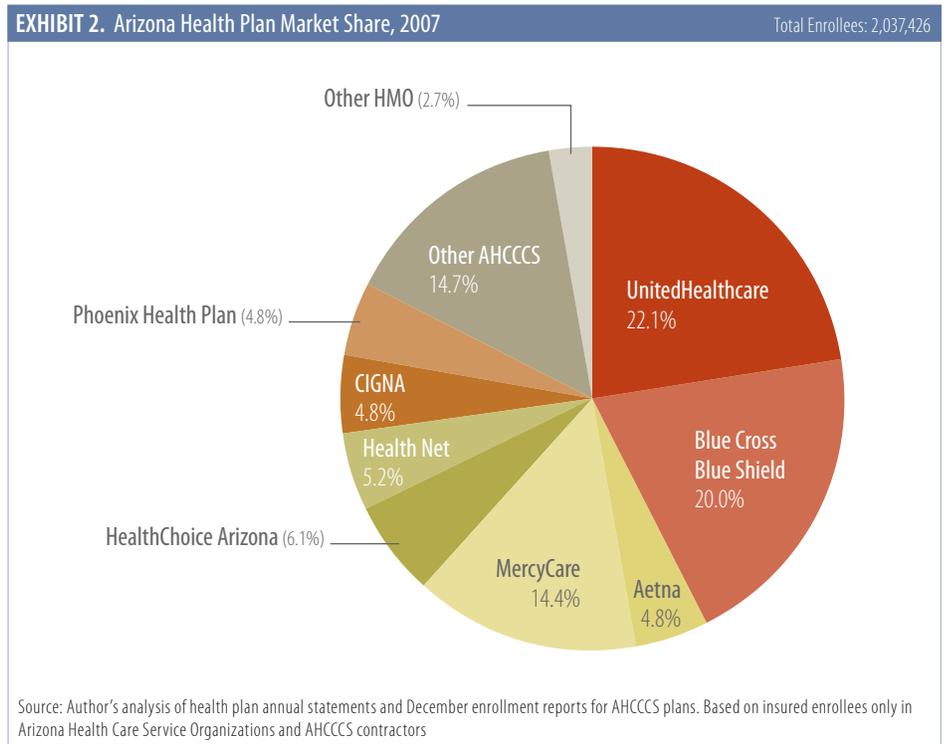
The term *point-of-service* is used differently in different markets. In the context of HMOs, point-of-service plans provide full coverage when using the HMO's provider panel and indemnity coverage, with additional enrollee cost sharing, for services received from providers outside the HMO network. In the context of PPOs or insurance carriers, it also refers to a two-tiered plan for coverage — in and out of network — and usually includes a requirement that enrollees select a primary care physician to coordinate their care and referrals to specialists.

AHCCCS contracts separately for acute care and for long-term care (which was added to AHCCCS in 1987), although some companies are in both lines of business. AHCCCS contractors include local government units (Pima County Health System and Pinal County) and some national companies (Centene, which operates in Arizona as Bridgeway Health Solutions). Two companies, SCAN Long Term Care and Care 1st (both relatively new to Arizona), are the Arizona operations of California health plans. Providers in Tucson own University Physicians HealthCare, and IASIS Healthcare, with three Phoenix area hospitals, owns Health Choice Arizona.

Three of the AHCCCS plans also contract with the state for a subsidized health benefits programs for small employers known as HealthCare Group of Arizona. The program was first created in 1985 and currently covers about 25,000 people in the state. The three plans, MercyCare, Care 1st and University Physicians, offer an HMO level of benefits. AHCCCS also administers a separate PPO network for the HealthCare Group.

The AHCCCS plans are generally separate from the other health insurers, but with some significant exceptions. As noted earlier, United Health Group acquired Arizona Physicians IPA, the largest AHCCCS contractor, and operates it as part of its Americhoice company. Evercare, an AHCCCS contractor for long-term care services, is also a member company of United Health Group. At one time Blue Cross Blue Shield and CIGNA were AHCCCS contractors, but they both dropped their contracts.

*Exhibit 2* combines enrollment in the two categories of health plans and shows their relative market share at the end of 2007. The pie chart includes insured enrollees group and individual plans, as well as seniors in Medicare Advantage and enrollees in AHCCCS plans. It does not include enrollees in self-funded groups or in insured PPO plans that are offered by other health



insurers. (The sidebar explains the difference between HMOs and PPOs and other kinds of managed care health plans.) Enrollees in affiliated companies are grouped together, so that the pie slice for UnitedHealthcare includes PacifiCare, Arizona Physicians IPA and EverCare. The four largest health insurers/AHCCCS plans had about 62% of the total insured enrollment in 2007. The sidebar compares Arizona health plans with their counterparts in some other states on this measure of market concentration, showing that Arizona is in the middle of the pack on that measure.

This report focuses on health plans and their insured groups and individuals, numbering about 2.1 million in 2007. Many of the health plan companies have shifted their marketing and product development focus to administering health benefits for larger employers that self-insure their employee benefits. As we will show later, we estimate that about 1.1 million Arizonans are covered in self-insured employer groups.

Employers have moved to self-funded arrangements because they present several advantages. The biggest is the administrative convenience of operating a single benefit design across multiple states. Self-funded employers are generally exempt from state regulations, for example, mandating that certain benefits be included in the benefit design. They also benefit financially in important ways. They are generally exempt from premium taxes and from assessments that support state insurance risk pool or Medicaid surcharges. The insurers have generally encouraged that movement as a way of holding down increases in the cost of coverage. And even for insured groups, they have encouraged employers to move away from the HMO model of rich benefits

and less cost-sharing. To the extent that health insurers are marketing consumer directed plans or plans with health saving accounts, they are doing that outside of their HMOs.

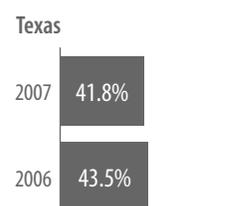
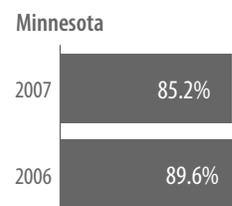
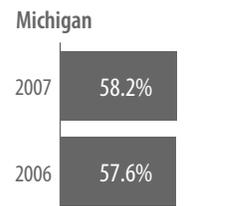
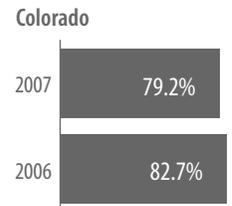
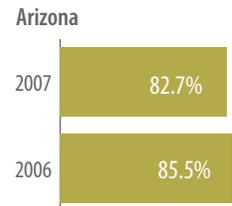
Blue Cross Blue Shield of Arizona provides a good illustration of the importance of self-funded group plan administration to health plan companies. Blue Cross, which is still an independent company here, operates numerous lines of business and reports total enrollment in comprehensive and supplemental health plans of 1.1 million persons. That includes 252,000 in insured groups, including federal employees. About 142,000 individuals have individual coverage and 13,000 seniors have Medicare supplement plans from Blue Cross. The total also includes nearly 700,000 enrollees in a variety of self-insured employer groups, or who are Arizona enrollees in plans administered by other Blue Cross companies. UnitedHealthcare, Aetna and CIGNA also have emphasized their plan administration services for national employers and have moved away from the HMO model of comprehensive benefits with modest cost-sharing.

## 2.2 Providers and Systems

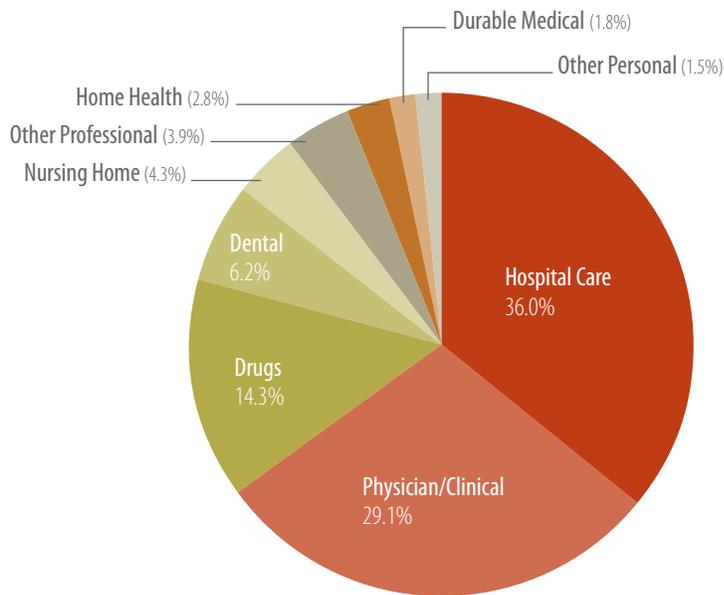
The biggest single piece of the health care dollar is spending on hospital care. Federal reports show that, in 2004, \$23.576 billion was spent for health care in Arizona, from both private and public sources. That is a per capita amount of about \$4,100. That is significantly less than the national average of \$5,283. The largest category of spending is hospital care, where the average per capita amount was \$1,479 (36.0%), followed by physician and clinical services at \$1,193. See *Exhibit 3* on page 14 for a breakdown of spending by categories.

### HMO Market Concentration

Portion of HMO enrollees in each state enrolled in the four largest HMOs at the end of 2006 and 2007.



**EXHIBIT 3. Personal Health Spending by Category in Arizona, 2004** Total Spending: \$23.576 billion



Source: Centers for Medicare and Medicaid Services, Office of the Actuary. Health Expenditures by State of Residence.

### 2.2.1 Hospitals

The growth of managed care organizations in the 1980s and 1990s put pressure on independent community and religious hospitals to consolidate into hospital systems that would be able to exert more negotiating power in dealing with the managed care companies. As HMOs and other insurers grew, they controlled large blocs of enrollees and a high percentage of the admissions coming to hospitals. And at that time, there appeared to be surplus hospital capacity in the state, giving the HMOs more leverage in their negotiations. It was not unusual for hospitals (and physicians) to sign managed care contracts for rates and other terms that they thought were inadequate out of fear that patients would be lost to other hospitals.

The hospitals concluded that they needed to meet the size and strength of the HMOs and other insurers by

getting larger themselves. As in other markets, Arizona hospitals formed systems to gain operating efficiencies and improve their bargaining leverage. A second factor driving hospital consolidation was the entry into the state of investor owned (for-profit) hospital systems that were targeting metropolitan areas like Phoenix to acquire a critical mass of the hospital capacity and business there.

*Exhibit 4* provides an overview of the hospitals and systems in the Phoenix and Tucson metropolitan areas. The data are drawn from Medicare cost reports for 2006 fiscal year operations. Exhibits in Section 4 of this report provide additional detail on inpatient occupancy rates and payer mix, revenues and net income for the systems and for individual hospitals. A second source of hospital data is the annual hospital discharge data set prepared by the [Arizona Department of Health Services](#).

Several new hospitals have opened in the state in the past few years. Arizona has not had certificate of need or other regulations of hospital or other health facility capacity for many years. Recent years of improved profitability have made it possible for hospital systems to add new facilities in developing areas. Three new hospitals have opened in Gilbert (East Valley) in the past three years, two of them owned by major systems in the Phoenix area. In some cases, a hospital was closed when a new one opened nearby.

Health care and real estate development are closely tied, both for new developments and for re-use of existing buildings that no longer serve their original purpose. This is particularly true in growing metropolitan regions like those in Arizona and it does not distinguish between for-profit hospitals or nonprofit providers. Banner Health, in particular, has sought to develop new hospitals in areas where development is expected to occur. In one case it is partnering with a development firm to build a medical campus as part of a planned community. A specialty medical group will move into the former Mesa General Hospital, formerly an IASIS hospital and now owned by an investment company. In Tucson, the site of the former Tucson General Hospital is being redeveloped as a cancer center for University Medical Center.

As will be discussed later, these developments are based on a very careful analysis of population growth in their respective regions. Still, these analyses are based on certain assumptions about population growth

**EXHIBIT 4. Arizona Hospitals and Systems Overview, 2006**

Hospital/System by Region	Staffed Beds	Inpatient Days	Occupancy Rate	Net Patient Revenues	Net Income	Margin %	Share of Revenues	Market Share (Inpatient Days)
<b>PHOENIX AREA</b>								
Abrazo Vanguard www.abrazohealth.com Including Arrowhead Community Hospital (Glendale); Maryvale Hospital Medical Center, Paradise Valley Hospital, Paradise Valley Psychiatric, Phoenix Baptist Hospital, Phoenix Memorial Hospital (all Phoenix); West Valley Hospital Medical Center (Goodyear). Phoenix Memorial closed its acute care operations in 2007.	862	156,256	51.7%	\$414,563,972	-\$8,288,937	-2.0%	6.3%	8.4%
Banner Health* www.bannerhealth.com Including Desert Samaritan Medical Center, Baywood Medical Center and Baywood Heart Hospital (Mesa); Thunderbird Samaritan (Glendale); Good Samaritan and Estrella Medical Centers (Phoenix); Banner Behavioral Health Center (Scottsdale). In 2007, Banner replaced Mesa Lutheran hospital with Banner Gateway Medical Center in Gilbert. (The two Sun Health hospitals were acquired by Banner in 2008.)	2,272	677,955	81.8%	2,022,635,551	97,135,446	4.8%	30.7%	36.6%
Catholic Healthcare West www.chwhealth.org Including St. Joseph's Hospital & Medical Center (Phoenix); Chandler Regional Hospital; Mercy Gilbert Medical Center	724	223,606	84.7%	893,197,208	80,306,359	9.0%	13.6%	12.1%
Iasis Healthcare www.iasishealthcare.com/hospitals/hos_az.htm Including Mesa General Hospital; Tempe St. Luke's Hospital; St. Luke's Medical Center and Behavioral Health (Phoenix). IASIS opened Mountain View Medical Center in Mesa in 2007, and closed Mesa General in 2008.	472	83,167	51.6%	258,011,135	2,675,968	1.0%	3.9%	4.5%
John C. Lincoln Health Network www.jcl.com Including Deer Valley and North Mountain (Phoenix)	447	109,040	70.3%	381,489,775	27,173,141	7.1%	5.8%	5.9%
Scottsdale Healthcare www.shc.org Including Osborne, Shea and Thompson Peak (opened in 2007)	726	195,794	74.4%	672,242,908	37,346,899	5.6%	10.2%	10.6%
Sun Health www.sunhealth.org Including Boswell Hospital (Sun City) and Del E. Webb Hospital (Sun City West). Acquired by Banner Health in 2008.	535	148,561	76.1%	431,443,326	6,750,036	1.6%	6.6%	8.0%
Other Phoenix Area hospitals Including Maricopa Medical Center, Mayo Clinic Hospital, Arizona Heart Hospital and Phoenix Childrens Hospital	1,018	256,248	68.9%	1,507,898,175	130,939,929	8.7%	22.9%	13.8%
<b>TUCSON AREA</b>								
Carondelet www.carondelet.org Including St. Joseph's and St. Mary's Hospitals (Tucson); Tucson Heart Hospital (acquired from MedCath in 2006)	690	149,988	59.6%	459,165,942	43,003,647	9.4%	29.2%	29.3%
Community Health Systems* www.chs.net/index.html Including Northwest Medical Center and Northwest Medical Center Oro Valley (Tucson). Community Health Systems acquired Triad Hospitals in 2007	342	97,530	78.0%	289,063,080	12,083,139	4.2%	18.4%	19.0%
TMC Health Care www.tmc.az.com Including Tucson Medical Center and El Dorado Hospital (Tucson)	592	152,932	77.6%	392,089,800	-13,248,902	-3.4%	24.9%	29.8%
Other Tucson Area hospitals Including University Medical Center and The University Physicians Hospital	397	112,005	78.0%	431,867,148	16,530,345	3.8%	27.5%	21.9%

\*Banner Health also owns Page Hospital. Community Health Systems also owns Payson Regional Medical Center and Western Arizona Medical Center (Bullhead City).

Source: Author's analysis of Medicare cost reports for Arizona hospitals for 2006 fiscal years

trends and demand for medical care, and that carries significant risk in at least three ways. First, if population growth assumptions are not realized, there may be too much hospital capacity in a developing area and the actual results may fall short of expectations for patients and revenues. Second, will there be enough nurses and other medical professionals to staff the new units? And third, how will the new (and existing) hospitals be affected by other market changes? For example, more people with employer sponsored coverage are required to pay high deductibles before their coverage kicks in. Will they defer procedures or other care for fear that they cannot afford their contribution? And will hospitals and physicians have difficulties collecting from these individuals?

### 2.2.2 Phoenix Area

In the Phoenix area, there were 31 acute care hospitals in 2006, plus hospitals for mental health (3), rehabilitation and long-term care (8) and for specialties like cardiology, orthopedics and surgery. After a decade of consolidation and system building, they are organized into six systems, plus nine other hospitals. (Our analysis generally does not include the rehabilitation facilities, hospitals of the United States Department of Veterans Affairs, the U.S. Public Health Service Indian hospitals or Arizona State Hospital, part of the Arizona Department of Health Services.)

The Banner Health system (including the two Sun Health hospitals as of September 2008) is by far the largest in both Maricopa County and the state, with 44.6% of the inpatient hospital days in the Phoenix area (based on 2006 data).

Banner Health's market share based on patient revenues is 37.3%. As we will note later, an analysis by sub-region would show that some of the hospital systems are very strong in a focused part of the region, such as the northwest part of Phoenix or Scottsdale. Banner Health includes nine acute care hospitals in Arizona, plus a behavioral health facility and a heart hospital. It was formed by the merger of Samaritan Health and Lutheran Health Systems, which had been based in North Dakota. Banner Health also has hospitals in five other western states, though no longer in North Dakota.

Banner Health has been actively developing new hospitals and extending its reach, both geographically and with specialty centers. It opened Banner Estrella in west Phoenix in 2005. In 2007, Banner replaced Mesa Lutheran hospital with Banner Gateway Medical Center in Gilbert. It has started construction on a new hospital and campus in Pinal County (Ironwood) and, working with local developers, it acquired land in Verrado for a future medical campus as part of a planned development.

Catholic Healthcare West (CHW) operates the second largest hospital system in the Phoenix area. CHW has 41 acute care hospitals in Arizona, California and Nevada. Its flagship hospital here is St. Joseph's in Phoenix, which includes the Barrow Neurological Institute. The Barrow is ranked ninth nationally for neurology and neurosurgery in the most recent *U.S. News & World Report* ratings and is a "center of excellence" contracting with national managed

care companies. While other Arizona hospitals made the top 50 of the U.S News rankings in one or more specialties, the Barrow is the only one in the top 10 of any specialty. Still, other systems here have sought to develop and promote their specialty centers as part of a growth strategy. For example, Banner is developing a children's hospital within Banner Desert Medical Center in Mesa.

In the Phoenix area, the three CHW hospitals account for 12.1% of inpatient days and 13.6% of patient revenues. That system also includes Chandler Regional and Mercy Gilbert Medical Center, which opened in the East Valley in 2006.

Scottsdale Healthcare is the third largest system in the Phoenix area, with 10.6% of inpatient days in 2006. It started small but has grown with that part of the valley and now has three hospitals in Scottsdale. The newest is Thompson Peak, which opened in 2007. Other nonprofit systems in the area are John C. Lincoln, with two hospitals in northwest Phoenix, and Sun Health, with two hospitals in the northwest part of the region. Banner Health acquired Sun Health's hospitals, health plan and research centers, with the deal closing in 2008.

The two investor-owned hospital systems operating in the area, Abrazo Health and IASIS, together account for 12.9% of 2006 inpatient days in the area and 10.2% of patient revenues. Vanguard Health System, a publicly traded company based in Nashville, owns Abrazo's six acute care hospitals in the Phoenix area and a psychiatric hospital. It also owns Phoenix Health Plan, an AHCCCS

health plan, and Abrazo Advantage, a Medicare plan. IASIS Healthcare, based in Franklin, TN, has four acute care hospitals plus a psychiatric center in the area. It opened a new hospital in Mesa, Mountain View Medical Center, in 2007, and closed Mesa General in 2008. IASIS also owns Health Choice Arizona, a large AHCCCS plan.

Of the four independent hospitals in the area, Arizona Heart Hospital, is one of nine heart hospitals owned by MedCath, based in Charlotte, NC. The other three are Maricopa Medical Center, Mayo Clinic Hospital and Phoenix Children's Hospital. These four account for 13.8% of inpatient days but 22.9% of patient revenues. Maricopa Medical Center is part of the Maricopa Integrated Health System (MIHS), the public benefit corporation created a few years ago to run the county's hospital, special services and family practice clinics. The Mayo Clinic hospital in Scottsdale was opened in 1998, about 11 years after the Rochester, MN-based Mayo Clinic opened a satellite medical center in Scottsdale.

One of the most talked about hospitals in the Phoenix area does not exist yet. That would be the downtown hospital that is planned for the new Phoenix branch of the University of Arizona medical school. That branch opened a few years ago in the hopes that producing more medical graduates would help to ease a current and projected shortage of physicians in the state. The new school has experienced some disruption, with changes in top leadership and uncertainty about when it will have a new facility.

The University of Arizona has sought other hospitals to partner with it in developing the new hospital and campus. It negotiated with the Banner Health system in 2007, but those talks broke down. Some state officials have high hopes that a new hospital would provide an anchor for the Phoenix Biomedical Campus downtown. Some interviewees suggested that the state has underestimated the amount of investment needed to get the medical school off the ground, including constructing a hospital and literally building up the faculty and training programs. Yet the state faces serious budget shortfalls (the governor imposed a hiring freeze early in 2008) and would be hard-pressed to find the additional funds.

On top of that, Maricopa Medical Center wants funding for a new building. The hospitals and its primary care clinics were spun off from the county a few years ago after a new public benefit corporation, known as Maricopa Integrated Health System, was formed. It is widely acknowledged that the hospital facility is outdated, and that has led to the question: wouldn't it be efficient to build a new hospital that would meet both needs? Still, Maricopa Medical Center has struggled in recent years, and was cited for numerous problems in a recent JCAHO review.

Hospitals have changed hands over the years as the systems formed. In the 1990s, Banner Health (then Samaritan) sold Maryvale Samaritan to Vanguard and Havasu Regional to Province Healthcare (now LifePoint Hospitals). In 1997 John C. Lincoln acquired Phoenix General Hospital to become a

two-hospital system—the hospital is known as John C. Lincoln Deer Valley.

### 2.2.3 Tucson Hospitals

In the Tucson area hospitals have evolved into three major systems plus the University Medical Center. The Carondelet hospitals, St. Joseph's and St. Mary's, had patient revenues of \$459.2 million and 150,000 inpatient hospital days. The Carondelet hospitals acquired full ownership of Tucson Heart Hospital from MedCath in 2006. MedCath has sold some of its other hospitals around the country to local providers. Carondelet is a member of Ascension Health, based in St. Louis, one of the largest Catholic health systems in the country.

The second major system in the Tucson area is TMC Health Care, including Tucson Medical Center and El Dorado Hospital. Community Health Systems, an investor-owned company, acquired four Arizona hospitals from Triad Hospitals, including two in Tucson, Northwest Medical Center and Northwest Medical Center Oro Valley. Community Health Systems also owns Payson Regional Medical Center and Western Arizona Regional Medical Center in Bullhead City.

Also in Tucson, the University (of Arizona) Medical Center is the hospital of the University's medical school. The faculty physicians are members of University Physicians, a multi-specialty group of more than 300 physicians. In 2004, University Physicians took over Pima County's Kino hospital after years of losses and almost losing accreditation. It is now known as The University Physicians Hospital at Kino. University

Physicians also operates a large AHCCCS health plan and a Health Care Group plan for small employers.

Outside of the Tucson and Phoenix areas, there are about 30 other acute care hospitals. At this point, there are no communities outside those metropolitan areas where two or more acute care hospitals compete. There are seven United States Public Health Service Indian Hospitals in Arizona—one in Phoenix and the rest in places like Yuma, Ft. Defiance and Whiteriver.

#### 2.2.4 Physicians

The number of physicians practicing in the state, now and in the future, and their distribution is seen as a major challenge in Arizona. Concern that the number of physicians was inadequate and a desire to train more medical students in the state were the major reasons for establishing a satellite in Phoenix of the University of Arizona medical school. *Exhibit 5* presents two kinds of data about physicians in the state. It is based on surveys that accompany the license renewal process for both allopathic and osteopathic physicians in the state. The data are compiled by the Center for Health Information and Research at Arizona State University.

The average response to the most recent survey was about 57%. According to a report on the implementation of information technology in physicians' offices, this was a full count census of physicians, not a sampling, so 57% is considered very good. (The Use of Electronic Medical Records and Physicians' Attitudes toward a Health Information Exchange. August 2008: Third Interim Report. Sponsored by and Prepared for the Arizona Health Care Cost Containment System by the Arizona State University Center for Health Information & Research.) The Center has previously published a series of reports on physician supply in the state. The authors compared the characteristics of the respondents to other data on the entire population of physicians. They concluded that the respondents closely resembled the larger population for gender breakdown, age cohort, specialty (primary care or specialty care) and location (Maricopa, Pima and all other counties). There was no comparison of respondents and the larger population based on practice type, for example, academic or administrative medicine, or community health center or government agency, or solo or group practice.

The first part of Exhibit 5 shows the number of licensed physicians by county in 2003 and 2007. In 2003, there were 10,642 active physicians in the state, practicing in a

variety of settings. (That number includes some that indicated that they were semi-retired.) Based on an estimated state population then of 5.6 million, there were an average of 1.9 physicians per 1,000 population in the state. The range is quite wide. At one end, there were 2.8 physicians per 1,000 population in Pima County. In eight smaller counties, the ratio was less than one physician per 1,000 population.

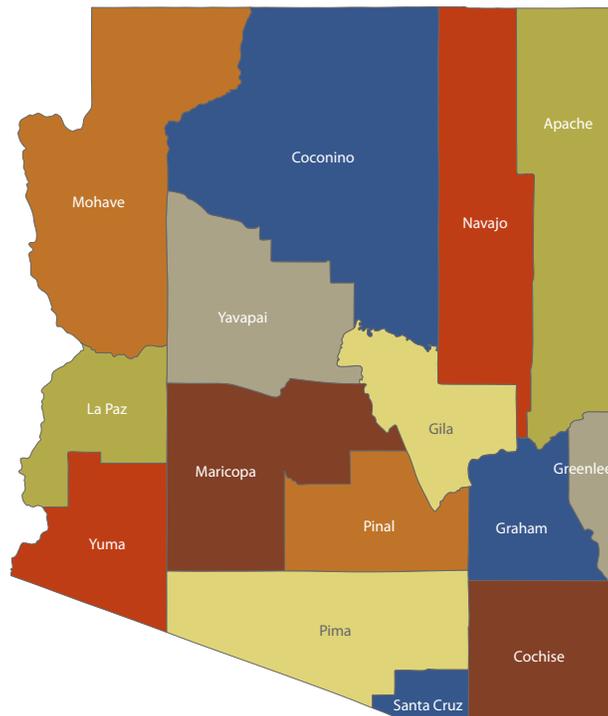
The total number of licensed physicians increased by more than one third in the next four years, up to 14,178 in 2007. The state's population increased by 13.2% in that period, up to 6.3 million, so the average ratio increased to 2.24 physicians per 1,000 population. The ratio for the Phoenix MSA increased from 1.91 to 2.28 physicians per 1,000 population. There are still five counties in the state where the ratio is below one physician per 1,000 population. (Based on data from the 2008 Statistical Abstract, the average ratio for the United States was 2.89 physicians per 1,000 population in 2006.)

In the second half of Exhibit 5, the licensing data are used to show the distribution of physicians by county and by practice setting. The focus is on those reporting that they are in solo or group practices. Other settings include academic, government agencies, community health centers, residents or fellows and hospitalists. Only about one fourth of the physicians responded to the questions about the setting in which they practice. For primary care physicians, about 22% of those responding said they were in solo practice and about 42% said that they were in a group practice. The results were similar for the specialists responding to those questions: about 21% were in solo practice and about 40% were in a group practice. In general, the proportion of physicians in solo practice is lower in Maricopa and Pima Counties but higher in other parts of the state.

The CHIR report was commissioned by AHCCCS. In an effort to improve administrative efficiency and practice quality, it wants to increase the number of physicians that implement electronic medical records. Other payers also encourage physicians to move toward electronic records. Whether physicians are practicing in groups or as solo practitioners is significant because physician groups are more likely to have implemented electronic medical records (the survey showed that 44.4% of physicians in groups used an EMR compared to 25.3% of those in solo practices). One obstacle to implementation of EMRs is their considerable cost and the limited availability of capital within medical practices. One option may be for

physicians to develop closer ties with hospital systems, whether through joining in physician hospital organizations or going as far as to be acquired. In Minnesota and Wisconsin, states where a high percentage of doctors practice in well known medical groups, several of those groups have given up their independence and accepted buyout offers from hospital systems.

In Tucson, the largest medical group is University Physicians, the physicians practicing at the University of Arizona medical school and hospital. In the Phoenix area, the largest groups are the Mayo Clinic, Arizona Medical Clinic, now a part of Banner Health, and Comprehensive Healthcare Center, the physicians practicing at Maricopa Medical Center. Three charts in Section 4 provide basic information about many of the larger physician practices in the Phoenix and Tucson areas and in other parts of the state.



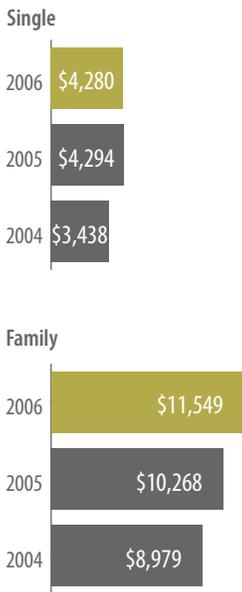
**EXHIBIT 5. Arizona Physicians: Distribution by Practice Size, Specialty, Population and County, 2003 and 2007**

County	Estimated Population		PHYSICIANS				PRIMARY CARE, 2007					SPECIALTY CARE, 2007				
	2003	2007	Total	Per 1,000	2003	2007	Solo*	Group	Other <sup>†</sup>	N/R <sup>‡</sup>	TOTAL	Solo*	Group	Other <sup>†</sup>	N/R <sup>‡</sup>	TOTAL
Apache	72,576	80,905	41	0.56	33	0.41	0 (0.0%)	0	5	18	23	0 (0.0%)	0	2	8	10
Cochise	119,861	126,817	109	0.91	152	1.20	10 (29.4%)	10	14	44	78	4 (22.2%)	10	4	56	74
Coconino	116,134	119,436	301	2.59	357	2.99	10 (23.3%)	14	19	121	164	9 (17.6%)	31	11	142	193
Gila	51,696	52,106	68	1.32	86	1.65	2 (22.2%)	5	2	45	54	0 (0.0%)	6	4	22	32
Graham	31,719	33,399	26	0.82	38	1.14	5 (33.3%)	5	5	17	32	1 (100.0%)	0	0	5	6
Greenlee	7,791	7,552	3	0.39	9	1.19	0 (0.0%)	1	1	5	7	0 (0.0%)	0	0	2	2
La Paz	20,353	21,619	12	0.59	19	0.88	1 (33.3%)	0	2	10	13	1 (33.3%)	2	0	3	6
Maricopa	3,416,869	3,879,864	6,730	1.97	9,292	2.39	254 (21.3%)	519	419	3,057	4,249	285 (22.6%)	608	368	3,782	5,043
Mohave	174,468	194,611	192	1.10	298	1.53	16 (43.2%)	18	3	91	128	4 (7.8%)	36	11	119	170
Navajo	109,068	120,323	94	0.86	118	0.98	7 (29.2%)	8	9	54	78	4 (26.7%)	6	5	25	40
Pima	884,542	959,242	2,446	2.77	2,899	3.02	57 (16.4%)	135	155	890	1,237	74 (18.1%)	167	168	1,253	1,662
Pinal	188,110	276,226	148	0.79	197	0.71	9 (25.0%)	12	15	93	129	5 (23.8%)	6	10	47	68
Santa Cruz	41,007	46,141	30	0.73	39	0.85	2 (22.2%)	2	5	18	27	1 (33.3%)	2	0	9	12
Yavapai	190,850	220,773	255	1.34	385	1.74	20 (35.1%)	26	11	128	185	9 (20.9%)	20	14	157	200
Yuma	171,736	197,225	187	1.09	256	1.30	11 (34.4%)	11	10	101	133	15 (44.1%)	11	8	89	123
<b>TOTAL</b>	<b>5,596,779</b>	<b>6,336,240</b>	<b>10,642</b>	<b>1.90</b>	<b>14,178</b>	<b>2.24</b>	<b>404 (21.9%)</b>	<b>766</b>	<b>675</b>	<b>4,692</b>	<b>6,537</b>	<b>412 (21.4%)</b>	<b>905</b>	<b>605</b>	<b>5,719</b>	<b>7,641</b>
Phoenix MSA	3,604,979	4,156,090	6,878	1.91	9,489	2.28										

\*Percentage in solo practice based on number of physicians responding to survey.  
<sup>†</sup>Includes academic, administrative, community health center, government, hospitalist, locum tenens, residents or fellows.  
<sup>‡</sup>Didn't respond.  
 Note: Phoenix MSA includes Maricopa and Pinal Counties.

Sources: Population data from the Arizona Department of Commerce, Population Statistics Unit. Physician data from licensing renewal files, prepared by Arizona State University Center for Health Information & Research.

### Average Employee Premiums for Single and Family Coverage



Source: MEPS-IC tables for Arizona, 2006

One approach to expanding access to primary care has been the opening of clinics in retail stores. Several national retailers like CVS, Target and Wal-Mart have started clinics or acquired companies that develop and operate retail clinics, such as Minute Clinic. Arizona’s first retail clinic opened in a Phoenix supermarket a few years ago, and more are in development.

#### 2.2.5 Community Health Centers and Rural Health Centers

Federally funded community health centers are an important component of the safety net provider system that services low-income families in Arizona, especially those that have no insurance or that are covered through AHCCCS. The Primary Care Association for the state is the Arizona Association of Community Health Centers. There are more than a dozen community health centers (federally qualified) spread across the state, operating more than 90 service sites. In the Phoenix area, Maricopa Integrated Health System operates 10 family health centers and the John C. Lincoln hospitals also operate a separate children’s health center. In addition, there are 14 rural health centers in the state, which benefit from a separate federal funding program. New centers and satellites have been added in the past few years with federal expansion funds.

Federally qualified health centers benefit from a variety of federal funding sources. In addition, they received cost-based reimbursement from some of their payers. Most of the health centers in Arizona are also contracted providers with one or more AHCCCS health plans.

Native Americans in the state are served by several different health systems. For example, urban clinics in Phoenix

and Tucson are focused on the needs of Native Americans, as is the Phoenix Indian Medical Center. In rural parts of the state, there are six Public Health Service hospitals as well as community health centers. The AHCCCS program also has specific programs serving that population segment.

#### 2.2.6 Mental Health Services

The Division of Behavioral Health Services in the Arizona Department of Health Services oversees the public sector for mental health services. Services are organized around and delivered through Tribal and Regional Behavioral Health Authorities. Funding comes from a variety of federal (Medicaid and SCHIP), state and local resources.

According to state reports, more than 150,000 adults and children were served in August 2008, and that number has been increasing since the end of 2007. In Maricopa County, Magellan Health Services, a national, for profit company, had been a major provider of services. As part of the 2007 contract procurement, Magellan agreed that it would transfer its Maricopa County clinics to community providers. In August 2008 it was announced that Magellan would transfer five mental health clinics to Southwest Network, a non-profit community provider in Maricopa County.

Earlier it was noted that the overall ratio of physicians to the population was low in most part of the state. The Arizona State University researchers have also studied access to psychiatrists in the state. In 2004, they found that there were 691 psychiatrists practicing in the state, with 60% of them in Maricopa County and 27% in Pima County. Of that number, 134 were child psychiatrists. (The authors noted that the state’s licensing files might not include psychiatrists practicing in federal

facilities, such as Department of Veterans Affairs hospitals or at Indian Health Service facilities.)

In Section 3 of the report, data are presented on utilization of care for mental health and chemical dependency for commercial enrollees in Arizona’s HMOs and other managed care plans.

On the public side, mental health services are organized through four regional behavioral health authorities (RBHAs, two managed by for-profit companies and two non-profit organizations), which receive state and federal funds through the Arizona Department of Health Services and contract with providers to serve recipients. Separate agencies serve American Indian reservations.

In general, mental health services are carved out for AHCCCS clients. That is, the AHCCCS health plans do not contract for and coordinate mental health services. AHCCCS payments for those services for its clients are

the biggest source of funding for the regional authorities. And while those contracted mental health providers are free to see commercially insured patients as well, it appears that they are mostly seeing the RBHA patients. For inpatient care, most of those clients are seen in public hospitals.

Patients with commercial insurance or who pay privately for their care are generally served by other providers. One exception may be that children and adolescents may receive care in both the public and private service networks.

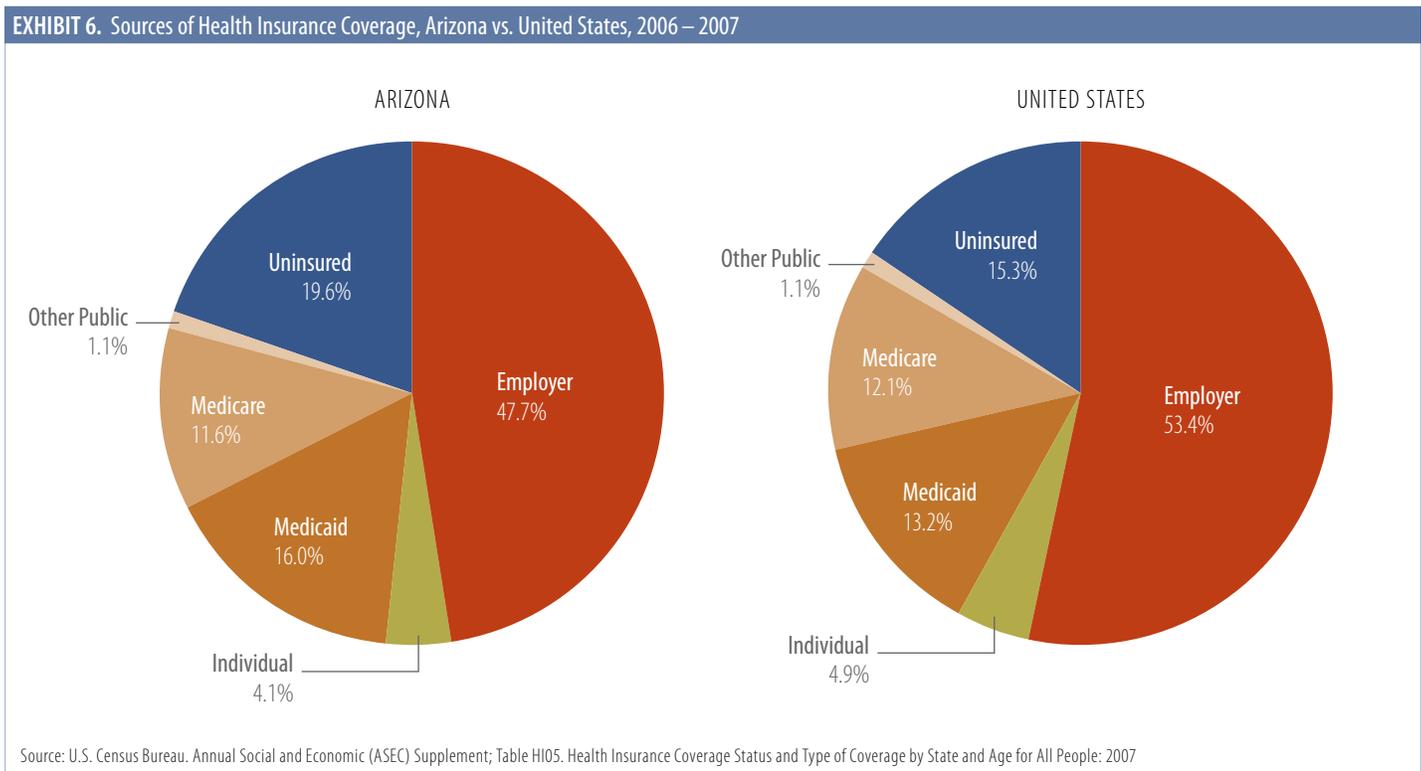
Capacity is an important mental health issue, and some private hospitals have closed their inpatient mental health units. That puts additional pressure on public providers of care, and Pima County is responding by adding new units for crisis and inpatient care. A number of state initiatives in this area seek to expand local partnerships that

would improve access to care and timeliness of care.

### 2.3 Health Insurance Coverage

*Exhibit 6* compares Arizona to the entire country on sources of health insurance. While 53.4% of Americans get their health coverage from their employer, only 47.7% of Arizonans have employer sponsored health benefits. On the other hand, Medicaid covers 16% of Arizona residents but 13.2% of the country as a whole. The proportion of people without insurance is higher in Arizona: 19.6% compared to an average of 15.3% for the country. Arizona has had some success in expanding coverage through AHCCCS and other programs and reducing the number of uninsured.

The sidebar on page 20 presents information on average health insurance premiums in Arizona for the past three years. In 2006, the



## Arizona State Agencies Involved In Health Care and Benefits

**AHCCCS (Arizona Health Care Cost Containment System)** is Arizona's Medicaid agency and also administers KidsCare, Arizona's State Children's Health Insurance Program, and HealthCare Group, a subsidized health plan for small employers.

[www.azahcccs.gov](http://www.azahcccs.gov)

**The Human Resources Division of the Department of Administration** organizes and administers health benefit plans for state employees and some other public employees in the state.

[www.hr.state.az.us](http://www.hr.state.az.us)

**Department of Health Services** administers public health services and behavioral health services and systems in the state, including Arizona State Hospital in Phoenix. Another unit in the agency collects data on hospitals and another section administers Children's Rehabilitative Services.

[www.azdhs.gov](http://www.azdhs.gov)

**Department of Economic Security** administers public assistance programs, including eligibility for AHCCCS and other programs. It also contracts with AHCCCS to provide or administer long-term care services to persons with developmental disabilities.

[www.azdes.gov/aspnew/default.asp](http://www.azdes.gov/aspnew/default.asp)

**Licensing boards**, such as the Arizona Medical Board, oversee health professionals, determining their qualifications and investigating complaints.

[www.azmd.gov](http://www.azmd.gov)

average annual premium for individual coverage was \$4,280 and the average premium for family coverage was \$11,549. Those figures are taken from the MEPS-IC (Medical Expenditure Panel Survey-Insurance Component) data files.

MEPS-IC data for Arizona from 2006 was used to estimate the number of employees that are enrolled in employer sponsored health plans where the employer is self-insuring the benefits. For firms between 100 and 999 employees, 22.5% of those with employer-sponsored coverage were in self-insured groups. For larger employers, 47.5% (793,550) of those with employer-sponsored coverage were in self-insured employer groups.

### 2.4 Purchasers

For the past 30 years, health care costs have increased by two or three times as much as personal income and have become one of the largest expenses for many employers. Private and public employers face the challenge of ever increasing costs for health care benefits. Over the years they have tried a variety of strategies—HMOs, changes in benefit design, switching to self-insurance, introduction of wellness programs and changing to plans with high deductibles and health savings accounts. Each seems to provide a brief respite from high premium increases, but then the pressure resumes. There are 12 Fortune 500 corporations headquartered in Arizona, though none in the first 100. The [Arizona Republic's annual listing](#) of the state's 100 largest employers is dominated by retail and services companies. Wal-Mart is the largest employer in the state, followed by Banner Health. Two other hospital systems, Catholic Healthcare West and Carondelet Health Network, are in the top 25. (The list does not include government employers.)

Large, self-funded employers here, including the state of Arizona, participate in the Arizona Business Forum. That group does not purchase benefits jointly but provides a forum for employers to discuss benefit designs and issues affecting them.

Benefits for the state employees group are administered within the Arizona Department of Administration. Approximately 140,000 employees, dependents and retirees in state agencies and higher education institutions participate in the program. (The sidebar describes state agencies that are involved with health care and benefits.) The state is relatively generous in its contributions to employee coverage. For example, an employee selecting family coverage pays \$150 per month toward a premium of \$1,308 and the state pays the rest.

The state uses managed care networks and a variety of managed care tools for its employee benefits program. Almost all of the participants are in self-funded benefit plans. In 2007, the largest number of employees was enrolled in a UnitedHealthcare self-funded network arrangement, which was offered in Maricopa and Pima Counties and other southern counties. About 67,000 state employees, retirees and university employees are enrolled in the UnitedHealthcare network. The major benefits network in the other parts of the state is known as Rural Arizona Network-Arizona Medical Network (RAN-AMN). Through 2007, the state also offered a network administered by Schaller-Anderson, the Arizona company (now a part of Aetna) that administers the MercyCare AHCCCS plan.

### 3.0 Market Analysis

This section of the report focuses on the health plan companies, including the HMOs and the AHCCCS health plans, looking at their enrollment, financial results and measures of their utilization and effectiveness of care. Detailed data are presented from 2007 fiscal year operations, and often several years of summary data are presented to provide context for the trends.

The data were drawn from four primary sources. First, information on the health insurers was taken from annual statements that each company submits to the Arizona Department of Insurance, using forms prescribed by the National Association of Insurance Commissioners. Second, the AHCCCS plans submit audited financial statements and also separate reports on their enrollment. The monthly enrollment reports are available at the [AHCCCS web site](#). The AHCCCS plans do not submit the NAIC annual statement forms, which makes it difficult to compare Arizona Medicaid plans with commercial plans or with Medicaid plans in other states.

Third, data on Medicare Advantage health plans and Medicare Part D prescription drug plans were downloaded from the Centers for Medicare and Medicaid Services. And fourth, data on utilization of care (including mental health), effectiveness of care and enrollee satisfaction for commercial health plans were drawn from the Quality Compass® data set for 2006 operations.

Note that this analysis is limited to enrollment in insured plans and does not include membership, revenues or expenses for the insured enrollees whose coverage is written on the “paper” of an affiliated accident and health insurance company or that are in self-funded employer groups for which an HMO or insurance company provides administrative services. There are no regulatory requirements that comparable data be reported to state or federal agencies.

In reading the data tables that follow, readers should note that some companies operate multiple entities here, but continue to submit separate statements to regulators. For example, UnitedHealthcare operates what is now a small HMO under that name, but also owns PacifiCare and two AHCCCS plans, Arizona Physicians IPA and EverCare. Aetna owns the Aetna HMO and recently acquired Schaller Anderson, the management company for MercyCare. And the Vanguard/Abrazo hospitals own a Medicare HMO and an AHCCCS plan, Phoenix Health Plan

#### 3.1 Health Plan Enrollment

Enrollment in commercial (employer group, including federal employees and individuals) and Medicare Advantage health plans in Arizona was roughly flat in 2007. *Exhibit 7* shows that at the end of 2007, about 936,000 Arizonans were in those plans, down less than one percent from 2006. There was a slight increase in Medicare enrollment, offset by a decline in commercial group lives. Commercial enrollment in Blue Cross Blue Shield is mostly PPO arrangements and not HMO benefit plans.

Of the four largest health plans, three—Aetna, Blue Cross Blue Shield and HealthNet—posted modest enrollment gains. PacifiCare lost about 24,000

#### Sources of Health Plan Data for Arizona

The Arizona Department of Insurance publishes an overview of the health plans operating in the state. That brochure and other materials for individuals and group purchases can be found at:

[www.id.state.az.us/consumerlifehealth.html](http://www.id.state.az.us/consumerlifehealth.html)

In addition, consumers may find useful the information that the Arizona Department of Administration puts together on insurance benefits for state employees:

[www.benefitoptions.az.gov](http://www.benefitoptions.az.gov)

The National Committee for Quality Assurance (NCQA) accredits HMOs and PPOs and also rates them on a series of measures. Users can search by plan and by state. In Arizona, all large health plans except Blue Cross Blue Shield participate.

[ncqa.org/tabid/60/Default.aspx](http://ncqa.org/tabid/60/Default.aspx)

A link takes users to the *U.S. News and World Report* ranking of the best health plans in the country:

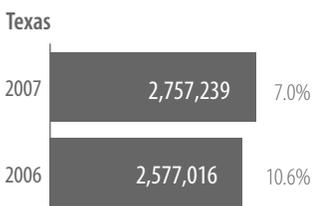
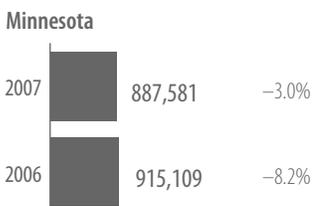
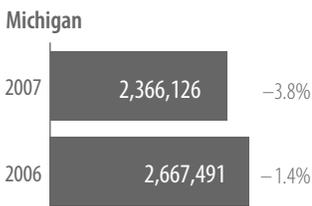
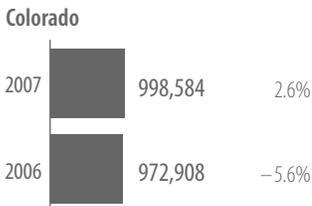
[health.usnews.com/sections/health/health-plans/index.html](http://health.usnews.com/sections/health/health-plans/index.html)

Some comparative data on Medicare Advantage and Part D prescription drug plans is available under “Learn More About Health Plans in Your Area” at:

[www.medicare.gov/Default.asp](http://www.medicare.gov/Default.asp)

**HMO Enrollment Change**

Selected state HMO enrollment in 2006 and 2007 and percentage change from the previous year.



**EXHIBIT 7. Arizona Health Plan Enrollment, 2007**

Health Plan	Commercial	MEDICARE		TOTAL	2006 TOTAL	CHANGE		
		Advantage	Supplement			Amount	%	
Abrazo Advantage	0	3,355	0	3,355	3,468	-113	-3.3%	
Aetna Health	96,317	570	0	96,887	92,224	4,663	5.1%	
Arcadian Health	0	2,832	0	2,832	2,204	628	28.5%	
Blue Cross Blue Shield	393,841	0	13,333	407,174	401,821	5,353	1.3%	
CIGNA Healthcare	65,957	31,378	0	97,335	112,184	-14,849	-13.2%	
HealthNet	59,534	46,932	0	106,466	90,163	16,303	18.1%	
Humana Health Plan	20,267	10,202	0	30,469	22,311	8,158	36.6%	
Great-West Health Plan (One Health)	0	0	0	0	911	-911		
PacifiCare	53,268	98,951	0	152,219	176,638	-24,419	-13.8%	
SCAN Health Plan	0	591	0	591	0	591		
Sun Health	0	18,278	68	18,346	18,077	269	1.5%	
UnitedHealthcare	15,287	5,026	37	20,350	22,515	-2,165	-9.6%	
<b>2007 TOTAL</b>	<b>704,471</b>	<b>218,115</b>	<b>13,438</b>	<b>936,024</b>	<b>942,516</b>	<b>-6,492</b>	<b>-0.7%</b>	
<b>2006 TOTAL</b>	<b>714,033</b>	<b>216,363</b>	<b>12,120</b>	<b>942,516</b>				
Change	-1.3%	0.8%	10.9%	-0.7%				
Segment Share	75.3%	23.3%	1.4%					
		<b>Acute Care</b>	<b>Long Term Care</b>	<b>Health Care Group</b>	<b>TOTAL</b>	<b>2006 TOTAL</b>	<b>CHANGE Amount</b>	<b>%</b>
<b>AHCCCS MANAGED CARE PLANS</b>	863,874	42,013	22,283	928,170	879,541	48,629	5.5%	
Arizona Physicians IPA	271,548	9,734		281,282	280,016	1,266	0.5%	
Bridgeway Health Solutions		1,522		1,522	881	641	72.8%	
Capstone		1,587		1,587		1,587		
Care 1st Arizona	30,281	487	3,422	34,190	31,433	2,757	8.8%	
Cochise Health Systems		925		925	912	13	1.4%	
Evercare Select		4,530		4,530	5,684	-1,154	-20.3%	
Health Choice Arizona	123,302			123,302	110,883	12,419	11.2%	
Maricopa Health Plan	34,629			34,629	33,324	1,305	3.9%	
Mercy Care Plan	269,211	15,645	9,281	294,137	272,723	21,414	7.9%	
Phoenix Health Plan	97,844			97,844	91,981	5,863	6.4%	
Pima Health Plan	29,478	3,944		33,422	31,249	2,173	7.0%	
Pinal/Gila LTC		1,309		1,309	1,241	68	5.5%	
SCAN – LTC		1,418		1,418	353	1,065	301.7%	
University Physicians/Family Care	7,581		9,580	17,161	17,917	-756	-4.2%	
Yavapai Long Term Care		912		912	944	-32	-3.4%	
<b>OTHER AHCCCS PLANS</b>	171,465	2,563	2,268	176,296	171,795	4,501	2.6%	
AHCCCS HCG PPO			2,268	2,268	2,344	-76	-3.2%	
Comprehensive Medical & Dental (DES)	9,078			9,078	8,896	182	2.0%	
Federal Emergency Service	75,583			75,583	72,599	2,984	4.1%	
Indian Health Services	83,081			83,081	81,233	1,848	2.3%	
LTC Developmental Disabilities DES*		561		561	552	9	1.6%	
Native American Health Care Centers/FFS		77		77	79	-2	-2.5%	
Other <sup>†</sup>	3,723	1,925		5,648	6,092	-444	-7.3%	
<b>2007 AHCCCS TOTAL</b>	<b>1,035,339</b>	<b>44,576</b>	<b>24,551</b>	<b>1,104,466</b>	<b>1,077,472</b>	<b>26,994</b>	<b>2.5%</b>	

\*The Department of Economic Security subcontracts acute care for about 19,000 persons with developmental disabilities to Arizona Physicians IPA, Care 1st and Mercy Care Plan. They are shown in the column for Long Term Care.  
<sup>†</sup>Other includes certain Indian tribes, ventilator dependent and certain fee-for-service or short term enrollees  
 Sources: Author's analysis of annual statements for Health Care Services Organizations and AHCCCS enrollment reports for December 2007 and 2006.

enrollees, about half from its Medicare Advantage and half from employer plans.

The second part of Exhibit 7 shows enrollment in plans contracting with AHCCCS for acute care Medicaid, long-term care and the Health Care Group. Membership in those lines of business increased by 2.5% in 2007. The table also shows AHCCCS enrollment under other contracts, including the Arizona Department of Economic Security and Native American health care centers. The second group accounts for about 10% of all AHCCCS enrollment, which grew to 1.1 million in 2007.

Taking the two groups together, total enrollment in managed care arrangements was 1.864 million in 2007. That is 30% of an estimated state population of 6.336 million. Within that number, AHCCCS managed care enrollees now account

for almost half (48.1%). Commercial enrollees are 39.4% and Medicare Advantage seniors account for 11.8%. That is a significant shift from 2002, when commercial enrollment was 53.8% of the total and AHCCCS members were 35.6%.

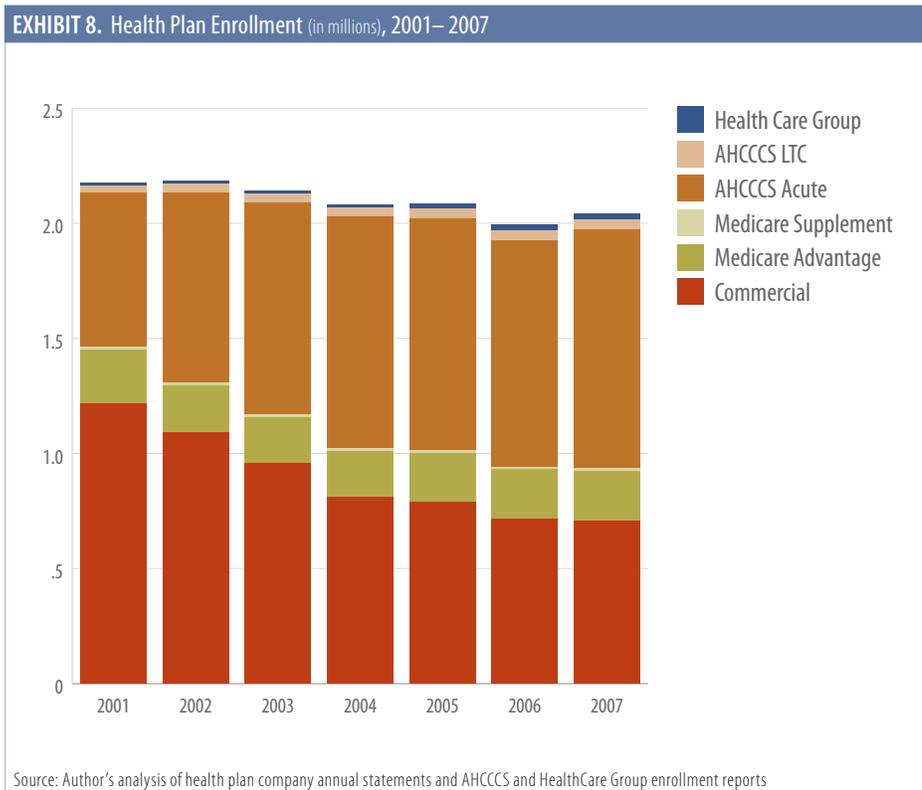
The short explanation for that change is that commercial HMO enrollment has dropped while AHCCCS has grown. *Exhibit 8* shows the enrollment trend from 2001 to 2007 for Arizona health plans. Overall enrollment in these insured managed care plans has dropped a little, but membership in the different market segments has changed a lot. Enrollment in commercial plans (including Health Care Group) dropped from 1.3 million to 727,000, while enrollment in AHCCCS managed care plans increased from 731,000 to 906,000. AHCCCS enrollment continues to grow, from 600,000 in managed care

plans in 2001 to 920,000 in August 2008.

The sidebar on page 24 compares Arizona health plans with HMOs in other states on trends in their health plan enrollment in the past two years. As in Arizona, enrollment in commercial HMO plans has declined steadily in these other states, partly offset by growth in membership in Medicaid managed care plans.

As noted earlier, this analysis is limited to enrollment in insured plans in these companies. As employer groups have left these plans in recent years, there is no comparable data on where those groups have gone. It is likely that most have gone to other insured plans written through affiliated insurance companies or have gone to self-insured plans administered by companies such as Blue Cross Blue Shield and UnitedHealthcare. For example, Blue Cross Blue Shield reported 617,000 enrollees in network rental plans in 2007, understood to mean self-funded employer groups. That was an increase from 583,000 in 2006.

Another measure of activity outside of the health plan companies is health insurance premiums collected by accident and health insurance companies in Arizona in recent years. The sidebar on page 26 shows premiums collected in 2006 and 2007 by 13 national companies, including Aetna, Connecticut General (CIGNA), Humana and UnitedHealthcare. In 2006, these companies collected just under \$2 billion in health premiums, an increase of almost 12%. (Health premiums include dental, vision,

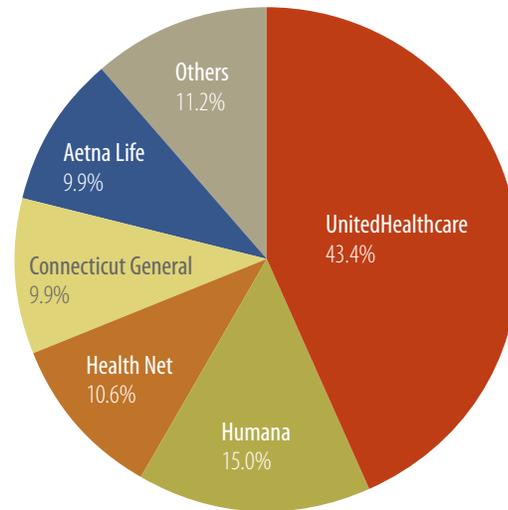


**Arizona Health Premiums for non-HMO Insurers, 2006 and 2007**

<b>Aetna Life</b>	
2007	220,566,364
2006	167,781,616
<b>Connecticut General</b>	
2007	220,996,193
2006	126,003,466
<b>Great-West Life &amp; Annuity</b>	
2007	22,185,690
2006	23,024,148
<b>Guardian Life Insurance Company</b>	
2007	14,527,149
2006	11,709,019
<b>Health Net Insurance Company</b>	
2007	237,033,368
2006	179,913,330
<b>Humana Insurance Company</b>	
2007	334,063,335
2006	287,460,333
<b>Mutual of Omaha</b>	
2007	30,462,439
2006	34,118,213
<b>Principal Life Insurance</b>	
2007	46,642,715
2006	42,599,142
<b>Prudential</b>	
2007	13,611,754
2006	50,298,358
<b>Time (Fortis) Insurance</b>	
2007	39,886,796
2006	38,420,500
<b>UniCare Life &amp; Health Insurance</b>	
2007	28,807,294
2006	21,921,344
<b>Union Security (Fortis) Benefits</b>	
2007	21,669,345
2006	22,799,688
<b>United Healthcare Insurance</b>	
2007	968,968,522
2006	922,995,800
<b>Unum Life Insurance</b>	
2007	31,898,293
2006	34,889,545
<b>TOTAL</b>	
2007	2,231,319,257
2006	1,963,935,502

Source: NAIC annual statements, Schedule T

**EXHIBIT 9. Arizona Market Share for Non-HMO Insurers, 2007**



Source: Author's analysis of accident and health insurers annual NAIC statements, Schedule T. Based on \$2.231 billion in health premiums for the major companies.

prescription drug and some disability insurance.) *Exhibit 9* takes the 2007 premium numbers and shows how these companies divide this part of the market. UnitedHealthcare Insurance is the largest here, with 43.4% of this market, followed by Humana. As will be seen later, both companies have enjoyed significant growth in their Medicare business in Arizona and have also seen most of the employer groups shift out their HMO products.

### 3.2 Medicare Plans

The Medicare Advantage program, created by the Medicare Modernization Act of 2003, was the federal government's third attempt to create private market options for seniors. During the 1980s, Medicare contracted with HMOs through the Medicare Risk program (sometimes called TEFRA Risk). It generally paid those HMOs 95% of average fee-for-service charges in each county, assuming that the HMOs would manage care and save money. That worked well for several years, until the annual payment increases slowed and HMOs and their providers began to drop risk contracts. In the 1990s, Congress tried again and created Medicare+Choice, adding preferred provider organization (PPO) options for seniors and starting private fee-for-service plans, allowing insurers to offer Medicare plans without having a network of contracted providers.

Again, early enthusiasm by health plans and seniors died out after a few years. HMOs competed vigorously, offering plans with supplemental benefits, including prescription drugs, while charging little or no additional enrollee premiums. Within a few years, medical costs went up faster than federal payment rates and again providers and HMOs withdrew from the program. However, those HMOs that stayed in the program were often able to earn strong profits.

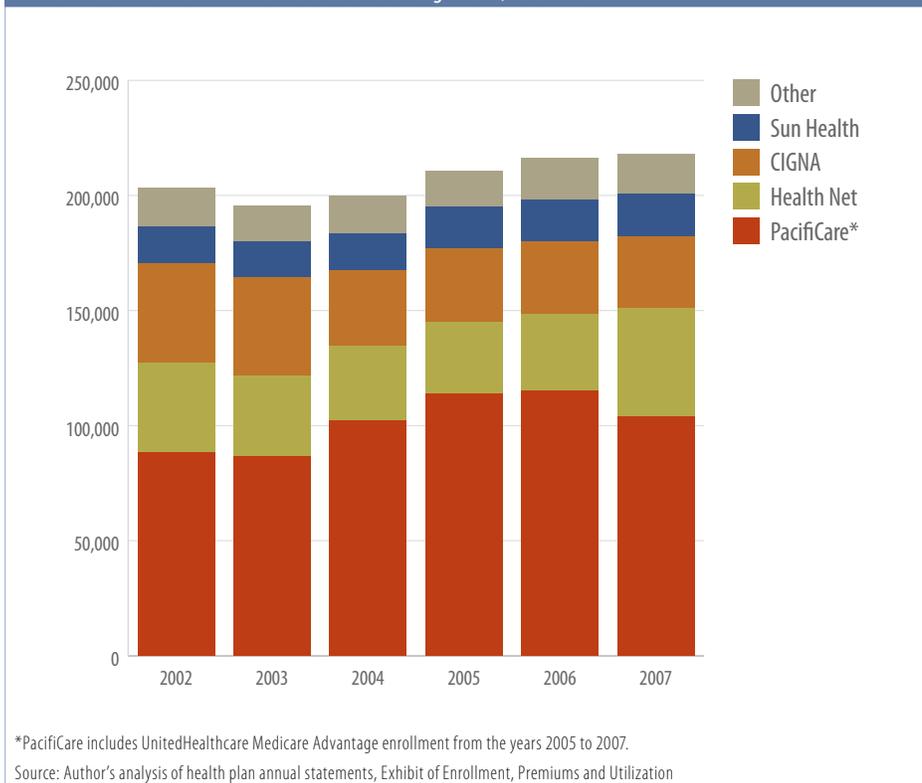
The third version came in 2003, when Congress created the Part D prescription drug benefit and several ways for seniors to gain that benefit. It authorized new and existing HMO plans to administer the new drug benefit and it created the stand-alone Part D plan, that could be coupled with traditional Medicare or one of the Advantage plans. It gave a boost to the Medicare Advantage plans, particularly private fee-for-service, by increasing their payment rates. Recent research has shown that those plans receive monthly payments that are 115% of the average payments for traditional Medicare.

*Exhibit 10* shows that enrollment in Medicare Advantage HMO plans dropped below 200,000 in 2003, but has since climbed to about 220,000. PacifiCare is the largest plan, with half of the senior HMO enrollment in the state, followed by Health Net.

*Exhibit 11* shows the main ways in which the 848,000 Medicare eligible Arizonans are now getting their prescription drug coverage. About 86% of them have creditable coverage now. The largest groups are enrolled in Medicare Advantage HMOs and PPOs with a prescription drug benefit. Just over one-fourth are enrolled in standalone Part D plans.

In *Exhibit 12*, the enrollment in varieties of Medicare Advantage plans is shown. HMO plans have the highest penetration here and historically have attracted a high percentage of Arizona seniors, including seniors from other states who spend the winter months in Arizona. Private fee-for-service plans have grown here, but have not achieved the market presence that they have in some other states.

**EXHIBIT 10. Enrollment in HMO Medicare Advantage Plans, 2002 – 2007**



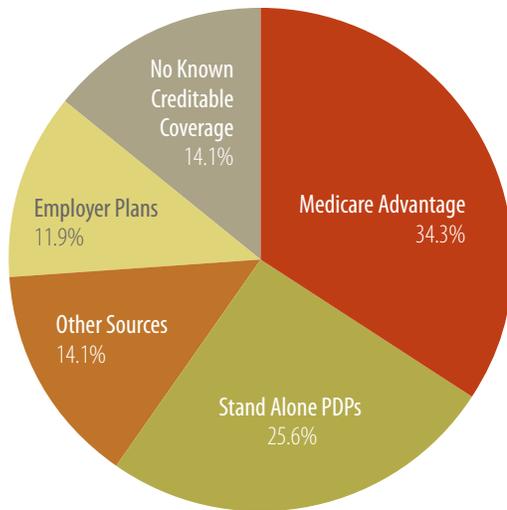
**Enrollment in Part D Prescription Drug Plans, January 2008**

UnitedHealthcare Insurance	54,084
Humana Insurance	50,436
United Health Care Insurance/United New York	26,173
Health Net Life	17,677
UniCare Life and Health	15,152
Sierra Health and Life	12,914
WellCare Prescription	5,146
Coventry Health	4,267
MemberHealth	3,415
Aetna Life Insurance	2,877
Medco Containment	2,334
United American Insurance	2,268
Pennsylvania Life	2,009
Connecticut General	1,870
Anthem Insurance	1,821
Silverscript Insurance	1,212
Blue Cross Blue Shield Northern Plains Alliance	890
RxAmerica LLC	760
Sterling Life	561
ODS Health Plan	553
Express Scripts	414
Group Health Inc	407
HCSC Insurance	269
First Health Life	257
Blue Shield of California	204
Envision Insurance	159
PSERS HOP Program	136
Union Pacific*	108
Excellus Health	103
HealthSpring	96
National Rural Electric Cooperative Association*	72
IBT Voluntary Employee Benefits Trust*	69
Oklahoma State Group Insurance Board*	61
Others with less than 50	279
<b>TOTAL</b>	<b>209,053</b>

\* Employer/Union Only Direct Contract PDP

Source: Centers for Medicare and Medicaid Services, Monthly PDP Enrollment by State/County/Contract, January 2008

**EXHIBIT 11. Sources of Prescription Drug Coverage for Arizona Seniors** Total Medicare Eligibles: 848,034



Source: Kaiser Family Foundation State Health Facts

The sidebar lists the 30 or so Part D standalone plans that are selling to Arizona seniors. More than 200,000 were enrolled in those plans at the beginning of 2008, with the most enrollees in UnitedHealthcare Insurance Company and Humana Insurance Company.

**3.3 Medicaid – AHCCCS**

About one in six Arizona residents is enrolled in the state’s Medicaid plan, known as AHCCCS. It was created in 1982 when Arizona became the last state to organize a Medicaid program. AHCCCS was constructed on a foundation of federal waivers and even now is required to periodically receive reauthorization from the federal government. The state and the counties had other programs for financing care for low-income families prior to 1982 and continued some of those programs after that.

All AHCCCS enrollees choose a managed care plan or default to one—there is no fee-for-service

option. It can be broadly divided into the acute care program and the Long Term Care System (ALTCS). Measured by enrollment, the acute care program is much larger, with about 88% of the 1.1 million enrollees in 2007. While seniors and disabled persons in ALTCS are about 4% of the enrollees, they account for about 27% of the program’s expenditures.

AHCCCS has grown in several ways. Proposition 204 passed in 2000 and expanded the income limits for AHCCCS eligibility to 100% of the federal poverty guideline. This initiative also removed responsibilities from counties for paying for care for low-income persons and households under programs such as the Medically Needy. By enrolling them in AHCCCS, the state was able to leverage federal matching funds. Proposition 204 also removed some responsibilities from safety net providers that had served that population.

Arizona KidsCare, the state’s version of the State Children’s Health

Insurance Program, is administered through AHCCCS and now has about 65,000 enrollees. All (except for some Native American children) are enrolled automatically in one of the managed care plans. Arizona has been working under a separate federal waiver to develop a program in which the state, private employers and their uninsured employees and dependents would pool funds to help those employees purchase insurance for their households.

To help small employers find more affordable health care coverage, Arizona created the Healthcare Group (HCG) program in 1988, which is also administered by AHCCCS. It contracts with three AHCCCS plans to provide HMO coverage to small employers and local governments in the state. It added a PPO option in 2006. Enrollment in HCG plans has gone up and down, most recently down to about 20,000 in August 2008. Eligibility for the program was expanded a few years ago, and enrollment grew from 11,100 in 2004 to 24,600 in 2006. More than 9,000 firms participated during 2006 and 2007. The state has subsidized the program to capitalize it initially and to hold down premiums since then. But the program has lost millions of dollars since 2006, and enrollment has been curtailed in an effort to halt the losses.

*Exhibit 13* tracks enrollment in AHCCCS plans from 2001 to 2008. It includes acute care and long-term care, but not Healthcare Group. Three of the four largest contractors, MercyCare, Health Choice Arizona and Phoenix Health, are hospital-sponsored health plans.

EXHIBIT 12. Enrollment in Medicare Managed Care Plans, 2008					
Health Plan	HMO	Private Fee for Service	Local and Regional PPOs	Cost, HCPP and Other	TOTAL
Abrazo Advantage	3,210	0	0		3,210
Aetna Health/Life	563	1,594	244		2,401
Arcadian Health	2,836		0		2,836
Arizona Physicians IPA	12,404		0		12,404
Blue Cross Blue Shield of Michigan		1,983	0		1,983
Care 1st	1,481	0	0		1,481
CIGNA	30,646	52	0		30,698
Consolidated Association Railroad Employees			0	102	102
Deseret Healthcare			0	210	210
First Health		747	0		747
Health Choice Arizona	3,372	0	0		3,372
Health Net	45,575		3,385		48,960
Humana Health/Insurance	9,990	18,940	1,936		30,866
Kaiser Foundation	691		0		691
MercyCare	13,876	0	0		13,876
PacifiCare HMOs/Life & Health	96,777	1,889	0		98,666
Pyramid Life		2,517	0		2,517
Rochester Area HMO		406	0		406
Santa Fe Employees	0		0	109	109
SCAN Health Plan	589		0		589
Sterling Life		2,539	0		2,539
Sun Health	18,153	44	0	114	18,311
UniCare Life		650	0		650
Union Pacific			0	108	108
UnitedHealthcare HMO/Insurance	4,915	13	7,029	76	12,033
Universal Health		1,951	0	0	1,951
Plans with less than 100 members in Arizona	170	242	38	107	557
<b>TOTAL</b>	<b>245,248</b>	<b>33,567</b>	<b>12,632</b>	<b>826</b>	<b>292,273</b>

CMS reports do not list enrollment where there are fewer than 10 enrollees in a county for a particular health plan.

Source: Author's analysis of SCC Medicare Advantage Enrollment report for January 2008.

### AHCCCS Information Sources

AHCCCS has been the subject of numerous program evaluations, site visits and other studies. Some of them are summarized as part of a [2005 overview report](#).

AHCCCS is subject to [annual financial audits](#).

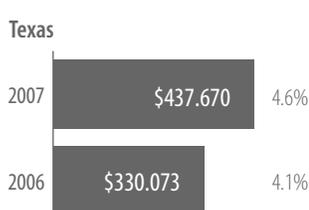
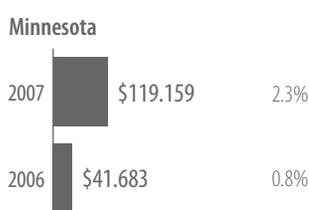
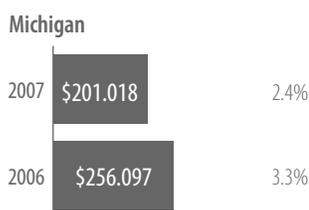
In addition, the Auditor General of Arizona regularly conducts [evaluations of program components](#).

A helpful survey of the sometimes turbulent early history of AHCCCS is found in this article in *Health Affairs*: Bradford Kirkman-Liff, et al; "The Evolution of Arizona's Indigent Care System," Winter 1987.

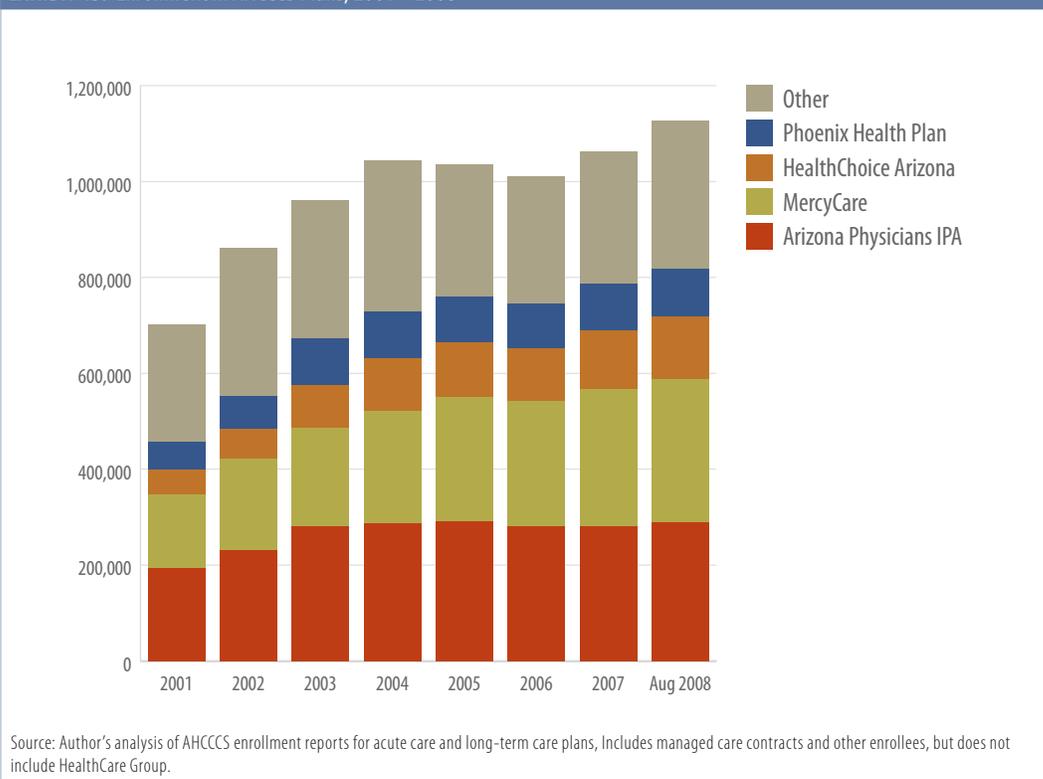
AHCCCS data, including enrollment statistics, are available for download at [www.azahcccs.gov/research](http://www.azahcccs.gov/research).

**HMO Net Income** (in millions)

HMO net income and margin as a percentage of underwriting revenues.



**EXHIBIT 13. Enrollment in AHCCCS Plans, 2001 – 2008**



They accounted for 46.2% of all AHCCCS enrollment at the end of 2007. The fourth and largest, Arizona Physicians IPA, was owned by hospitals in Phoenix and Tucson but has since been sold to UnitedHealthcare. (Arizona Physicians IPA, like several of the original AHCCCS plans, was originally formed by entrepreneurs. It went bankrupt within a few years and was rescued by the hospitals. Three of the other original AHCCCS contractors also foundered and folded or were taken over.)

Arizona Physicians IPA grew from 231,000 members in 2002 to 271,500 in 2007. MercyCare increased its acute care enrollment from 188,100 in 2002 to 269,200 in 2007.

Other state agencies also operate health care programs that complement AHCCCS. For example, the Arizona Department of Health Services operates Children's Rehabilitative Services, serving about 23,000 children with a variety of chronic illnesses and disabilities. That program also follows a managed care model and rebid its contracts in 2008.

It awarded the major contract to Arizona Physicians IPA, which has been building a network of contracted physicians and hospitals to provide specialized care through the program.

**3.4 Health Plan Revenues and Net Income**

Arizona health plans have been strongly profitable in recent years. *Exhibit 14* compares the health insurers and the AHCCCS plans on their revenues and net income in 2007. In 2007, Arizona health plan companies had net income of \$219.3 million, or 5.0% of underwriting revenues of \$4.393 billion. That is an increase from 2006 net income of \$199.2 or 4.6% of revenues. (Note that the results for Humana cover several states and are shown here below the total — Arizona only accounts for about 10% of the business reported by Humana on a multi-state annual statement.) The sidebar compares Arizona health plans with those in four other states on profitability for the past two years.

**EXHIBIT 14. Health Plan Net Income, 2007**

Health Plan	Underwriting Revenues	Underwriting Net Income	Net Income After Taxes	Margin	Net Income Per Member Per Month	Cumulative Net Income 2003 – 2007
Abrazo Advantage	\$39,357,550	\$12,768,657	\$19,211,946	48.8%	\$470.26	\$22,237,457
Aetna Health	347,956,799	31,292,309	21,142,560	6.1%	10.57	86,261,038
Arcadian Health	24,290,345	–118,486	159,169	0.7%	4.90	2,954,923
Blue Cross Blue Shield of Arizona	1,285,908,240	90,141,171	95,602,514	7.4%	7.25	455,553,812
CIGNA Healthcare of Arizona	625,827,122	19,405,259	14,207,357	2.3%	11.71	95,861,458
Great-West Health Plan (One Health)	–9,285	–15,285	51,771	NA	NA	55,478,428
HealthNet of Arizona	594,789,098	14,327,021	17,312,301	2.9%	14.01	922,419
PacifiCare	1,190,408,574	45,307,154	42,541,334	3.6%	22.21	136,776,259
SCAN Health Plan of Arizona	5,891,840	–1,314,007	–1,053,742	–17.9%	–267.45	–1,839,009
Sun Health	172,552,611	2,810,634	2,612,502	1.5%	11.77	8,398,982
UnitedHealthcare of Arizona	105,983,747	8,029,230	7,544,022	7.1%	29.97	18,982,108
<b>TOTAL</b>	<b>\$4,392,956,641</b>	<b>\$222,633,657</b>	<b>\$219,331,734</b>	<b>5.0%</b>	<b>\$10.91</b>	<b>\$875,678,029</b>
Humana*	\$1,413,109,913	–\$8,788,969	–\$16,118,227	–1.1%	–\$4.12	\$83,728,671

\*The data for Humana refers to operations in about seven states, of which Arizona represents about 10% of the revenues and enrollment.

AHCCCS Plans	Total Revenues	Medical Expenses	Net Income <sup>†</sup>	Margin	Cumulative Net Income 2003 – 2007
Arizona Physicians IPA	\$1,150,379,000	\$992,073,000	\$22,085,000	1.9%	\$28,074,000
Bridgeway Health Solutions	45,697,542	39,393,130	287,005	0.6%	287,005
Care 1st Arizona*	154,166,253	133,883,868	1,920,249	1.2%	4,278,444
Cochise Health Systems	33,355,529	26,189,532	4,280,329	12.8%	10,179,973
Evercare Select	183,160,032	153,710,444	4,459,202	2.4%	20,588,093
Health Choice Arizona	408,406,329	354,830,396	13,540,948	3.3%	47,705,960
Maricopa Health Plan	126,578,604	117,527,614	–4,306,665	–3.4%	–21,671,706
Mercy Care Plan*	1,622,751,000	1,438,266,000	54,935,000	3.4%	126,678,000
Phoenix Health Plan	290,566,614	240,265,691	13,073,695	4.5%	69,220,676
Pima Health Plan	258,122,002	234,439,377	1,829,046	0.7%	–47,236,396
Pinal/Gila LTC	50,498,772	41,467,845	4,281,368	8.5%	5,399,977
SCAN – LTC	46,863,369	36,913,451	1,020,483	2.2%	1,020,483
University Physicians/Family Care*	61,057,965	49,407,752	2,735,089	4.5%	6,072,997
Yavapai Long Term Care	35,540,375	29,899,902	2,319,255	6.5%	5,779,062
<b>TOTAL</b>	<b>\$4,467,143,386</b>	<b>\$3,888,268,002</b>	<b>\$122,460,004</b>	<b>2.7%</b>	<b>\$256,376,568</b>

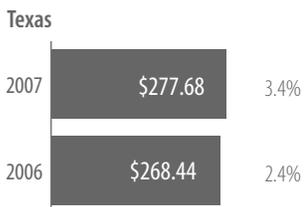
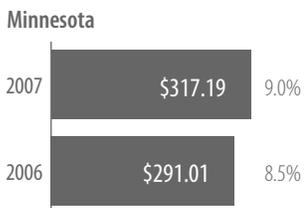
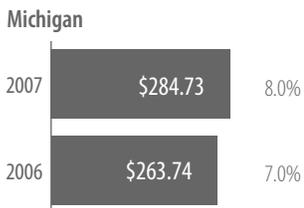
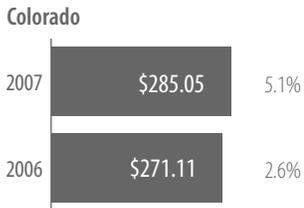
\*Includes HealthCare Group and ventilator dependent enrollees

†After taxes and including investment income

Source: Author’s analysis of health plan annual statements for 2007, Statement of Revenues and Expenses and audited financial statements for AHCCCS plans.

### HMO Premium Trend

State average HMO premium revenues per commercial member per month and its increase over the previous year.



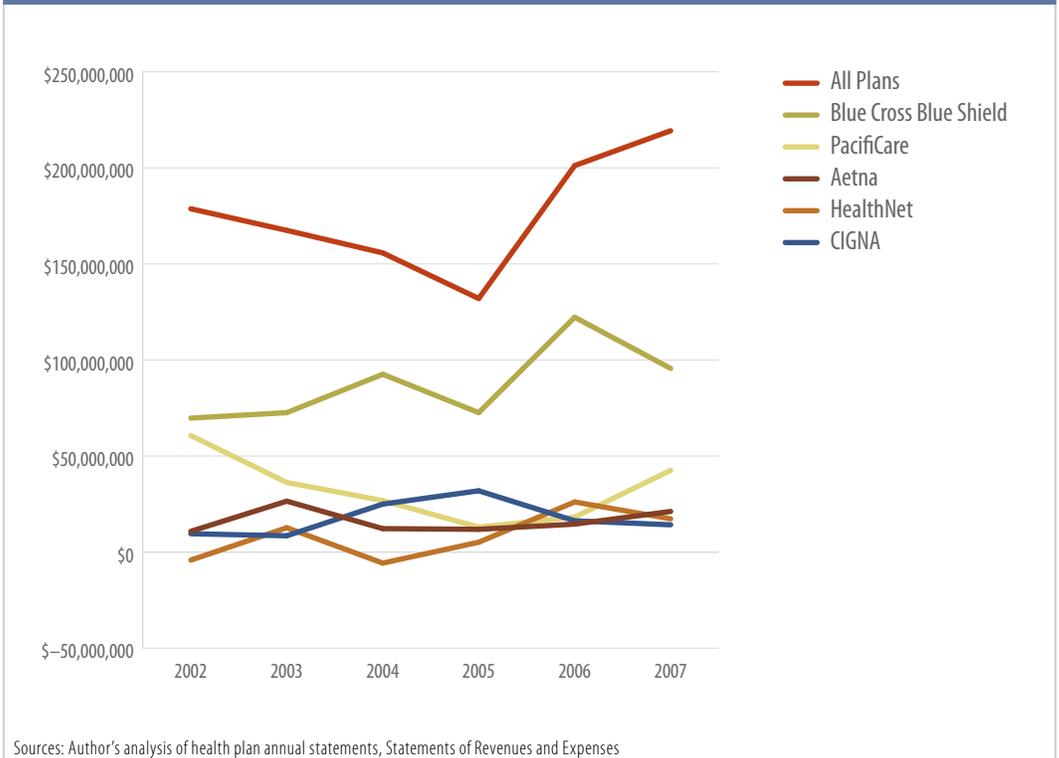
In 2007, these 11 companies had net underwriting income of \$222.6 million. Investment gains of \$89.9 million (about one third at Blue Cross) were offset by federal income taxes paid of \$91.9 million. Except for SCAN, a relative newcomer to Arizona, all the health plans were profitable. Among the larger plans, Blue Cross had the highest margin and net income in 2007, but PacifiCare was the most profitable on a per member per month basis.

The AHCCCS plans reported net income of \$118.2 million, or 2.7% of revenues. MercyCare had the highest net income (after investment income and taxes) and a margin of 3.4% in 2007, Arizona Physicians IPA had net income after taxes of \$22.1 million. Only Maricopa Health Plan reported losing money in 2007. Their results were a small improvement over 2006 when as a group they had net income of \$104.1 million, or 2.6% of revenues.

During the five years from 2003 to 2007 the Arizona health plan companies had cumulative net income of \$875.7 million, with Blue Cross Blue Shield earning 45% of that amount. During the same period, the AHCCCS companies had net income of \$256.4 million, with MercyCare accounting for half of that. *Exhibit 15* shows the results for the largest health plan companies and for that group as a whole from 2002 to 2007. While overall net income declined in 2004 and 2005, it has since come back up and was higher than ever in 2007.

Using data from an exhibit in the annual statements, *Exhibit 16* compares the health plan companies on their underwriting net income (not including investment income earned or taxes paid) by line of business: commercial, Medicare and Medicare Supplement. In 2007, about two-thirds of the net income was from commercial business and the

EXHIBIT 15. Health Plan Net Income Trends, 2002 – 2007



**EXHIBIT 16. Health Plan Net Income by Line of Business, 2007 and 2006**

Health Plan	Commercial		Medicare Advantage		Medicare Supplement		TOTAL	
	2007	2006	2007	2006	2007	2006	2007	2006
Abrazo Advantage	0	0	\$12,768,658	\$4,049,926	0	0	\$12,768,658	\$4,049,926
Aetna Health	30,214,613	18,820,351	-1,213,036	291,357	0	0	29,001,577	19,111,708
Arcadian Health	0	0	2,084,464	-5,998,546	0	0	2,084,464	-5,998,546
Blue Cross Blue Shield of Arizona	60,975,183	61,708,424	0	0	-1,702,532	3,851,754	59,272,651	65,560,178
CIGNA Healthcare of Arizona	8,242,301	6,074,798	10,430,274	9,306,595	0	0	18,672,575	15,381,393
Great-West Health Plan (One Health)	-15,285	8,179,145	0	0	0	0	-15,285	8,179,145
HealthNet of Arizona	6,114,838	15,036,342	8,212,183	20,848,521	0	0	14,327,021	35,884,863
PacifiCare	17,771,736	-1,409,234	27,535,418	23,903,112	0	0	45,307,154	22,493,878
SCAN Health Plan of Arizona	0	-3,177,753	-1,314,007	-761,754	0	0	-1,314,007	-3,939,507
Sun Health	0	0	2,805,293	3,768,996	5,341	23,746	2,810,634	3,792,742
UnitedHealthcare of Arizona	2,298,272	0	5,767,268	3,037,051	-36,310	-51,419	8,029,230	2,985,632
<b>TOTAL</b>	<b>125,601,658</b>	<b>105,232,073</b>	<b>67,076,515</b>	<b>58,445,258</b>	<b>-1,733,501</b>	<b>3,824,081</b>	<b>190,944,672</b>	<b>167,501,412</b>
Humana*	-62,133,465	10,403,036	41,848,418	7,847,359	-240	0	-20,285,287	18,250,395

\*Humana is based on reporting of operations in multiple states.

Sources: Author's analysis of health plan annual statements; Exhibit of Enrollment, Premiums and Utilization.

rest was from Medicare Advantage plans. The results were not as good in 2006 but the proportions were similar. Medicare Advantage has been strongly profitable, particularly for PacifiCare and Abrazo Advantage in 2007.

**3.5 Health Plan Premium Revenue and Expenses**

In this section, health plan commercial premiums are converted to a per member per month figure, which is then compared to previous years and to the other health plans here. *Exhibit 17* shows premium revenues per commercial member month from 2002 to 2007. In 2007, the average amount collected increased by 3.8%, from \$258.95 to \$268.24. That was a relatively small increase, compared to the previous four years: 8.4% in 2003, 10.2% in 2004, “only” 5.2% in 2005 and

**EXHIBIT 17. Commercial Premium Revenue Per Member Per Month, 2002 – 2007**

Health Plan	2002	2003	2004	2005	2006	2007	Change 2007/2006
Aetna Health	\$166.93	\$189.31	\$207.40	\$227.03	\$266.17	\$260.29	-2.2%
Blue Cross Blue Shield of Arizona	198.18	208.93	227.84	230.13	243.80	260.14	6.7%
CIGNA Healthcare of Arizona	200.19	222.63	247.95	262.36	349.85	345.38	-1.3%
Great-West Health Plan (One Health)	47.58	23.02	26.27	28.16	29.51	NA	NA
HealthNet of Arizona	188.04	199.79	217.13	240.94	264.47	269.19	1.8%
Humana*	156.04	173.25	189.78	209.80	252.58	223.96	-11.3%
PacifiCare	195.97	203.06	216.87	241.19	262.20	301.35	14.9%
UnitedHealthcare of Arizona	182.31	197.88	251.76	267.61	296.44	329.42	11.1%
<b>TOTAL</b>	<b>\$182.95</b>	<b>\$198.26</b>	<b>\$218.43</b>	<b>\$229.79</b>	<b>\$258.95</b>	<b>\$268.84</b>	<b>3.8%</b>
Annual Increase		8.4%	10.2%	5.2%	12.7%	3.8%	

\*Humana's revenue calculation is based on the Arizona data in the Exhibit of Premiums, Enrollment and Utilization.

Sources: Author's analysis of annual statements, Exhibit of Premiums, Enrollment and Utilization and Analysis of Operations by Lines of Business

12.7% in 2006. This means that the average employer with an HMO plan paid \$71 per member per month more in 2007 than in 2003. The sidebar on page 32 compares health plans in Arizona and the other states on premium revenue trend.

Given that employers paid about \$269 per member per month in 2007, how did health plans spend those revenues? The two major categories of expenses are medical/hospital care and plan administration. *Exhibit 18* looks at two measures of medical expenses for commercial plans—medical loss ratios and medical expenses per member per month. In 2007, the average medical loss ratio—the percentage of premium spent on medical expenses—was 80.8%, which is relatively low. The average loss ratio has moved in a narrow range since 2002.

The ability to control medical expenses is key to health plan profitability. The second part of *Exhibit 18* compares commercial health plans on medical expenses, again calculated on a per member per month basis. In 2007, the average amount spent was \$217.29, up 5.6% from 2006. Analysts will compare health plans on the “spread” between their premium revenues and medical expenses. A wider spread results in higher profits. In 2006, the spread for these health plan companies was \$53.09, on average, the difference between \$258.95 collected per member month and \$205.86 spent for medical expenses. In 2007, the average spread was \$51.53, reflected in higher profits

for Aetna and PacifiCare, Health Net saw its medical loss ratio increase from 76% in 2006 to 82.4% in 2007 and its net income for commercial business decreased from \$15 million to \$6.1 million.

Medical loss ratios for AHCCCS plans were generally much higher than for commercial plans. And while they have been profitable in recent years, they don’t enjoy the same margins as the other health plan companies. *Exhibit 19* compares loss ratios for the AHCCCS plans from 2003 to 2007 based on all their AHCCCS contracts. Although some plans are in multiple lines of business (Acute Care and Long-Term Care or Healthcare Group), the financial reporting is not consistent enough to break out those lines of business. The general trend has been downward, with average loss ratios for these plans of 94.1% in 2004 down to 87.0% in 2007. The administrators of AHCCCS face a constant challenge: balancing the state’s budget and facing the temptation of reducing payments to mostly profitable health plans or setting rates to maintain a certain level of profitability as the price of having contractors that do the medical management and plan administration work needed for that population.

*Exhibit 20* compares health plans on their plan administration costs, which usually include compensation, marketing, information systems, medical management and office occupancy. In 2007, the health plan companies spent \$580.7 million for plan administration. That is an average of 12.8% of their underwriting revenues. On

**EXHIBIT 18. Medical Loss Ratios and Per Member Per Month Medical Expenses for Commercial Enrollees, 2002 – 2007**

Health Plan	Medical Loss Ratios						Per Member Per Month Medical Expenses						Change
	2002	2003	2004	2005	2006	2007	2002	2003	2004	2005	2006	2007	2007/2006
Aetna Health	84.0%	77.5%	80.6%	79.6%	77.2%	78.4%	\$140.21	\$146.66	\$167.15	\$180.72	\$205.47	\$204.09	-0.7%
Blue Cross Blue Shield of Arizona	71.7%	76.1%	74.2%	78.7%	77.6%	80.0%	142.18	159.10	169.06	181.05	189.19	208.12	10.0%
CIGNA Healthcare of Arizona	84.4%	86.2%	84.6%	79.9%	81.1%	81.8%	169.02	191.98	209.76	209.63	283.83	282.67	-0.4%
Great-West Health Plan (One Health)	33.1%	554.6%	60.3%	65.1%	76.1%		15.73	127.66	15.83	18.34	22.46	NA	NA
HealthNet of Arizona	84.0%	77.2%	82.9%	80.4%	76.0%	82.4%	158.02	154.21	180.10	193.65	201.10	221.70	10.2%
Humana*							130.00	145.77	172.86	198.23	209.44	181.77	-13.2%
PacifiCare	76.8%	84.4%	85.2%	86.5%	88.2%	86.0%	150.42	171.30	184.68	208.68	231.39	259.14	12.0%
UnitedHealthcare of Arizona	71.0%	76.0%	75.8%	83.9%	83.4%	83.2%	129.52	150.31	190.90	224.55	247.25	273.93	10.8%
<b>TOTAL</b>	<b>77.8%</b>	<b>80.2%</b>	<b>79.5%</b>	<b>80.6%</b>	<b>79.5%</b>	<b>80.8%</b>	<b>\$142.42</b>	<b>\$158.96</b>	<b>\$173.62</b>	<b>\$185.16</b>	<b>\$205.86</b>	<b>\$217.29</b>	<b>5.6%</b>

\*Humana’s medical expense calculation is based on the Arizona data in the Exhibit of Premiums, Enrollment and Utilization.

Sources: Author’s analysis of health plan annual statements, Exhibit of Premiums, Enrollment and Utilization and Analysis of Operations by Lines of Business

EXHIBIT 19. Medical Loss Ratios for AHCCCS Plans, 2003 – 2007					
AHCCCS Plans	2003	2004	2005	2006	2007
Arizona Physicians IPA	89.5%	88.1%	89.4%	89.0%	86.2%
Bridgeway Health Solutions	NA	NA	NA	NA	86.2%
Care 1st Arizona	87.1%	86.4%	87.5%	87.5%	86.8%
Cochise Health Systems	86.3%	131.2%	85.2%	77.6%	78.5%
Evercare Select	89.6%	87.4%	86.7%	76.1%	83.9%
Health Choice Arizona	88.1%	87.2%	88.0%	87.6%	86.9%
Maricopa Health Plan	94.2%	119.6%	NA	88.6%	92.8%
Mercy Care Plan	92.9%	91.1%	91.6%	88.5%	88.6%
Phoenix Health Plan	83.1%	82.6%	80.9%	81.1%	82.7%
Pima Health Plan	110.5%	117.2%	92.3%	90.9%	90.8%
Pinal/Gila LTC	87.0%	89.6%	88.7%	86.3%	82.1%
SCAN – LTC	NA	NA	NA	NA	78.8%
University Physicians/Family Care	95.9%	95.2%	92.3%	83.5%	80.9%
Yavapai Long Term Care	83.1%	94.6%	90.6%	84.1%	84.1%
<b>TOTAL</b>	<b>92.4%</b>	<b>94.1%</b>	<b>89.2%</b>	<b>87.1%</b>	<b>87.0%</b>

Source: Author’s analysis of AHCCCS plans audited financial statements

average, that is \$28.62 per member per month, slightly less than in 2006.

The AHCCCS plans reported administrative expenses of \$370.5 million in 2007, which is an average of 8.3% of revenues. MercyCare was among the lowest, at 7.4% of revenues. That is less than the first group of health insurers and may reflect lower marketing expenses and that AHCCCS absorbs some of the costs of enrollment.

How health plans pay their providers is key to their relationship. Capitation—fixed monthly payments to providers per enrollee to cover all or a defined portion of their care costs—was central to the original concept of managed care. (See the sidebar on page 36, “What is Capitation?”). The purpose was to give providers incentives to practice conservatively, particularly with regard to hospital admissions, tests and referrals to specialists, and to emphasize preventive care. Critics argued that capitation created incentives for physicians to undertreat their patients.

*Exhibit 21* compares health plan companies on their use of capitation since 2002. It shows that use of capitation payments has fluctuated, but that it was never higher than 16.2% in the past six years and is currently

Health Plan	Administrative Expenses		Per Member Per Month	
	Total	as a % of Revenues	2007	2006
Abrazo Advantage	\$5,202,903	13.2%	\$127.35	\$101.49
Aetna Health	43,791,733	12.6%	21.89	26.56
Arcadian Health	34,709,960	21.9%	155.63	217.1
Blue Cross Blue Shield of Arizona	177,608,587	13.8%	13.47	12.23
CIGNA Healthcare of Arizona	59,830,737	9.6%	49.31	62.27
Great-West Health Plan (One Health)	–6,505	70.1%	–591.36	87.64
HealthNet of Arizona	75,214,142	12.6%	60.85	64.33
PacificCare	155,322,363	13.0%	81.09	71.28
SCAN Health Plan of Arizona	1,472,477	25.0%	373.73	
Sun Health	11,991,946	6.9%	54.03	45.63
UnitedHealthcare of Arizona	15,575,804	14.7%	61.88	59.63
<b>TOTAL</b>	<b>\$580,714,147</b>	<b>12.8%</b>	<b>28.62</b>	<b>29.56</b>
Humana*	\$245,578,053	17.4%	62.7	50.78

AHCCCS PLANS	Total	as a % of Revenues
Arizona Physicians IPA	\$103,183,000	9.0%
Bridgeway Health Solution	5,009,769	11.0%
Care 1st Arizona	17,081,552	11.1%
Cochise Health Systems	2,722,887	8.2%
Evercare Select	25,461,184	13.9%
Health Choice Arizona	31,160,442	7.6%
Maricopa Health Plan	10,657,747	8.4%
Mercy Care Plan	119,309,000	7.4%
Phoenix Health Plan	24,494,107	8.4%
Pima Health Plan	6,490,032	2.5%
Pinal/Gila LTC	3,926,810	7.8%
SCAN – LTC	8,690,387	18.5%
University Physicians/Family Care	8,591,393	14.1%
Yavapai Long Term Care	3,677,803	10.3%

\*Humana’s administrative cost is based on its operations in multiple states.

Source: Author’s analysis of health plan annual statements and AHCCCS plans audited financial statements

**What is Capitation?**

Under capitation, the HMO pays a fixed amount to a network of physicians or other provider organization each month for each member that selects that network. The provider group, in turn, is responsible for managing that payment so that it covers the costs of care regardless of the level of utilization of those patients. The goal of capitation is for the provider to have a financial stake in using care appropriately

Depending on the size of the provider network and the inclination of the health plan, the capitation payment and the providers' risk may be limited to professional services, namely primary care and certain specialty referrals and outpatient procedures. In other cases, health plans and providers may choose to negotiate a global capitation, under which the provider organization receives a larger payment but accepts financial responsibility for almost all care, including inpatient hospitalizations, specialty referrals and pharmacy benefits.

**EXHIBIT 21. Use of Capitation by Arizona Health Plans, 2002 – 2007**

Health Plan	2007 Capitation Payments	PERCENT PAID IN CAPITATION					
		2007	2006	2005	2004	2003	2002
Abrazo Advantage	\$0	0.0%	0.0%				
Aetna Health	6,750,916	2.5%	3.2%	6.8%	8.5%	9.5%	10.6%
Arcadian Health	737,026	0.6%	1.2%	2.3%			
Blue Cross Blue Shield of Arizona	10,793,400	1.1%	1.3%	1.4%	1.5%	1.6%	1.7%
CIGNA Healthcare of Arizona	38,049,780	6.7%	7.9%	8.8%	7.8%	8.5%	11.0%
Great-West Health Plan (One Health)	0	0.0%	0.0%	0.4%	0.5%	0.5%	0.0%
HealthNet of Arizona	52,342,480	10.7%	10.5%	10.2%	10.0%	12.1%	12.5%
PacifiCare	207,360,701	19.2%	18.8%	26.5%	17.7%	19.2%	23.0%
SCAN Health Plan of Arizona	0	0.0%					
Sun Health	137,984,188	87.3%	88.6%	97.4%	97.3%	96.8%	95.4%
UnitedHealthcare of Arizona	1,643,979	1.9%	2.2%	2.8%	2.7%	4.4%	4.3%
<b>TOTAL</b>	<b>\$455,662,470</b>	<b>12.0%</b>	<b>12.7%</b>	<b>16.2%</b>	<b>12.4%</b>	<b>12.8%</b>	<b>14.0%</b>

Sources: Author's analysis of health plan annual statements, Exhibit 7

down to 12%. (Note that the financial statements of the AHCCCS plans do not report on use of capitation, which would be useful to the state in overseeing the finances of its contractors.)

Occasionally the annual statements provide some insight. In PacifiCare's 2005 annual statement, it reported a larger use of capitation payments. Some of its capitation arrangements were with "carve-out" organization that contract to provide a specific service, like mental health care or vision benefits for a fixed amount per member. But this report also shows the largest payments to the Banner Mesa/Baywood Network and to Banner Health of Arizona, meaning that about 14% of its provider payments were to Banner Health and related providers. A sidebar on page 37 compares Arizona health plans with their counterparts in the other states on their use of capitation in 2006 and 2007.

**3.6 Net Worth and Reserves**

As insurance companies, these health plans are expected to maintain certain levels of reserves so that they can continue to pay claims even if there is an interruption in their revenues or if claims are higher than expected. (The health plans and self-funded employers also use reinsurance or stop-loss arrangements to protect against very high claims.) *Exhibit 22* presents different views of health plan net worth and solvency. First it shows that health plans increased their net worth by almost \$180 million. On average, they had net worth of about \$694 per member. They had more than three months of expenses in reserve; that is, if no premium checks were coming through the mail slot, they could continue to pay claims and overhead, on average, for 13.5 weeks.

The right hand columns show how these plans do when measured by the risk-based capital standards developed by the National Association of Insurance Commissioners and adopted by Arizona and most other states. The actual

**EXHIBIT 22. Net Worth and Surplus for Arizona Health Plans, 2006 and 2007**

Health Plan*	Total Net Worth			Net Worth Per Member	Weeks of Reserves	Risk Based Capital Ratio <sup>†</sup>	
	2007	2006	Change			2007	2006
Aetna Health	\$44,050,497	\$32,204,802	\$11,845,695	\$454.66	7.23	449.2%	356.1%
Arcadian Health	21,718,795	7,382,288	14,336,507	7,669.07	7.23	400.0%	219.5%
Blue Cross Blue Shield of Arizona	648,346,401	573,857,170	74,489,231	587.08	28.19	1,568.1%	1565.7%
CIGNA Healthcare of Arizona	55,218,745	57,305,865	-2,087,120	567.31	4.73	298.2%	318.6%
HealthNet of Arizona	66,195,834	58,760,763	7,435,071	621.76	5.93	372.4%	456.7%
Great-West Health Plan (One Health) <sup>‡</sup>	1,974,216	1,916,880	57,336	NA	17,109.87	260.4%	254.7%
PacifiCare	169,682,273	126,524,319	43,157,954	1,114.72	7.71	492.4%	272.3%
SCAN Health Plan of Arizona	4,049,051	3,214,733	834,318	6,851.19	29.22	795.1%	7833.7%
Sun Health	10,689,675	9,663,465	1,026,210	582.67	3.27	278.0%	275.0%
UnitedHealthcare of Arizona	88,127,188	59,563,185	28,564,003	4,330.57	46.78	735.1%	646.7%
<b>TOTAL</b>	<b>\$1,110,052,675</b>	<b>\$930,393,470</b>	<b>\$179,659,205</b>	<b>\$694.05</b>	<b>13.50</b>	<b>768.5%</b>	<b>665.1%</b>

\*Abrazo was not included because it reported an unusually large increase in assets in 2007, which skews the comparisons.

†A ratio of 200% is considered a necessary minimum. Ratios below 200% would make the health plan subject to regulatory action.

‡Great-West uses reinsurance in such a way that its medical expenses appear very low and its reserves extremely high.

Source: Author’s analysis of health plan annual statement, Assets, Liabilities and Surplus

calculation is proprietary, but the bottom line numbers appear in the annual statements and were used to calculate a ratio for each plan for each year. On average, these health plans had a ratio of 768%. A ratio of 200% is considered a minimum—below that and state regulators would likely take some enforcement action. On the other hand, regulators and advocacy groups in several states have raised questions about health plans, particularly Blue Cross plans, which have accumulated very large surpluses. The table shows that Blue Cross Blue Shield of Arizona has a ratio of 1,568% or almost eight times the minimum. The Blue Cross Association requires a minimum ratio of 375% for its member companies.

### 3.7 Health Plan Effectiveness and Utilization of Care

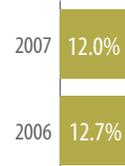
Health insurance is a huge expense for many American employers, yet they have never had access to good information that would allow them to compare the effectiveness and efficiency of care that their employees received through their benefit plans. While there have been significant investments in identifying measures of effectiveness of care and collecting data around those measures, only a little progress has been made in making that information available and useful to employers or to consumers.

Having said that, this section of the report provides comparative information on commercial enrollees in Arizona health plans based on data licensed from the Quality Compass data set produced by NCQA, the National Committee for Quality

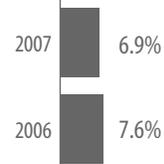
### HMO Capitation

Portion of dollars paid to providers through capitation arrangements.

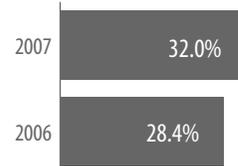
#### Arizona



#### Colorado



#### Michigan



#### Minnesota



#### Texas



**NCQA Accreditation Status of Arizona Health Plans**

**Aetna Health Inc. (Arizona)**

Commercial/HMO/POS Combined

COMMENDABLE

Medicare/HMO

SCHEDULED

**CIGNA HealthCare of Arizona, Inc.**

Commercial/HMO/POS Combined

EXCELLENT

**Health Net of Arizona, Inc.**

Commercial/HMO

EXCELLENT

**Humana Health Plan, Inc. – Arizona**

Commercial/HMO

COMMENDABLE

**PacifiCare of Arizona, Inc.**

Commercial/HMO

EXCELLENT

Medicare/HMO

EXCELLENT

**UnitedHealthcare of Arizona, Inc.**

Commercial/HMO/POS Combined

COMMENDABLE

**Care 1st HealthPlan Arizona\***

Medicaid/HMO

SCHEDULED

\*Achieved New Health Plan Accreditation.

Source: NCQA Health Plan Report  
Accessed July 2008

Assurance. The data are from the HEDIS (now called the Healthcare Effectiveness Data and Information Set) reports that HMOs across the country submit to NCQA. This section includes several tables built around HEDIS measures. It also includes one table of data comparing HMOs on measures of enrollee satisfaction, based on data from the CAHPS (Consumer Assessment of Health Plan Satisfaction) survey developed by the Foundation for Accountability. The data in this section are for health plan operations in 2006. The exhibits include data from six health plans, all national companies. However, Blue Cross Blue Shield of Arizona does not submit data for Quality Compass.

NCQA also accredits HMOs and other health plans, and many employers (and some state agencies) require that HMOs participate in either NCQA accreditation or another similar program. The NCQA accreditation status of Arizona health plan companies is shown in the sidebar. A few of the AHCCCS plans also participate.

*Exhibit 23* compares Arizona health plans on three measures of inpatient hospital utilization: inpatient hospital days per 1,000 members, inpatient hospital discharges per 1,000 members and average length of stay. In 2006, Arizona HMOs reported an average of 219 inpatient days per 1,000 members, higher than the national average of 208 days.

**EXHIBIT 23. Utilization of Inpatient Hospital Care for Commercial Enrollees (per 1,000 members), 2006**

Health Plan	Discharges	Average Length of Stay	Acute Days		
			2006	2005	2004
Aetna	58.81	3.40	200.09	212.63	229.27
CIGNA	64.07	3.49	223.51	227.16	228.33
Health Net	63.52	3.53	224.41	210.18	189.25
Humana	62.00	3.41	211.26	187.31	209.92
PacifiCare	63.97	3.56	227.62	232.46	206.09
UnitedHealthcare	81.39	2.78	226.49	226.19	298.40
<b>Arizona Average</b>	<b>65.63</b>	<b>3.36</b>	<b>218.90</b>	<b>216.05</b>	<b>226.88</b>
U.S. Average	57.69	3.61	208.42	210.12	214.46

Sources: Author's analysis of data from Quality Compass 2007 (2006 operations)

**EXHIBIT 24. Utilization of Ambulatory Care for Commercial Enrollees (per 1,000 members), 2006**

Health Plan	Outpatient Visits	Emergency Room Visits	Ambulatory Surgery Procedures	Observation Room Stays
CIGNA	3,396.42	146.90	109.40	2.66
HealthNet	3,263.16	181.59	125.56	4.98
Humana	1,235.79	316.54	153.77	2.74
PacifiCare	3,743.34	226.02	127.58	4.45
UnitedHealthcare	3,344.24	180.50	123.59	4.56
<b>Arizona Average</b>	<b>3,056.06</b>	<b>204.93</b>	<b>123.41</b>	<b>4.84</b>
U.S. Average	3,714.56	185.94	122.94	8.42

Sources: Author's analysis of data from Quality Compass 2007 (2006 operations)

The rate for discharges per 1,000 members was also above national averages. For comparison purposes, the table also shows the inpatient days per 1,000 rates for 2005 and 2004. Aetna and Humana had lower rates than the other plans in 2006. UnitedHealthcare had relatively high rates of discharges but shorter average lengths of stay.

Exhibit 24 shows four measures of ambulatory care utilization:

outpatient (office) visits, emergency room visits, ambulatory surgeries and observation room stays. All four are expressed as rates per 1,000 members. On average, Arizona health plans had fewer office visits and fewer observation room stays. But they reported higher rates of emergency department use than the national average. CIGNA had the lowest rates of emergency room use and observation room stays. Humana

(which has a small Arizona HMO) reported very low rates of office visits and high rates of emergency room use.

Exhibit 25 presents a series of measures of utilization of care for mental illness and chemical dependency, new for this report. The top half focuses on services provided for mental illnesses, both inpatient and in other settings. Arizona health plans reported that their commercial enrollees used an average of 13

**EXHIBIT 25. Utilization of Mental Health and Chemical Dependency Care for Commercial Enrollees, 2006**

Health Plan	MENTAL HEALTH INPATIENT HOSPITALIZATION			RECEIVED MENTAL HEALTH SERVICES*					RECEIVED FOLLOW-UP CARE after Hospitalization for Mental Illness <sup>†</sup> for Children Prescribed ADHD Medication		
	Inpatient Discharges per 1,000	Average Length of Stay	Inpatient Days per 1,000 <sup>††</sup>	Enrollment	Any Services		Intensive Outpatient/ Partial Hospitalization	Outpatient and Emergency	Within 7 Days	Within 30 days	Within 30 days
					Inpatient	Outpatient					
Aetna	2.21	6.75	14.92	144,599	4.6%	0.2%	0.0%	4.6%	52.5%	76.1%	35.9%
CIGNA	2.07	6.44	13.33	211,257	4.6%	0.2%	0.0%	4.5%	52.4%	71.9%	33.8%
HealthNet	1.63	5.29	8.62	54,461	3.5%	0.1%	0.0%	3.4%	59.4%	78.1%	22.9%
Humana	3.53	3.75	13.24	11,325	3.9%	0.7%	0.0%	3.3%	NA	NA	NA
PacifiCare	2.86	5.38	15.39	112,776	NR	0.2%	0.0%	NR	50.5%	58.8%	15.6%
UnitedHealthcare	1.84	5.24	9.64	235,913	5.3%	0.2%	0.0%	5.3%	52.8%	74.4%	36.0%
<b>Arizona Average</b>	<b>2.36</b>	<b>5.46</b>	<b>12.89</b>	<b>128,389</b>	<b>4.4%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>4.2%</b>	<b>53.5%</b>	<b>71.9%</b>	<b>28.8%</b>
U.S. Average	3.24	6.05	19.6	192,231	5.8%	0.3%	0.1%	5.7%	56.7%	75.8%	33.0%

DEFINITIONS: \*The percentage of members who received any inpatient, outpatient or intermediate care for mental illness.

†Not a HEDIS measure, but was calculated by the author from other measures.

††This HEDIS measure is the percentage of discharges for members 6 years of age and older who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization with a mental health practitioner within 30 days of discharge.

Health Plan	CHEMICAL DEPENDENCY INPATIENT HOSPITALIZATION**			RECEIVED CHEMICAL DEPENDENCY SERVICES <sup>†</sup>				
	Inpatient Discharges per 1,000	Average Length of Stay	Inpatient Days per 1,000 <sup>††</sup>	Enrollment	Any Services	Inpatient	Intensive Outpatient/ Partial Hospitalization	Outpatient and Emergency
Aetna	1.20	6.17	7.40	144,599	37.0%	10.0%	4.0%	31.0%
CIGNA	0.95	5.50	5.23	211,257	68.0%	25.0%	1.0%	50.0%
HealthNet	1.73	2.88	4.98	54,461	82.0%	28.0%	6.0%	61.0%
Humana	6.01	1.50	9.02	11,325	73.0%	22.0%	0.0%	57.0%
PacifiCare	1.45	5.42	7.86	112,776	71.0%	25.0%	2.0%	55.0%
UnitedHealthcare	1.28	4.18	5.35	235,913	86.0%	30.0%	1.0%	66.0%
<b>Arizona Average</b>	<b>2.10</b>	<b>4.22</b>	<b>8.86</b>	<b>128,389</b>	<b>70.0%</b>	<b>23.0%</b>	<b>2.0%</b>	<b>54.0%</b>
U.S. Average	1.38	5.21	7.19	192,231	83.0%	27.0%	4.0%	69.0%

DEFINITIONS: \*\*This HEDIS measure is the number and percentage of members with an alcohol and other drug (AOD) claim. AOD claims contain a diagnosis of AOD abuse or dependence and a specific AOD-related service during the measurement year for any chemical dependency services (inpatient, intermediate, ambulatory).

††Not a HEDIS measure, but was calculated by the author from other measures.

Sources: Author's analysis of data from Quality Compass 2007 (2006 operations)

inpatient days for mental illness per 1,000 members. The columns to the right show that an average of 4.4% of health plan members received any kinds of mental health services in 2006. Most of that was in outpatient and emergency settings, with less than one percent receiving inpatient care.

Of the small number that received inpatient care, just over half received some kind of formal follow-up attention within 7 days of discharge; about 72% received formal follow-up within a month after discharge. The table also shows that about 29% of children receiving prescriptions for medications treating attention deficiency hyperactivity disorder (ADHD) received some kind of formal follow-up within 30 days. The Arizona average of 29% is below the national average of 33%

The second half of the table presents a similar analysis of care provided for chemical dependency conditions. Arizona health plan enrollees used about 9 inpatient

hospital days per 1,000 members in 2006. The percentage of enrollees with a chemical dependency diagnosis receiving any kind of service was high—70%—though that is less than the national average. (This data is different from the numbers reported above for mental health services, which were based on the entire enrollee population.)

*Exhibit 26* shows a series of measures of effectiveness and utilization of care, the core of the early HEDIS measures. The measures have evolved over the years and, in a few cases, have been dropped as a high percentage of health plans were able to achieve 100% scores. Exhibit 26 shows how Arizona health plans scored on six effectiveness of care measures and one utilization of care measure—well-child visits in the first 15 months of life. The Arizona averages were below the national averages on five of these measures. Within the Arizona group, Health Net had the highest scores on four measures.

Prescription drug costs have been a significant cost driver in recent years, as new, usually more expensive drugs come on the market and as overall prescribing rates increase. Still there are also pressures that hold down increases in prescription drug costs. A number of widely prescribed drugs have lost their patent protection and are now available in cheaper generic versions or are available without a prescription. Most health plans have adjusted their benefit designs with three-tier co-payments, encouraging use of generics or brand name drugs that are on the health plan’s formulary. And many health plans provide financial incentives to physicians, either for increasing their rate of generic prescribing or improving their compliance with the health plan’s drug formulary.

As shown in *Exhibit 27*, the average Arizona enrollee filled (or refilled) prescriptions about 10 times in 2006. Health plans spent an average of \$43.72 per member per month for prescriptions, well

**EXHIBIT 26. Selected Effectiveness and Utilization of Care Measures for Commercial Enrollees, 2006**

Health Plan	Product	Well-Child Visits (6+) in the first 15 months of life	IMMUNIZATION STATUS COMBO 2		Comprehensive Diabetes Care (eye exams)	Beta Blocker Treatment after a heart attack	CANCER SCREENING		High Blood Pressure Control
			Childhood	Adolescent			Cervical	Breast	
Aetna	HMO/POS Combined	53.02	75.59	44.79	50.47	100.00	78.17	61.84	60.19
CIGNA	HMO/POS Combined	71.15	78.59	52.80	47.45	97.74	82.64	70.27	57.18
Health Net	HMO	68.34	75.64	54.06	56.35	96.67	85.63	68.27	66.13
Humana	HMO	48.54	76.61	25.22	21.22	NA*	77.96	57.23	55.47
PacificCare	HMO	69.06	79.63	38.03	53.29	97.44	81.14	66.50	51.45
UnitedHealthcare	HMO/POS Combined	75.91	75.43	37.71	40.88	98.00	82.48	65.63	54.01
<b>Arizona Average</b>	<b>HMO/POS Combined</b>	<b>64.34</b>	<b>76.91</b>	<b>42.10</b>	<b>44.94</b>	<b>97.97</b>	<b>81.33</b>	<b>64.96</b>	<b>57.41</b>
U.S. Average	All lines of business	72.93	79.79	57.66	54.65	97.71	81.03	68.88	59.66

EXPLANATION OF MEASURES: Childhood Immunization. Using Combination 2, which identifies children who turned two years old during the reporting year and who received 4 DTP, 3 OPV, 1 MMR, 2 HepB and 1 Hib. Breast cancer screening. Identifies women age 52 through 69 who had one or more mammograms during the reporting year or the prior year. Cervical cancer screening. Identifies women ages 21 through 64 who had one or more Pap test during the reporting year or the prior two years. Eye Exams for Diabetics. Identifies members ages 18 to 75 with diabetes who received a retinal exam during the report year. High Blood Pressure Control. Measures control of blood pressure (less than or equal to reading of 140/90 for adults ages 46 to 85 years who are diagnosed with hypertension.

\*Not applicable, meaning that the HMO did not have enough members in that cell to meet NCQA standards of statistical significance or to protect privacy of individual members.

Source: Author’s analysis of HMO HEDIS reports found in NCQA Quality Compass® data files

**EXHIBIT 27. Prescription Drug Expenditures for Commercial Enrollees, 2004 – 06**

Health Plan	Average Number of Prescriptions per member per year	Average Cost of Prescriptions per member per month		
		2006	2005	2004
Aetna	9.35	42.54	NR	NR
CIGNA	10.49	NR	NR	NR
HealthNet	10.08	46.75	41.35	37.95
Humana	7.10	31.79	34.18	39.01
PacifiCare	11.23	52.70	50.91	46.74
UnitedHealthcare	9.39	44.82	42.00	38.22
<b>Arizona Average</b>	<b>9.61</b>	<b>43.72</b>	<b>ND</b>	<b>ND</b>
<b>U.S. Average</b>	<b>11.55</b>	<b>53.89</b>	<b>50.10</b>	<b>46.77</b>

Source: Author’s analysis of data from Quality Compass 2007 (2006 operations)

below the national average of \$53.89. The U.S. average increased from \$46.77 in 2004 to \$50.10 in 2005 and \$53.89 in 2006.

Finally, *Exhibit 28* compares the health plans on their scores on enrollee satisfaction surveys. Some of them are based on composite measures. On all seven measures in the table, the average for Arizona health plans was lower than the national average. Arizona enrollees are like their counterparts in other states—in almost all cases more of them give their overall health care higher marks than they give their health plans. And they give their personal doctor even higher marks. In particular, Arizona doctors were highly rated for their communication skills.

**EXHIBIT 28. Selected Effectiveness and Utilization of Care Measures for Commercial Enrollees, 2006**

Health Plan	COMPOSITE SCORES		RATING OF...				
	Getting Care Quickly	Getting Needed Care	All Health Care	How a Doctor Communicates	Personal Doctor	Health Plan	Health Plan (2005)
Aetna	83.18	77.58	67.15	89.58	78.74	54.13	60.56
CIGNA	79.74	82.56	67.55	88.77	76.87	65.21	62.99
Health Net	84.70	85.63	70.83	89.33	81.54	68.11	62.66
Humana	78.27	75.59	61.68	83.43	64.07	57.96	excluded
PacifiCare	79.79	80.25	66.48	90.55	77.53	56.79	59.00
UnitedHealthcare	84.48	81.25	73.91	93.43	78.38	61.47	62.15
<b>Arizona Average</b>	<b>81.69</b>	<b>80.48</b>	<b>67.93</b>	<b>89.18</b>	<b>76.19</b>	<b>60.61</b>	<b>61.47</b>
<b>U.S. Average</b>	<b>86.13</b>	<b>84.15</b>	<b>73.61</b>	<b>92.76</b>	<b>81.08</b>	<b>63.90</b>	<b>65.21</b>

EXPLANATION OF MEASURES: Getting Care Quickly. A composite score based on the percentage of members who responded “Always” or “Usually” when asked about: (1) their experience in the past year in getting help or advice requested during normal office hour (2) getting a timely appointment for routine care; (3) getting care right away when needed because of illness or injury and (4) how often they waited 15 minutes or more past appointed time to see the provider they went to see. Getting Needed Care. A composite score based on the percentage of members who responded “Not a problem” when asked about their experience in the past year in: (1) getting a provider they were happy with, (2) getting a referral to a specialist; (3) getting care believed necessary and (4) delays in getting approval from the health plan. Rating of All Health Care. Percentage of members who, on a scale from 1 to 10, with 10 being the best, rated all their health care in the past year with an 8, 9, or 10. Rating of Health Plan. Percentage of members who, on a scale from 1 to 10, with 10 being the best, rated their experiences with their health plan in the past year with an 8, 9, or 10. How Doctor Communicates. The composite score is the overall percentage of members who responded “Always” or “Usually” to the following questions: (1) In the last 12 months, how often did your personal doctor explain things in a way that was easy to understand? (2) In the last 12 months, how often did your personal doctor listen carefully to you? (3) In the last 12 months, how often did your personal doctors show respect for what you had to say? (4) In the last 12 months, how often did your personal doctor spend enough time with you? Rating of Personal Doctor. This measure is based on the following question: Using any number from 0 to 10, where 0 is the worst personal doctor possible and 10 is the best personal doctor possible, what number would you use to rate your personal doctor? The result displayed is the percentage of members who answered this question with 8, 9, or 10.

Source: Author’s analysis of HMO HEDIS reports found in NCQA Quality Compass® data files

### Sources of Hospital Data for Arizona

The Arizona Hospital Discharge Data Report is part of a state-wide reporting structure required by all hospitals to be submitted to the [Arizona Department of Health Services](#). The department has assembled multiple years of data that can be analyzed using database software and it has published some summary information.

To compare hospitals on prices for certain services, the Arizona Hospital and Healthcare Association created [Arizona Hospital Choice](#). Where available, the site also includes links to hospital-specific information about community benefits, quality information and financial assistance policies.

The [Hospital Compare web site](#), prepared by the United States Department of Health & Human Services, contains Process of Care Measures that show how often hospitals provided adult patients with recommended treatments for heart attack, heart failure, pneumonia, and surgery. It includes information about hospitals' mortality rates for heart attack and heart failure and directory information about hospitals.

The [Arizona Healthcare Workforce Data Center](#), established by the Arizona Hospital and Healthcare Association in 2007, reports on Arizona's workforce trends for physicians, nurses and other health professionals.

## 4.0 Hospitals and Regional Submarkets

The first sections of this report have looked at statewide data on health insurers. This section presents an analysis of the hospitals and hospital systems in Arizona organized around the two large metropolitan areas—Phoenix and Tucson—and the major hospitals in other parts of the state. It includes additional information about regional market share for health insurers in those areas and other health market issues.

Each section includes two hospital data tables. The first table shows the acute care hospitals in the area, organized by system, and their revenues, expenses and net income. The second shows inpatient occupancy rates and payer mix, that is, who was expected to pay for the hospital admission—Medicare, Medicaid or another payer, mostly HMOs and other commercial insurance. There is also a calculation of gross charges per admission. The data are from the 2006 fiscal year and are drawn from the annual Medicare facility cost reports that Arizona hospitals submit to their respective Medicare fiscal intermediary. The primary intermediaries for Arizona hospitals are Blue Cross Blue Shield of Arizona and Mutual of Omaha.

### 4.1 Phoenix Area Hospitals and Systems

The Phoenix metropolitan area (including Maricopa and Pinal Counties) covers a huge geographic area (9,222 square miles) and is among the fastest growing metropolitan areas in the United States. Census Bureau reports shows that the Phoenix area is now the 13th largest metropolitan area in the country and that its population grew to an estimated 4.2 million in 2007, up 28.5% since 2000. That is about 65% of the state's estimated population of 6.3 million.

About 562,000 residents of Maricopa County are enrolled in the acute care portion of AHCCCS and about 489,000 of them are in plans with managed care contractors. Mercy Care has 39.3% of that group and Arizona Physicians IPA has 20.9%. There are about 430,000 seniors in the county, with 169,000 of them enrolled in Medicare HMOs. That is a high percentage of seniors, though not as high as in the San Francisco Bay Area or San Diego. PacifiCare has 34.7% of that group, followed by CIGNA and Health Net with about 18% each. These data are from AHCCCS and CMS reports, respectively. There are no comparable reports on commercial enrollment in HMOs and other health plans by county for Arizona.

The area has experienced an enormous medical construction boom in the past five years. Most of the people interviewed agreed that the new hospitals were needed to “catch up” with this huge population growth, given that there had been very little new hospital construction for most of the 1990s. During the late 1980s and the 1990s, hospital occupancy rates dropped and there was a sense that there was surplus capacity for inpatient care. That was a perfect situation for the entry of managed care plans that were able to leverage the surplus capacity to their advantage. Hospitals would agree to contracts that they thought were unfavorable out of fear of losing access to patients. That created further financial problems for the hospitals and they found it impossible

to finance construction of new facilities.

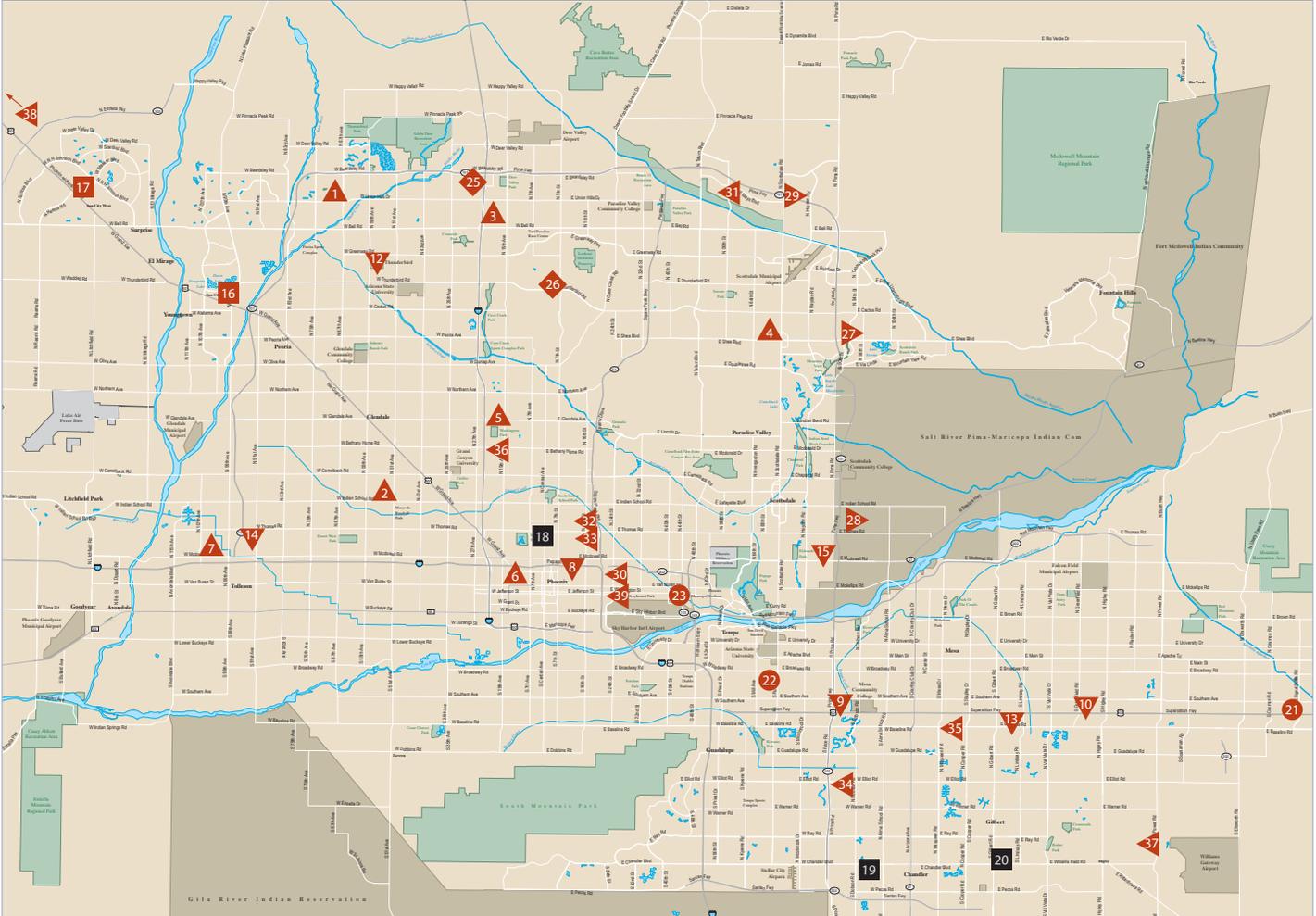
That changed at the end of the 1990s, as hospitals consolidated in order to strengthen their negotiating

positions with the health insurers.

*Exhibit 29* is a map of the region showing the location and system affiliation of the acute care hospitals as of 2007.

As their profits increased and as the population of the area began to explode, hospitals began to build, replacing patient care towers, siting new hospitals in growing areas, and

**EXHIBIT 29. Phoenix Area Hospitals and Systems**



**▲ Abrazo/Vanguard**

- 1 Arrowhead Community Hospital
- 2 Maryvale Hospital Medical Center
- 3 Paradise Valley Hospital
- 4 Paradise Valley Psychiatric
- 5 Phoenix Baptist Hospital
- 6 Phoenix Memorial Hospital
- 7 West Valley Hospital Medical Center

**▼ Banner Health**

- 8 Good Samaritan
- 9 Desert Samaritan Medical Center
- 10 Banner Baywood Medical Center and Banner Baywood Heart Hospital

- 12 Thunderbird Samaritan

- 13 Gateway Medical
- 14 Banner Estrella Medical Center
- 15 Banner Behavioral Health Center

**■ Sun Health**

- 16 Sun Health Boswell Hospital
- 17 Sun Health Del E Webb Hospital

**■ Catholic Healthcare West**

- 18 St. Joseph's Hospital & Medical Center
- 19 Chandler Regional Hospital
- 20 Mercy Gilbert

**● IASIS Healthcare**

- 21 Mountain Vista Medical Center
- 22 Tempe St. Luke's Hospital
- 23 St. Luke's Medical Center and St. Luke's Behavioral Health

**◆ John C. Lincoln Health Network**

- 25 John C. Lincoln Deer Valley
- 26 John C. Lincoln North Mountain

**▶ Scottsdale Healthcare**

- 27 Scottsdale Healthcare - Shea
- 28 Scottsdale Healthcare - Osborn
- 29 Thomson Peak

**◀ Specialty and Other Hospitals**

- 30 Maricopa Medical Center
- 31 Mayo Clinic Hospital
- 32 Arizona Heart Hospital
- 33 Phoenix Children's Hospital
- 34 Arizona Orthopedic Surgical Hospital
- 35 Arizona Spine and Joint Hospital
- 36 Arizona Surgical Hospital
- 37 Gilbert Hospital
- 38 Wickenburg Community Hospital
- 39 Arizona State Hospital

partnering with physicians and others to build medical office buildings and ambulatory care centers. With improved finances, they were able to finance new construction through cash flow or by borrowing against stronger balance sheets.

As noted in Section 2, the area’s major hospital systems have sought to anticipate growth in the region and to be the first to build a new hospital there. But the population growth projections produced by state agencies are thought to have

overstated growth up to now and established an inflated base and trend for projecting future growth. One of the flaws was that a major input to the population analysis was the number of building permits issued for new houses. In 2005, 62,000 new homes were built in the Phoenix area, but only 40,000 were bought by people who moved into those homes. And that was before the housing market and the economy in general began to slow in 2006.

*Exhibit 30* compares the Phoenix area hospitals and systems on their revenues, expenses and net income. In 2006, the acute care hospitals in the area had net income of \$374 million, or 5.7% of net patient revenues. (Net patient revenues are gross charges less discounts for government and private payers.) The Banner Health, John C. Lincoln and Scottsdale Healthcare hospitals made money on operations and had the benefit of other revenues, including investment income, philanthropy and government aid. The Banner

**EXHIBIT 30. Revenues, Expenses and Net Income of Phoenix Area Hospitals and Systems, 2006**

Hospital/System	City	Net Patient Revenues	Operating Expenses	Net Operating Income	Other Income	Net Income	Margin
<b>ABRAZO/VANGUARD</b>		\$414,563,972	\$418,657,878	-\$4,093,906	\$3,380,806	-\$8,288,937	-2.0%
Arrowhead Community Hospital	Glendale	101,635,888	86,610,686	15,025,202	815,780	15,840,890	15.6%
Maryvale Hospital Medical Center	Phoenix	91,103,141	90,370,297	732,844	278,726	969,013	1.1%
Paradise Valley Hospital	Phoenix	89,084,676	80,574,859	8,509,817	641,295	1,620,092	1.8%
Paradise Valley Psychiatric	Phoenix	3,451,212	3,219,940	231,272	0	231,272	6.7%
Phoenix Baptist Hospital	Phoenix	107,781,862	110,382,443	-2,600,581	1,308,249	-1,294,547	-1.2%
Phoenix Memorial Hospital	Phoenix	56,934,933	64,370,467	-7,435,534	684,382	-6,751,197	-11.9%
West Valley Hospital Medical Center	Goodyear	66,208,148	69,739,872	-3,531,724	468,154	-3,063,570	-4.6%
<b>BANNER HEALTH</b>		2,022,635,551	1,955,002,810	67,632,741	31,126,042	97,135,446	4.8%
Good Samaritan	Phoenix	608,312,000	592,016,582	16,295,418	15,989,220	32,284,638	5.3%
Desert Samaritan Medical Center	Mesa	448,939,207	439,088,436	9,850,771	3,876,940	12,215,078	2.7%
Baywood Medical Center	Mesa	235,822,020	210,100,669	25,721,351	1,791,496	27,512,847	11.7%
Thunderbird Samaritan	Glendale	314,161,707	303,566,428	10,595,279	2,617,671	13,102,246	4.2%
Mesa Lutheran	Mesa	150,093,785	149,279,983	813,802	2,689,445	3,503,247	2.3%
Baywood Heart Hospital	Mesa	114,949,191	98,743,934	16,205,257	1,118,481	17,323,738	15.1%
Estrella Medical Center	Phoenix	133,283,966	145,039,821	-11,755,855	1,847,285	-9,908,570	-7.4%
Banner Behavioral Health Center	Scottsdale	17,073,675	17,166,957	-93,282	1,195,504	1,102,222	6.5%
<b>CATHOLIC HEALTHCARE WEST</b>		893,197,208	924,043,007	-30,845,799	111,152,158	80,306,359	9.0%
St. Joseph’s Hospital & Medical Center	Phoenix	630,951,465	681,866,283	-50,914,818	103,220,369	52,305,551	8.3%
Chandler Regional Hospital	Chandler	262,245,743	242,176,724	20,069,019	7,931,789	28,000,808	10.7%
<b>IASIS HEALTHCARE</b>		258,011,135	259,689,517	-1,678,382	4,354,350	2,675,968	1.0%
Mesa General Hospital	Mesa	82,160,341	82,995,126	-834,785	624,071	-210,714	-0.3%
Tempe St. Luke’s Hospital	Tempe	56,291,141	56,501,215	-210,074	38,524	-171,550	-0.3%
St. Luke’s Medical Center	Phoenix	94,322,876	100,692,042	-6,369,166	3,518,558	-2,850,608	-3.0%
St. Luke’s Behavioral Health	Phoenix	25,236,777	19,501,134	5,735,643	173,197	5,908,840	23.4%

EXHIBIT 30. Revenues, Expenses and Net Income of Phoenix Area Hospitals and Systems, 2006							
Hospital/System	City	Net Patient Revenues	Operating Expenses	Net Operating Income	Other Income	Net Income	Margin
<b>JOHN C. LINCOLN HEALTH NETWORK</b>		381,489,775	362,985,337	18,504,438	8,668,703	27,173,141	7.1%
John C. Lincoln Deer Valley	Phoenix	155,427,508	147,064,958	8,362,550	1,815,834	10,178,384	6.5%
John C. Lincoln North Mountain	Phoenix	226,062,267	215,920,379	10,141,888	6,852,869	16,994,757	7.5%
<b>SCOTTSDALE HEALTHCARE</b>		672,242,908	603,673,396	68,569,512	13,362,087	37,346,899	5.6%
Scottsdale Healthcare – Shea	Scottsdale	345,396,414	317,651,561	27,744,853	7,882,436	24,634,514	7.1%
Scottsdale Healthcare – Osborn	Scottsdale	326,846,494	286,021,835	40,824,659	5,479,651	12,712,385	3.9%
<b>SUN HEALTH</b>		431,443,326	428,556,602	2,886,724	3,863,312	6,750,036	1.6%
Sun Health Boswell Hospital	Sun City	259,123,000	255,496,314	3,626,686	2,383,018	6,009,704	2.3%
Sun Health Del E Webb Hospital	Sun City West	172,320,326	173,060,288	-739,962	1,480,294	740,332	0.4%
<b>MARICOPA MEDICAL CENTER</b>		379,649,471	527,183,099	-147,533,628	170,077,751	21,758,116	5.7%
<b>MAYO CLINIC HOSPITAL</b>		589,543,988	633,333,277	-43,789,289	69,547,837	13,040,651	2.2%
<b>ARIZONA HEART HOSPITAL</b>		92,094,256	84,888,244	7,206,012	41,988	7,248,000	7.9%
<b>PHOENIX CHILDREN'S HOSPITAL</b>		317,493,406	283,097,933	34,395,473	14,892,741	49,288,214	15.5%
<b>SPECIALTY AND OTHER HOSPITALS</b>		120,307,385	76,637,420	43,669,965	1,084,681	38,727,347	32.2%
Arizona Orthopedic Surgical Hospital	Chandler	61,867,760	21,158,301	40,709,459	28,263	34,710,423	56.1%
Arizona Spine and Joint Hospital	Mesa	17,831,454	16,850,491	980,963	26,074	1,007,037	5.6%
Arizona Surgical Hospital	Phoenix	1,715,111	2,539,502	-824,391	55,997	-768,394	-44.8%
Gilbert Hospital	Higley	28,752,196	25,311,324	3,440,872	17,182	3,458,054	12.0%
Wickenburg Community Hospital	Wickenburg	10,140,864	10,777,802	-636,938	957,165	320,227	3.2%
<b>TOTAL</b>		<b>6,581,482,050</b>	<b>6,565,783,324</b>	<b>15,698,726</b>	<b>431,655,192</b>	<b>374,038,841</b>	<b>5.7%</b>

Source: Author's analysis of hospital Medicare facility cost reports, 2006 operating years, except Banner Samaritan, which is based on 2007 operations

Health system had net income of \$97.1 million, or 4.8% of net patient revenues and the CHW hospitals had net income \$80.3 million, or 9.0% of patient revenues. Phoenix Children's Hospital had net income of \$49.3 million, or 15.5% of patient revenues. It benefited from about \$15 million in other revenues. The Mayo Clinic Hospital reported losing money on operations but receiving \$69.5 million in other revenues.

In general, hospitals reported stronger results in 2006 than in 2005, though that was not the case for two major systems. In 2005, Phoenix area hospitals had net income of \$259 million in 2005, or 4.9% of net patient revenues. The

Banner Health hospitals had net income of \$117.7 million, or 5.5% of patient revenues and the CHW hospitals here had net income of \$97.3 million, or 11.5%.

*Exhibit 31* is a comparison of Phoenix area hospitals on their inpatient occupancy rates and payer mix. Average occupancy in 2006 was 72.8%. That is a little higher than 72%, the average occupancy rate in the area for 2005. The CHW hospitals had average occupancy of 84.7% while Banner Health hospitals had overall occupancy of 81.8%, up from 79.4% in 2005.

More than half of the inpatient days for 2006 were covered by other payers, including managed care plans

and other commercial insurance. Medicare covered 23.2% while Medicaid covered 24.7% of inpatient days. Medicare was an especially important payer to Sun Health (45.7%) and to Mayo Clinic hospital (58%). Medicaid covered 42.2% of inpatient days at the CHW hospitals, mostly at St. Joseph, and 68.7% of inpatient days at Maricopa Medical Center. Viewed another way, Medicaid covered 457,000 inpatient days at acute care hospitals in the area. Of that number, more than 57,000 were provided at Maricopa Medical Center. The Banner Health hospitals provided 170,000 days, with almost 59,000 of them at Good Samaritan. Of the individual

**EXHIBIT 31. Inpatient Occupancy and Payer Mix for Phoenix Area Hospitals and Systems, 2006**

Hospital/System	NUMBER OF		Occupancy	DISTRIBUTION OF INPATIENT DAYS			Average Charge Per Admission
	Beds	Inpatient Days		Medicare	Medicaid	Other	
<b>ABRAZO/VANGUARD</b>	862	156,256	51.7%	18.1%	33.4%	48.5%	\$22,808
Arrowhead Community Hospital	162	36,876	62.3%	16.4%	31.2%	52.4%	19,934
Maryvale Hospital Medical Center	228	40,755	49.0%	10.5%	62.5%	27.0%	21,588
Paradise Valley Hospital	130	29,871	63.0%	19.2%	26.8%	54.0%	22,811
Paradise Valley Psychiatric	19	4,436	64.0%	80.0%	0.0%	20.0%	25,237
Phoenix Baptist Hospital	226	35,971	44.9%	18.3%	42.8%	39.0%	21,150
Phoenix Memorial Hospital	153	21,761	39.0%	14.2%	12.2%	73.6%	27,325
West Valley Hospital Medical Center	106	23,462	81.2%	21.3%	3.1%	75.6%	23,729
<b>BANNER HEALTH</b>	2,272	677,955	81.8%	20.7%	25.2%	54.1%	28,996
Good Samaritan	567	176,962	85.5%	20.5%	33.1%	46.5%	34,144
Desert Samaritan Medical Center	539	170,715	86.8%	13.9%	27.5%	58.6%	28,284
Baywood Medical Center	239	83,518	95.7%	36.4%	15.5%	48.1%	30,475
Thunderbird Samaritan	333	116,985	96.2%	17.9%	23.6%	58.4%	22,551
Mesa Lutheran	258	39,415	41.9%	21.9%	27.2%	50.9%	27,787
Baywood Heart Hospital	111	26,014	64.2%	43.9%	5.9%	50.2%	48,065
Estrella Medical Center	165	43,835	72.8%	17.4%	28.0%	54.6%	22,793
Banner Behavioral Health Center	60	20,511	93.7%	7.3%	0.0%	92.7%	9,708
<b>CATHOLIC HEALTHCARE WEST</b>	724	223,606	84.7%	16.8%	42.2%	41.0%	35,810
St. Joseph's Hospital & Medical Center	516	148,829	79.1%	12.9%	51.9%	35.3%	38,460
Chandler Regional Hospital	208	74,777	98.5%	24.7%	23.1%	52.3%	30,996
<b>IASIS HEALTHCARE</b>	472	83,167	51.6%	24.5%	18.1%	57.4%	34,963
Mesa General Hospital	126	23,142	50.3%	33.0%	38.0%	28.9%	32,204
Tempe St. Luke's Hospital	66	14,714	61.1%	25.8%	21.5%	52.7%	26,927
St. Luke's Medical Center	195	17,353	28.8%	20.8%	15.0%	64.2%	56,023
St. Luke's Behavioral Health	85	27,958	90.1%	19.1%	1.7%	79.2%	17,851
<b>JOHN C. LINCOLN HEALTH NETWORK</b>	447	109,040	70.3%	21.6%	22.3%	56.1%	33,212
John C. Lincoln Deer Valley	205	38,995	58.1%	23.1%	20.0%	56.8%	32,823
John C. Lincoln North Mountain	242	70,045	79.5%	20.7%	23.6%	55.7%	33,429
<b>SCOTTSDALE HEALTHCARE</b>	726	195,794	74.4%	28.2%	12.8%	59.0%	22,082
Scottsdale Healthcare – Shea	405	109,275	74.8%	26.7%	8.4%	64.9%	21,590
Scottsdale Healthcare – Osborn	321	86,519	73.9%	30.1%	18.4%	51.5%	22,615
<b>SUN HEALTH</b>	535	148,561	76.1%	45.7%	10.4%	43.9%	33,540
Sun Health Boswell Hospital	307	88,953	79.4%	46.7%	5.8%	47.5%	41,265
Sun Health Del E Webb Hospital	228	59,608	71.6%	44.2%	17.3%	38.5%	25,365
<b>MARICOPA MEDICAL CENTER</b>	387	83,652	59.2%	7.7%	68.7%	23.6%	19,959
<b>MAYO CLINIC HOSPITAL</b>	201	60,621	82.6%	58.0%	0.0%	42.0%	36,847
<b>ARIZONA HEART HOSPITAL</b>	59	20,048	93.1%	54.7%	7.8%	37.5%	40,520
<b>PHOENIX CHILDREN'S HOSPITAL</b>	284	84,271	81.3%	0.5%	0.7%	98.8%	45,154

**EXHIBIT 31. Inpatient Occupancy and Payer Mix for Phoenix Area Hospitals and Systems, 2006**

Hospital/System	NUMBER OF		Occupancy	DISTRIBUTION OF INPATIENT DAYS			Average Charge Per Admission
	Beds	Inpatient Days		Medicare	Medicaid	Other	
<b>SPECIALTY AND OTHER HOSPITALS</b>	87	6,822	27.1%	38.5%	2.2%	59.3%	26,828
Arizona Orthopedic Surgical Hospital	16	1,612	27.6%	27.7%	0.0%	72.3%	48,146
Arizona Spine And Joint Hospital	23	2,321	27.6%	55.9%	0.3%	43.8%	38,723
Arizona Surgical Hospital	27	146	4.2%	17.1%	0.0%	82.9%	38,665
Gilbert Hospital	6	1,594	79.8%	7.8%	3.6%	88.6%	8,220
Wickenburg Community Hospital	15	1,149	21.0%	63.7%	7.7%	28.6%	7,632
<b>TOTAL</b>	<b>7,056</b>	<b>1,850,627</b>	<b>72.8%</b>	<b>23.2%</b>	<b>24.7%</b>	<b>52.1%</b>	<b>29,830</b>

Source: Author’s analysis of hospital Medicare facility cost reports, 2006 operating years, except Banner Good Samaritan from 2007 fiscal year

**EXHIBIT 32. Major Physician Groups in Phoenix Area**

Group	Primary Location	Number of Physicians
Advanced Cardiac Specialties www.advancedcardiac.com	Phoenix	27
Advanced Surgical Associates www.advancedsurgery.com	Mesa	8
Arizona Arthritis Rheumatology Association azarthritis.com	Paradise Valley	9
Arizona Cardiology Group www.azcard.com	Phoenix	10
Arizona Oncology (Associates) www.arizonaoncology.com	Phoenix	45
Banner Arizona Medical Clinic www.bannerdocs.com	Peoria	100+
Banner Health www.bannerdocs.com	Phoenix	
Banner PrimeCare Network www.bannerdocs.com	Phoenix	700+
Best Medical Group	Phoenix	
CIGNA Medical Group www.cigna.com	Phoenix	170 clinicians
Comprehensive Healthcare Center	Phoenix	
Concentra (Urgent Care) www.concentraurgentcare.com	15 locations	
Consultants in Internal Medicine www.cimdocs.com/home.htm	Glendale	4
Desert Hills Family Medicine	Glendale	
Digestive Disease Consultants	Mesa	5
Integrated Medical Services, Inc. www.imsaz.org	15 locations	
IPC The Hospitalist Co. www.hospitalist.com	Phoenix, Tucson	
Mayo Clinic www.mayoclinic.org/about/arizona.html	Scottsdale	412 staff physicians and scientists
Mesa Gastrointestinal Associates	Mesa	6

hospitals here, St. Joseph provided the largest number of Medicaid days—77,180.

The average charge for an inpatient hospital day was just under \$30,000. That is the sticker price and does not mean that the patient or insurer paid anywhere close to that amount in the end. Typically billed charges are two to three times the actual amount collected from insurers or patients. Medicare and Medicaid set their own fee schedules and private insurance plans negotiated discounted fee schedules or pay hospitals based on daily rates. The average daily charge for the CHW hospitals was almost \$36,000, compared to \$29,000 for the Banner Health hospitals. Specialty hospitals, such as Baywood Heart or Phoenix Children’s typically report higher daily charges.

Exhibit 32 lists two dozen physician groups in the Phoenix area. The largest medical group in the area is the Mayo Clinic, with more than 400 staff physicians and research scientists. Banner Health acquired Arizona Medical Clinic, which, after Mayo, had been the largest group practice. Banner also administers a wide variety of physicians’ practices and employs some of the doctors that are in hospital-based practices. Both Banner Health and CHW have pursued strategies of acquiring physician practices and employing more physicians. Based on interviews and other observations, that has not been strategy that has been that successful in the past. And it appears that systems like Scottsdale Healthcare are choosing to not pursue that strategy with their doctors.

**EXHIBIT 32. Major Physician Groups in Phoenix Area, cont.**

Group	Primary Location	Number of Physicians
North Phoenix Heart Center www.nphc.com	Phoenix	9
Phoenix Medical Group phoenixmedicalgroup.com	Peoria	10
Phoenix Perinatal Associates www.perinatal.com	Phoenix, 3 others	17

Source: Author's search of web sites, telephone contacts and newspaper article searches

**4.2 Tucson Area Hospitals and Systems**

Tucson has also grown rapidly in since 2000 and its population was estimated to have reached 967,000 in 2007. It grew 14.6% from 2000 to 2007 and it is ranked the 52nd largest metropolitan area in the country.

About 14% (150,000) of the residents of Pima County are seniors and about 56,000 of them are enrolled in a Medicare HMO. PacifiCare is the largest here and enrolls almost 29,000 Pima County seniors. That is less than in 2004. Health Net is second, with 18,550 seniors in 2008 compared to about 11,700 in 2004.

About 145,000 residents are enrolled in AHCCCS acute care plans in Pima County. Arizona Physicians IPA has about one-third of them (49,700), while Mercy Care and Health Choice Arizona are the next largest. University

Family Care, the health plan of University Physicians, enrolls about 7,600 in its AHCCCS acute care plan. It also offers benefit plans through the Healthcare Group. Pima County contracts with AHCCCS as a long-term care plan.

The two Carondelet hospitals comprise the largest system in the Tucson area. Carondelet also owns Holy Cross Hospital in Nogales. The Tucson Medical Center is the largest hospital in the area, with 461 staffed beds. The University (of Arizona) Medical Center is among the largest hospitals in the area and is the major teaching hospital for the University's Medical School and residency programs. It is ranked a top-50 hospital for five specialties on the U.S. News and World Report top hospitals list. A new patient care tower at University Medical Center is expected to house Tucson's first children's hospital, although Tucson Medical Center operates a Children's Emergency Center and other pediatric specialty services. Pima County used to operate a general hospital at Kino but that was turned over to University Physicians.

Other health facility construction projects are underway or in planning stages, though not to the extent as is occurring in the Phoenix area. TMC Health Care is planning a new hospital in the southeast part of the Tucson area, to be known as Rincom Community Hospital at Civano. TMC closed inpatient services at its El Dorado hospital in 2006,

**EXHIBIT 33. Revenues, Expenses and Net Income of Tucson Area Hospitals and Systems, 2006**

Hospital/System	City	Net Patient Revenues	Operating Expenses	Net Operating Income	Other Income	Net Income	Margin
<b>CARONDOLET HEALTH NETWORK</b>		\$402,794,269	\$396,188,136	\$6,606,133	\$41,916,009	\$46,222,406	11.5%
St. Mary's	Tucson	211,878,085	211,103,531	774,554	24,405,498	23,441,558	11.1%
St. Joseph's	Tucson	190,916,184	185,084,605	5,831,579	17,510,511	22,780,848	11.9%
<b>TMC HEALTH CARE</b>		392,089,800	417,705,586	-25,615,786	12,366,884	-13,248,902	-3.4%
Tucson Medical Center	Tucson	359,245,505	370,203,825	-10,958,320	11,146,618	188,298	0.1%
El Dorado Medical Center	Tucson	32,844,295	47,501,761	-14,657,466	1,220,266	-13,437,200	-40.9%
<b>COMMUNITY HEALTH SYSTEMS</b>		289,063,080	267,854,463	21,208,617	2,650,362	12,083,139	4.2%
Northwest Medical Center	Tucson	223,473,206	202,221,035	21,252,171	2,294,245	14,533,854	6.5%
Northwest Medical Center Oro Valley	Oro Valley	65,589,874	65,633,428	-43,554	356,117	-2,450,715	-3.7%
<b>UNIVERSITY MEDICAL CENTER</b>		382,430,041	392,081,034	-9,650,993	32,791,876	23,140,883	6.1%
THE UNIVERSITY PHYSICIANS HOSPITAL	Tucson	49,437,107	78,903,764	-29,466,657	22,867,935	-6,610,538	-13.4%
TUCSON HEART HOSPITAL (MEDCATH)	Tucson	56,371,673	59,791,003	-3,419,330	224,845	-3,218,759	-5.7%
<b>TOTAL</b>		<b>\$1,572,185,970</b>	<b>\$1,612,523,986</b>	<b>-\$40,338,016</b>	<b>\$112,817,911</b>	<b>\$58,368,229</b>	<b>3.7%</b>

Source: Author's analysis of hospital Medicare facility cost reports, 2006 operating years

**EXHIBIT 34. Inpatient Occupancy and Payer Mix for Tucson Area Hospitals and Systems, 2006**

Hospital/System	NUMBER OF			DISTRIBUTION OF INPATIENT DAYS			Average Charge Per Admission
	Beds	Inpatient Days	Occupancy	Medicare	Medicaid	Other	
<b>CARONDOLET HEALTH NETWORK</b>	630	138,384	60.2%	29.0%	23.8%	47.2%	\$27,462
St. Mary's	341	72,394	58.2%	30.5%	26.6%	42.9%	29,701
St. Joseph's	289	65,990	62.6%	27.3%	39.2%	33.5%	25,164
<b>TUCSON MEDICAL CENTER</b>	592	152,932	77.6%	23.2%	30.8%	46.1%	20,546
Tucson Medical Center	461	141,847	84.9%	21.2%	32.6%	46.2%	19,744
El Dorado Medical Center	131	11,085	36.8%	48.2%	6.8%	45.0%	31,494
<b>COMMUNITY HEALTH SYSTEMS</b>	342	97,530	78.0%	33.0%	1.7%	65.2%	27,832
Northwest Medical Center	270	80,619	81.7%	30.3%	1.0%	68.7%	27,936
Northwest Medical Center Oro Valley	72	16,911	64.3%	46.3%	5.0%	48.8%	27,388
<b>UNIVERSITY MEDICAL CENTER</b>	347	102,024	81.4%	22.0%	42.2%	35.8%	34,763
THE UNIVERSITY PHYSICIANS HOSPITAL	50	9,981	54.7%	22.5%	39.1%	38.3%	25,922
<b>TUCSON HEART HOSPITAL</b>	60	11,604	53.0%	57.0%	6.1%	37.0%	36,161
<b>TOTAL</b>	<b>2,021</b>	<b>512,455</b>	<b>71.4%</b>	<b>27.1%</b>	<b>25.2%</b>	<b>47.6%</b>	<b>26,724</b>

Source: Author's analysis of hospital Medicare facility cost reports, 2006 operating years

but will reopen the facility for a variety of ambulatory care services. Carondelet Health Network has broken ground for a medical office building at its St. Mary's campus.

Exhibit 33 shows revenues, expenses and net income for Tucson area hospitals. In 2006, they had net income of \$58.4 million, or 3.7% of net patient revenues of \$1.572 billion. That compares to 2005 net income of \$72.3 million, or 4.8% of net patient revenue of \$1.510 billion. The Carondelet hospitals had very strong results in 2006 and 2005 with 2006 net income of \$43 million or 9.4% of patient revenues. On the other hand, TMC Health Care lost money at its hospitals in 2006 and in 2005. The University Medical Center had net income of \$23.1 million in 2006 and \$22.9 million in 2005. El Dorado Medical Center wound down its operations in 2006 and reported a loss of \$13.4 million for the year. It lost a similar amount in 2005.

Exhibit 34 presents a comparison of inpatient occupancy rates and payer mix for Tucson hospitals. In 2006, the average occupancy rate was 71.4%. That is an increase from average occupancy of 68.6% in 2005. Other payers, including commercial insurance, covered 47.6% of the inpatient days. Medicare covered an average of 27.1% of inpatient days and was especially important for St. Mary's and the Tucson Heart Hospital, which became part of the Carondelet system. (That compares to 23.2% of inpatient days in the Phoenix area in 2006.) Medicaid was an especially important payer

for St. Joseph's and for the University Medical Center. Of 130,000 days covered by Medicaid in the Tucson area in 2006, Tucson Medical Center covered 46,300 and University Medical Center provided 43,100 Medicaid days.

Exhibit 35 presents an overview of the major physician groups in the Tucson area. The University Physicians group has about 350 doctors in primary care and specialties.

**EXHIBIT 35. Major Physician Groups in Tucson Area**

Group	Primary Location	Number of Physicians
Arizona Community Physicians www.azacp.com	Tucson	105
Assured Imaging www.assuredimagingcad.com	Tucson	
Carondelet Medical Group www.carondelet.org/cmgroup	Tucson	70+ physicians and mid-level providers
Ironwood OB/GYN www.ironwoodobgyn.com	Tucson	6
Pima Heart www.pimaheart.com	Tucson	27
Specialists in Dermatology www.clearskindoctor.com	Tucson	4
Tucson Children's Clinics www.childrensclinics.org	Tucson	
University Physicians Healthcare www.uph.org	Tucson	350

Source: Author's search of web sites, phone contacts and newspaper articles.

Compared to Phoenix, Tucson has more of a tradition or culture of physician group practice and of physicians practicing in hospital-based groups. For example, Carondelet Medical Group consists of more than 70 physicians, almost all primary care, practicing in more than a dozen locations. Saguaro Physicians LLC is a group of 11 physicians employed by TMC Health Care.

### 4.3 Other Major Hospitals in the State

New hospitals are being developed in other parts of the state as well. For example, Yavapai Regional Medical Center East, a 50-bed acute care hospital, opened in Prescott Valley in 2006. Valley View Medical Center opened in 2005 in Fort Mojave, near the point where the state boundaries of Arizona, California and Nevada intersect.

Hospitals in these areas have a variety of governance structures. For example, a hospital district with an elected board owns the Yuma Regional Medical Center campus and contracts with a nonprofit corporation (with a separate

board of directors) to provide hospital care. Other are owned by religious systems (Holy Cross in Nogales) or by for profit companies (Havasu Regional and Western Arizona Regional).

*Exhibit 36* shows revenues, expenses and net income for the 13 hospitals listed here. On average, they had margins of 10.1% on net patient revenues of \$1.368 billion. Five hospitals had margins of more than 10%, including the Community Health hospitals in Payson and Bullhead City.

Yuma Regional and Flagstaff Medical had the highest number of inpatient days in 2006. *Exhibit 37* compares these hospitals on their inpatient occupancy and payer mix. Occupancy is lower for many of these hospitals, with three below 50% and two others between 50% and 60%. Hospitals with the highest occupancy rates were Western Arizona Regional and Yavapai Regional. Medicare is a more important payer to these hospitals, and accounted for more than 50% of inpatient days at all but three of these

Hospital (System)	City	Net Patient Revenues	Operating Expenses	Net Operating Income	Other Income	Net Income	Margin
Casa Grande Regional Medical Center (Regional Care Services)	Casa Grande	\$102,855,734	\$101,121,211	\$1,734,523	\$2,632,766	\$4,367,289	4.2%
Flagstaff Medical Center (Northern Arizona Healthcare)	Flagstaff	238,024,261	239,639,931	-1,615,670	19,364,551	16,932,164	7.1%
Havasu Regional Medical Center (Province Healthcare)	Lake Havasu City	66,205,595	47,148,680	19,056,915	433,709	19,490,624	29.4%
Holy Cross Hospital (Carondelet)	Nogales	20,307,111	19,376,025	931,086	811,130	1,603,970	7.9%
Kingman Regional Medical Center (Kindred)	Kingman	133,872,855	127,655,747	6,217,108	4,919,274	11,136,382	8.3%
Navapache Regional	Showlow	70,763,818	66,458,008	4,305,810	2,031,492	6,231,807	8.8%
Page Hospital (Banner)	Page	14,548,777	13,129,018	1,419,759	378,622	1,798,381	12.4%
Payson Regional Medical Center (Community Health)	Payson	45,542,726	34,114,135	11,428,591	176,545	11,605,136	25.5%
Sierra Vista Regional Health Center	Sierra Vista	72,205,450	69,457,089	2,748,361	1,652,214	4,352,448	6.0%
Verde Valley Medical Center (Northern Arizona Healthcare)	Cottonwood	97,719,900	95,768,249	1,951,651	5,950,755	7,338,771	7.5%
Western Arizona Regional Medical Center (Community Health)	Bullhead City	115,146,748	93,740,261	21,406,487	823,544	22,230,031	19.3%
Yavapai Regional Medical Center	Prescott	148,115,793	148,484,542	-368,749	4,133,303	3,764,554	2.5%
Yuma Regional Medical Center	Yuma	243,056,922	215,071,068	27,985,854	0	27,985,854	11.5%
	<b>TOTAL</b>	<b>\$1,368,365,690</b>	<b>\$1,271,163,964</b>	<b>\$97,201,726</b>	<b>\$43,307,905</b>	<b>\$138,837,411</b>	<b>10.1%</b>

Source: Author's analysis of hospital Medicare facility cost reports, 2006 operating years

**EXHIBIT 37. Inpatient Occupancy and Payer Mix for Various Arizona Hospitals and Systems, 2006**

Hospital/System	Beds	NUMBER OF Inpatient Days	Occupancy	DISTRIBUTION OF INPATIENT DAYS			Average Charge Per Admission
				Medicare	Medicaid	Other	
Casa Grande Regional Medical Center	164	33,827	56.5%	35.2%	29.6%	35.3%	\$17,249
Flagstaff Medical Center	235	54,238	63.2%	32.8%	36.4%	30.8%	28,604
Havasu Regional Medical Center	119	15,750	54.5%	59.2%	16.8%	24.0%	22,967
Holy Cross Hospital	25	4,346	47.6%	13.4%	75.6%	11.0%	11,641
Kingman Regional Medical Center	160	36,665	64.8%	49.6%	25.2%	25.2%	15,666
Navapache Regional	66	15,792	65.6%	28.6%	33.5%	37.9%	12,767
Page Hospital	25	1,437	15.7%	16.8%	33.1%	50.1%	10,880
Payson Regional Medical Center	43	7,510	47.8%	52.7%	21.0%	26.3%	21,225
Sierra Vista Regional Health Center	77	20,164	71.7%	39.6%	26.1%	34.3%	14,604
Verde Valley Medical Center	99	22,426	62.1%	53.2%	22.3%	24.5%	28,007
Western Arizona Regional Medical Center	92	30,742	91.5%	48.5%	18.3%	33.2%	34,171
Yavapai Regional Medical Center	128	37,212	79.6%	51.1%	19.8%	29.1%	19,060
Yuma Regional Medical Center	333	78,069	64.7%	44.1%	21.4%	34.4%	19,216
<b>TOTAL</b>	<b>1,566</b>	<b>358,178</b>	<b>64.6%</b>	<b>43.2%</b>	<b>25.7%</b>	<b>31.0%</b>	<b>\$20,972</b>

Source: Author's analysis of hospital Medicare facility cost reports, 2006 operating years

hospitals. Other payers (commercial insurance) are less important, covering 31% of inpatient days, on average. Of this group of hospitals, Flagstaff Medical Center and Yuma Regional Medical Center provide the most Medicaid days.

Exhibit 38 lists a handful of physician groups in places like Flagstaff and Yuma. In addition, physicians in rural areas are employed by community health centers and by federal agencies.

**EXHIBIT 38. Major Physician Groups in Other Parts of Arizona**

Group	Primary Location	Number of Physicians
Arizona Heart Institute www.azheart.com	Rural locations in Casa Grande, Lake Havasu, Parker, Payson, Prescott and Prescott Valley	9
Flagstaff Medical Center (Northern Arizona Healthcare)	Flagstaff	
Midwestern Internal Medicine www.midwestinternalmed.com	Lake Havasu City	5
North Country HealthCare www.northcountryhealthcare.org	Flagstaff plus eight satellite locations	14
Prescott Radiologists	Prescott	
Prescott Valley Primary and Urgent Care	Prescott Valley	
Yuma Cardiologists	Yuma	6

Source: Author's search of web sites, telephone contacts and newspaper article searches

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