AN ASSESSMENT OF THE SAFETY NET in Phoenix, Arizona

By

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FOREWARD

After several years of decline, the number of Americans without health insurance is climbing rapidly. Meanwhile erosion in tax revenues is driving states to cut funding for Medicaid. Both trends are hitting all health care providers hard, as they are simultaneously attempting to cope with a nursing shortage, escalating labor costs, and the adoption of expensive new technologies.

These forces are felt the most in the health care safety net. These providers of care for the poor, uninsured and other vulnerable populations have not had to face such a confluence of challenges in recent memory. They must survive in an industry in upheaval, while attempting to serve the ballooning numbers of our fellow Americans in need. They must also continue to provide a set of highly specialized services, such as burn, trauma and neonatal care to a broad swath of their local communities.

It is against this backdrop that we have assessed the "state of the safety net" in the Phoenix metropolitan area. Due to the foresight of the Robert Wood Johnson Foundation, a team of researchers at The George Washington University Medical Center led by Marsha Regenstein, PhD, MCP, has assessed the health of the safety net in ten United States communities. In each community we worked with a Community Partner—a local organization that helped us to identify the key issues and stakeholders. In Phoenix, we are deeply indebted to the St. Luke's Health Initiatives. These community partners have also committed to convening opinion leaders and others in their region to discuss the implications of the reports' findings. All of this was done as part of the *Urgent Matters* project, a national program designed to spur awareness of safety net issues while finding practical ways to relieve one symptom of distress—overcrowded emergency departments.

Our goal is to provide new analysis and information on what is happening today in the critical systems of care for the underserved in these communities. By doing so we seek to inform the health care discussions in these places and the nation, and to lay a foundation for rational change and improvement. We do not presume to know all the answers. But we believe that an objective analysis by an unbiased team can be immensely helpful to communities in need of a critical analysis of their safety net. This report seeks to meet this need.

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EXECUTIVE SUMMARY

The Urgent Matters program is a new national initiative

of The Robert Wood Johnson Foundation, designed to identify opportunities for relieving crowding in our nation's emergency departments and to improve access to quality care for uninsured and underserved community residents. *Urgent Matters* examines the interdependence between emergency department (ED) use and the health care safety net in ten communities throughout the United States. One component of this program was the development of comprehensive assessments of the safety nets in each of the ten communities that served as the focus of this study. This report presents the findings of the Phoenix, Arizona, safety net assessment.

Each of the *Urgent Matters* safety net assessments was prepared by a research team from The George Washington University Medical Center, School of Public Health and Health Services, Department of Health Policy, in close collaboration with the project staff from the hospitals selected for this study and a community partner. The Phoenix assessment draws upon information collected from interviews with senior leaders in the Phoenix health care community and from on-site visits of safety net facilities. The research team also met with key stakeholders in Phoenix as well as with residents who use safety net services.

To set the context for this study, the team drew upon secondary data sources to provide demographic information on the populations in Phoenix, as well as data on health services utilization, coverage statistics, and related information. The assessment includes an analysis of data that indicates the extent to which the emergency department at St. Joseph's Hospital and Medical Center provides care that could safely be provided in a primary care setting.

This report examines key issues that shape the health care network available to uninsured and underserved residents in Phoenix. It provides background on the Phoenix health care safety net and describes key characteristics of the populations served by the safety net. It then outlines the structure of the safety net and funding mechanisms that support health care safety net services. The report also includes an analysis of key challenges facing providers of primary and specialty care services and specific barriers that some populations face in trying to access them.

KEY FINDINGS AND ISSUES FOR CONSIDERATION: IMPROVING CARE FOR UNINSURED AND UNDERSERVED RESIDENTS OF PHOENIX

The safety net assessment team's analysis of the Phoenix safety net generated the following key findings:

- The Phoenix safety net is a loose configuration of independent providers, with no clear coordination among them. No one system or provider offers low-income and uninsured patients a comprehensive set of services to meet their health care needs.
- Funding from the recently passed Proposition 414 will provide a consistent source of revenue for the county-run Maricopa Integrated Health System (MIHS). This tax is expected to generate up to \$40 million a year, and will be used to help shore-up finances, renovate facilities, and bring salaries to competitive levels. It is unclear whether the current Board of Supervisors will levy the tax now or wait until a new governing board is elected in November 2004.
- Upfront clinic fees, recently imposed by MIHS, pose a significant barrier to low-income, uninsured patients who rely on the county-run system for care. These fees have resulted in a sharp decrease in clinic visits and, effectively, placed its clinics outside the health care safety net. It remains to be seen whether the passage of Proposition 414 will result in a reduction of upfront costs associated with clinic visits.
- A fair amount of primary care is available to lowincome and uninsured residents in the Phoenix area, but it is poorly distributed and difficult to access. Clinics that serve the uninsured are clustered in close proximity to each other, leaving vast areas with virtually no safety net services nearby.

The situation is exacerbated by the sheer size of Maricopa Count. In addition, the county has a particularly underdeveloped public transportation system that leaves many residents completely dependent on private transportation.

- A significant percentage of emergency department visits at St. Joseph's Hospital and Medical Center are for patients whose conditions are non-emergent. More than one-fifth (22.5 percent) of all emergency department encounters that did not result in an inpatient admission were for patients who presented with non-emergent conditions. Nearly onequarter more (23.2 percent) were for patients whose conditions were emergent but could have been treated in a primary care setting.
- Physicians and dentists are in short supply in the Phoenix metropolitan area. The shortage translates into serious access problems for uninsured and underserved patients, since few of those physicians who practice in Phoenix will see uninsured patients. Access to specialty providers is particularly difficult for the uninsured. Individuals covered by the Arizona Health Care Cost Containment System (AHCCCS), the state's Medicaid program, have a better chance of seeing a general practitioner, specialist or dentist than someone without insurance. Patients wait three to six months or longer for many health care services.
- Mental health services are not readily available to the uninsured, and may be difficult to access even for individuals covered by Medicaid. Access to behavioral health services for uninsured children or adults with serious mental health problems is better, particularly if the services are court-ordered.
- Low-income and uninsured residents in the Phoenix area lack information about sources of free or lowcost care. Much of the information about clinic services and other safety net supports is spread by word of mouth. Thus, many individuals who are in need of care are unaware of alternatives to hospital emergency departments. This appears to be particularly true of Spanish-speaking residents.

The Urgent Matters *safety net assessment team offers the following issues for consideration.*

- Maricopa County should commission a study to determine what effects the dramatic changes in public financing (e.g., Proposition 204, Tobacco Tax, Proposition 414) have had on the safety net and its ability to serve the uninsured and underserved. The study should include an investigation of any unintended consequences of the legislation on the principal safety net institutions in the county. The study should also examine whether MIHS can continue to provide vital services to county residents at rates that are not overly burdensome.
- Efforts should be made to attract and retain qualified physicians in the Phoenix metropolitan area. In addition, in order to increase the supply of providers available to low-income and uninsured residents in the county, community leaders should encourage and support programs that train non-physician primary care practitioners. Nurse practitioners, physician assistants, certified nurse mid-wives and others could augment the supply of providers and improve access to important services.
- Outreach efforts to educate residents about health care services should be strengthened. Providers and other groups should consider funding community health workers and case managers to bridge the gaps between those who deliver health services and those who consume these services.
- Safety net providers should implement an information system that follows patients across systems and sites of care. Such a system would improve patients' quality of care by streamlining eligibility and registration processes and enabling providers to have more up-to-date information on a patient's clinical profile and history.
- Local officials should examine existing bus routes and evaluate the effectiveness of the transportation system in serving low-income populations. Changes in bus routes should be considered.



AN ASSESSMENT OF THE SAFETY NET IN PHOENIX, ARIZONA

INTRODUCTION

In 2000, the Institute of Medicine (IOM) published a report on the health care system serving uninsured and underserved individuals in the United States. Entitled *America's Health Care Safety Net: Intact but Endangered*, the report examined the viability of the safety net in the context of major changes in the financing and delivery of health care. The IOM report concluded that the safety net in America is under significant pressure from changing political and financial forces, including the growth in the number of uninsured in this country, the reduction or elimination of subsidies funding charity care, and the growth of mandated managed care.

The Robert Wood Johnson Foundation established the *Urgent Matters* program in 2002 to further study the dynamics of the health care safety net. The IOM report focused its review principally on ambulatory and primary care settings; the *Urgent Matters* program takes IOM's research a step further and examines the interdependence between the emergency department (ED), another critical component of the safety net, and core safety net providers who "organize and deliver a significant level of health care and other health-related services to uninsured, Medicaid, and other vulnerable patients."¹

The purpose of the *Urgent Matters* program is to identify opportunities for relieving crowding in our nation's emergency departments and to improve access to quality care for uninsured and underserved community residents. The program consists of three key components: 1) technical assistance to ten hospitals whose EDs serve as critical access points for uninsured and underserved patients; 2) demonstration grants to four of these ten hospitals to support innovative and creative solutions to patient flow problems in the ED; and 3) comprehensive assessments of the safety nets in each of the communities that are home to the ten hospitals. This report presents the findings of the safety net assessment in Phoenix, Arizona.

Each of the *Urgent Matters* safety net assessments has been prepared by researchers at The George Washington University Medical Center, School of Public Health and Health Services, Department of Health Policy, in close collaboration with the hospital ED project staff and a community partner—an organization that is well-positioned to convene key stakeholders in the community to work together to strengthen safety net services on behalf of community residents. The *Urgent Matters* grantee hospitals and community partners are listed on the back cover of this report.

These assessments have been developed to provide information to communities about the residents who are most likely to rely on safety net services. They are designed to highlight key issues affecting access to care for uninsured and underserved residents, as well as to identify potential opportunities for improvement.

The safety net assessments were conducted over the summer and fall of 2003. Each assessment draws upon information developed through multiple sources. The Phoenix assessment team conducted a site visit on June 15-18, 2003, touring safety net facilities and speaking with numerous contacts identified by the community partner and others.

Through the site visits and a series of telephone conferences held prior to and following the visit to Phoenix, the assessment team interviewed many local informants, including senior leaders at hospitals and health systems, community health centers and other clinics, public health and other service agencies and mental health agencies. Individual providers or provider groups, advocates, and policymakers were interviewed as well. The team also drew upon second-

These assessments have been developed to provide information to communities about the residents who are most likely to rely on safety net services.



ary data sources to provide demographic information on the populations in Phoenix as well as data on health services utilization and coverage.

While in Phoenix, we conducted focus groups with residents who use safety net services. We held three groups with a total of 27 participants; two of the focus groups were conducted in Spanish and one was in English. The assessment team worked with the community partner to recruit patients who were likely to use safety net services. The findings from the focus groups provide insights into the challenges that uninsured and underserved residents face when trying to access services from the local health care system. The assessment includes an application of an ED profiling algorithm to emergency department data from St. Joseph's Hospital and Medical Center. The algorithm classifies ED encounters as either emergent or nonemergent cases.

Section one of the Phoenix safety net assessment provides a context for the report, presenting background demographics on Phoenix and Arizona. It further describes the structure of the safety net, identifying the providers and facilities that play key roles in delivering care to the underserved. Section one also outlines the financial mechanisms that support safety net services. Section two discusses the status of the safety net in Phoenix based on the site visits, telephone conferences and in-person interviews. This section examines challenges to the safety net, highlighting problems in access to needed services, growing burdens on hospital emergency departments, stresses on safety net providers, declining rates of insurance coverage, and other barriers to care faced by the underserved.

Section three presents findings from the focus groups and provides insights into the challenges that uninsured and underserved residents face when trying to access services from the local health system. Section four includes an analysis of patient visits to the emergency department at St. Joseph's Hospital and Medical Center. This analysis includes demographic information on patients who use the emergency department and presents information on the extent to which the emergency department at St. Joseph's Hospital may be providing care that could safely be provided in a primary care setting. Finally, Section five presents key findings and issues that safety net providers and others in the Phoenix area may want to consider as they work together to improve care for uninsured and underserved residents in their communities.

BACKGROUND

Phoenix is the most populated city in the state of Arizona with over 1.3 million residents.² Phoenix is located in Maricopa County, which encompasses over 9,200 square miles³ with a population of over 3.2 million residents, nearly two-thirds of the state's total (see Table 1).⁴ Over three-fourths of the County's population is white. A substantial number of residents (37 percent) categorize themselves as Hispanic.⁵ Black, Asian, and Native American residents together represent about 8 percent of the population and nearly 16 percent are categorized as "other."⁶ When comparing against statewide totals, Maricopa County has a much higher percentage of Hispanic and black residents.

Maricopa County also has proportionately more foreign born residents than Arizona and proportionately more residents who speak a language other than English at home than the state. The County population is also relatively young compared to the rest of the state, as it contains proportionately fewer elderly residents.

Table 1 A Snapshot of Maricopa Coun		
Selected Demographics	Maricopa County	Arizona
Population		
Size	3,259,093	5,346,616
Density: Persons/square mile	354.1	47.0
Race		
White	75.9%	77.6%
Black	4.3%	2.8%
Asian	2.1%	2.0%
American Indian/Alaska native	1.7%	4.7%
Other	15.7%	12.7%
Hispanic origin and race	37.0%	27.1%
Birthplace/Language		
Foreign born	21.1%	13.2%
Language other than English spoken at home	34.7%	25.7%
Age		
18 years and over	71.4%	72.5%
65 years and over	7.5%	12.5%
Median age (in years)	31.0	34.2
Source: American Community Survey Profile, 2002, U.S. Census Bureau, ur	l nless otherwise noted.	1

Although the County has a greater percentage of residents living in households with incomes below the federal poverty level (FPL) than does the state,⁷ a smaller percentage are covered by public insurance programs such as AHCCCS^{8.9} (the state's Medicaid program) and the State Children's Health Insurance Program (see Table 2).

	Maricopa County	Arizona
Income and poverty [^]		
Living below poverty	13.1%	11.8%
Median household income	\$42,721	\$41,172
Insurance coverage [#]		
Commercial	58.0%	55.2%
Medicare	12.2%	13.6%
AHCCCS and KidsCare*	12.9%	13.9%
Uninsured	16.9%	17.3%

Rates of uninsurance for both Maricopa County (16.9 percent) and Arizona (17.3 percent) exceed the national average of 15.2 percent.¹¹ A steady rise in unemployment between 1999 and 2002 contributed to the rise of uninsurance. Unemployment in Maricopa County rose to 5.8 percent in 2002, up from 3.2 in 1999, but improved slightly in 2003 when it dropped to 5.2 percent.¹²

Over the past several years, employers have responded to the economic downturn by also reducing health insurance coverage for their workers. Ten years ago, two-thirds of all Arizona workers were covered by employer-based health insurance plans. Today that figure is estimated to have dropped below 50 percent.¹³ The state's uninsurance rate has been mitigated somewhat by the expansion of the state's Medicaid program. As of January 2004 nearly 18 percent of the state's population was enrolled in AHCCCS, with total enrollment topping 900,000 members,¹⁴ up from about 500,000 before the program's expansion.

STRUCTURE OF THE PHOENIX HEALTH CARE SAFETY NET

The safety net in Phoenix is composed of primary care providers, hospitals and individual practitioners who provide services to uninsured and underserved patients. Nearly every health care provider has contracted with AHCCCS to provide services to Medicaid beneficiaries. The supply of primary care and specialty physicians is slightly higher in Maricopa County, relative to its population, than in Arizona as a whole (see Table 3). Conversely, the supply and use of hospital services is slightly lower in Maricopa County than the supply and use of such services statewide.

Table 3	Physician and Hospital Supply, Maricopa County and Arizona					
		Maricopa County	Arizona			
	Physician supply (per 100,000*) Primary care providers Pediatricians OB/GYN Medical specialist Surgical specialist	64.6 47.8 26.9 25.0 33.8	63.3 45.7 24.6 22.3 31.4			
	Hospital supply/utilization (per 1,000) Inpatient beds Hospital admissions Emergency department visits	1.99 98 287	2.03 100 304			
Source: Data are for 1999. Billings and Weinick. 2003. Monitoring the Health Care Safety Net Book II: A Data Book for States and Counties. Washington, DC: Agency for Healthcare Research and Quality.						

Counties. Washington, DC: Agency for Healthcare Research and Quality.
* Physician supply refers to the number of providers per 100,000 patients. For example, for primary care providers, the number refers
to provide a set of the number of providers per 100,000 patients.

to providers per 100,000 residents 18 years of age and older. For pediatricians, the number refers to providers per 100,000 residents under the age of 18.

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SAFETY NET PROVIDERS

The primary safety net providers in the Phoenix metropolitan area include the following organizations:

Hospitals: Several hospitals provide the majority of the uncompensated care offered to low-income Phoenix residents. They are Maricopa Medical Center (MMC), Banner Good Samaritan, and Catholic Health Care West/St. Joseph's Hospital and Medical Center. The largest of these is Maricopa Medical Center (MMC), which is part of the county-run Maricopa Integrated Health System (MIHS). MIHS also includes 11 primary care clinics, four health plans, and ambulatory specialty clinics. MMC is a 621-bed tertiary care hospital that includes a 172-bed psychiatric care facility, a regional burn center and a level 1 trauma center.¹⁵ MMC principally serves the south-central section of the Phoenix metropolitan area. The hospital has more than 21,000 admissions per year with a total of over 110,000 inpatient days.¹⁶ MMC handles more than 70,000 emergency room visits per year, and in 2001 had nearly 400,000 outpatient visits.17

MMC's payer mix demonstrates its importance as a safety net provider: 65 percent of inpatient admissions are paid for by Medicaid, 10 percent are paid for by Medicare, 23 percent are admissions of patients who are uninsured, and only 2 percent are covered by commercial insurance.¹⁸ MIHS has more than three times the amount of uncompensated care as a percent of gross charges of any health system in the region (18 percent).¹⁹

Primary Care: Multiple primary care providers are included in the metropolitan Phoenix safety net. They include: Federally Qualified Health Centers (FQHCs),²⁰ a federally funded Native American Community Health Center, private primary care clinics, hospital-based clinics, and school-based clinics.

The Federally Qualified Health Centers include Clinica Adelante and Mountain Park. Clinica Adelante began in 1979 as a migrant health center but changed over time as the local area became less agricultural. The center operates six clinical sites; three are located in the Northwest Valley, one is southeast of the city in Mesa, and two are in outlying areas of western Maricopa County. The clinic estimates that threefourths of its patients are undocumented immigrants.²¹ In 2002, the organization served approximately 22,000 patients. Forty percent of patients have publicly-sponsored insurance such as Medicaid or the State Children's Health Insurance Program (SCHIP), an additional 40 percent receive services on a sliding fee, 15 percent are covered by private insurance, and the remaining 5 percent are on Medicare.²² One of Clinica Adelante's sites provides preventive dental services; none of the sites provides mental health care.

A second FQHC is Mountain Park, which has been operating for over 24 years. It has three sites, and recently received funding from the Bureau of Primary Health Care to open another. The center provides behavioral health services at all its sites; dental services are delivered only at its main site. Individual clinic sites have late hours on alternate evenings. In 2002, Mountain Park provided nearly 93,000 medical and enabling encounters (such as interpreter services, nutrition counseling, and transportation) to over 26,000 users.²³ Sixty percent of the center's patients fall under 100 percent of the federal poverty level. In terms of payer mix, 44 percent of patients are uninsured, 43 percent are covered by Medicaid or SCHIP, 12 percent have private insurance, and 2 percent are on Medicare. Three out of four patients (76 percent) are Hispanic, 9 percent are black and 7 percent are white. Two-thirds of Mountain Park's patients do not speak English.24

The Native American Community Health Center, a Title V-funded clinic,²⁵ also provides primary care services to uninsured and underserved Native Americans. Native Americans from federally recognized tribes are eligible to receive services from the Phoenix Indian Medical Center, which is part of Indian Health Services. Native American service providers function independently from the broader health and social services community due to federal and state eligibility requirements and funding sources.

Several private primary care clinics serve as essential components of the health care safety net in the Phoenix Valley. Together they account for thousands

of encounters with uninsured and underserved patients each year. Two of them are the Society of St. Vincent de Paul's Free Clinic and Las Fuentes. During 2001, St. Vincent de Paul's Free Clinic provided nearly 10,500 medical and dental visits. Of those visits, 39 percent were for medical visits, 29 percent were for adult dental visits, 20 percent were for dental visits for children, and 12 percent were for ancillary visits. All services are provided free of charge although the clinic does solicit donations for services. Due to the great need for services, patients are told that they will be eligible to receive services for only a limited time (generally about two years). The clinic estimates that the 2001 market value for the services it provided for charity care was over \$2 million.26 It relies heavily on grants and private donations to keep its doors open.

Las Fuentes opened in 1995 and delivers 6,000 visits per year, serving over 3,000 patients. Half the patients are publicly insured, 30 percent are uninsured and pay sliding fee charges, and 20 percent have private insurance. The maximum charge on the sliding fee scale is \$40 per visit. The clinic is open from 9:00 a.m. – 5:00 p.m. Monday through Friday and holds a specialty clinic every other Saturday. The clinic is considering pursuing an FQHC designation to enable it to expand services and offer dental care to its patients.²⁷

Hospital-based clinics play an important role in the safety net in the Phoenix Valley. The Maricopa Integrated Health System (MIHS) operates 11 health clinics in Phoenix. In 2000, MIHS clinics treated approximately 64,000 patients through 340,000 outpatient visits. Approximately two-thirds of these patients were covered by Medicaid, SCHIP and Medicare, and

The safety net in Phoenix is composed of primary care providers, hospitals and individual practitioners who provide services to uninsured and underserved patients. about 29 percent were uninsured/self pay.²⁸ Faced with large budget shortfalls, MIHS imposed upfront fees for patients visiting its clinics that ranged from \$60–\$150 per primary care visit and \$125 per dental visit.²⁹ Since imposing these fees, MIHS' health clinics have witnessed a sharp decrease in clinic visits.³⁰

Other hospital-based clinics also offer care. In 2000, Good Samaritan Regional Hospital served over 1,700 patients in more than 12,000 visits in its outpatient clinic, and over 2,000 women's clinic patients in more than 8,000 visits. St. Joseph's Hospital and Medical Center operates a general clinic and several specialty clinics staffed mainly by residents. It estimates that these clinics served nearly 12,000 patients in 2001. The great majority of these patients are uninsured/self-pay.³¹

Sixty-eight school-based health centers in Maricopa County are also important safety net providers. During the 2002-2003 academic year, the school-based health centers provided primary care services to 28,000 children.³²

Behavioral Health: Regional behavioral health authorities (RBHAs) administer behavioral health services in the state. One RBHA is assigned to each of the state's six regions and is responsible for providing oversight, outreach and service coordination. RHBAs can provide services directly or subcontract to another provider to deliver services. Value Options, a managed care contractor, is the RHBA for Maricopa County. Value Options provides direct outpatient services to adults with serious mental illness, and has a contract to provide services to children who have general mental health and substance abuse needs. Services are provided to both AHCCCS recipients and those without insurance. Value Options serves over 42,000 Maricopa County residents through more than 85 behavioral health care providers and 21 case management sites.33

Services are available to children with serious emotional disturbances (SED) if they are eligible for AHCCCS. Adults who are seriously mentally ill (SMI) are eligible for services regardless of their insurance status. Those who are uninsured are covered by state-only funds. Adults over age 18 who are uninsured and not SMI are covered under state-only funds for services only if



court-ordered (i.e., if they are a danger to themselves or others) or if they have been determined to be persistently and acutely disabled. A full array of services is provided; co-payments may be assessed but are not strictly enforced.³⁴ For those who are not seriously mentally ill, treatment is given on a first-come, first-served basis and the benefit package is limited. Individuals with incomes below 100 percent of the federal poverty level receive care at no cost; those between 100 and 275 percent of poverty are assigned co-payments based on income. Within this latter group, those with hardships are not required to pay. Individuals with incomes above 275 percent of the FPL are expected to pay full price for care.

Maricopa County's RHBA offers behavioral health services in a variety of venues, including a state psychiatric hospital, urgent care center, crisis centers, jails, mobile teams, clinics, housing programs and a detoxification facility with a mobile patrol. In addition, a crisis line linked to the police department operates 24 hours a day and receives thousands of calls each month.

Dental Care: AHCCCS beneficiaries can obtain dental services from a variety of providers who have contracted with managed care plans, including a number of clinics and dentists in private practice. After years of low

provider enrollment, the state opted to reimburse dentists the usual and customary rate and heavily recruited dentists to rejoin AHCCCS. Today, many dentists participate in AHCCCS. Children on AHCCCS are eligible for a full complement of services; adults are only covered for services to address pain or extractions.

Some sources of dental care for uninsured children include a dental clinic at John C. Lincoln Health Network, St. Joseph's Hospital and Medical Center, the Boys and Girls Club, the Native American Community Health Center, Tanner Community Development Corporation/Coronado Dental Clinic, and Mountain Park Community Health Center. Uninsured adults rely on a handful of organizations for dental care including St. Vincent de Paul's Free Clinic, Mountain Park Community Health Center, Maricopa Homeless Clinic, and Indian Health Services at Indian Medical Center. St. Vincent de Paul's Free Clinic holds a lottery for patients to receive all necessary dental care. Maricopa Integrated Health System's dental clinics are also available to the uninsured for an upfront fee of \$125. Prior to MIHS' budget crisis, patients were charged \$30. Patients can also present at the emergency department to obtain dental care.

FINANCING THE SAFETY NET

ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM

Arizona's Medicaid program, Arizona Health Care Cost Containment System (AHCCCS), was established in the early 1980s as the nation's first statewide Medicaid managed care program.³⁵ The state negotiates contracts with managed care organizations, which in turn contract with provider networks to provide health care services to AHCCCS enrollees. Nearly all managed care arrangements with AHCCCS managed care plans are capitated. The program currently has more than 900,000 enrollees statewide; over 431,000 enrollees are in AHCCCS managed care plans in Maricopa County.³⁶ The state's children's health insurance program, KidsCare, has fewer than 50,000 enrollees, 58 percent of whom reside in Maricopa County.³⁷ Eligibility for AHCCCS is 100 percent of the federal poverty level (FPL) for adults; pregnant women are eligible at 133 percent of the FPL, children under age 1 are at 140 percent of the FPL, and children between 1-5 years old are at 133 percent of the FPL. Children can also qualify for KidsCare. No premuims apply to children up to 150 percent of the FPL. Those between 150 and 200 percent of the FPL are required to pay premiums.

Due to a poor economy and increases in eligibility levels allowed under Proposition 204 (described below), AHCCCS enrollment and costs have soared in recent years. Between January 2001 and January 2003, enrollment increased by 327,500 enrollees. In fiscal year 2003, \$612 million in general funds went to the program, up from \$483 million in fiscal year 2000. Costs for fiscal year 2004 are estimated to rise to over \$700 million.³⁸

Facing a budget shortfall of \$340 million in FY 2003 and up to \$1 billion for FY 2004, lawmakers proposed several changes to rein in AHCCCS costs. Proposed changes included the application of new cost-sharing requirements for the AHCCCS and KidCare Programs, the elimination of coverage for adults through a HIFA waiver to the KidsCare program,39 a reduction of the eligibility determination period from 12 months to six months, and cuts to the substance abuse services program.40 Ultimately, the legislature and governor agreed to make only two major changes to the program. First, a new 2 percent premium tax was imposed on Medicaid managed care plans participating in AHCCCS; this tax had previously applied to commercial health plans only. The increase in taxes is expected to raise \$70 million from providers and bring in an additional \$119 million in federal matching funds for AHCCCS.⁴¹ In addition the state's Premium Sharing Program was cut, which provided coverage for eligible adults below 200 percent of the FPL who did not qualify for AHCCCS and could not afford commercial insurance. This will result in a decrease of 2,500 people from AHCCCS enrollment.42

PROPOSITION 204

In 2000, voters passed Proposition 204, which raised the minimum AHCCCS eligibility guidelines to 100 percent of the FPL. This expansion was initially funded largely by the state's Tobacco Settlement funds. However, program costs associated with the AHCCCS expansion and enrollment have exceeded the funding available from the Tobacco Settlement. To help cover the increased costs the state has begun diverting monies from the state's tobacco tax (described below).

Prior to the passage of Proposition 204 in 2000, Arizona counties were responsible for the care of the medically needy and the medically indigent.43 Implementation of Proposition 204 relieved counties of this responsibility by expanding AHCCCS coverage to all low-income citizens in Arizona up to 100 percent of the FPL.44 Proposition 204 also repealed the county hospital maintenance of effort requirement beyond July 1, 2003. This essentially meant that both Maricopa County and Pima County were no longer required to maintain a public hospital after that date. Of course, federal law45 requires that the county hospital stabilize and treat patients who come to the emergency department, regardless of coverage or ability to pay. Therefore, Maricopa County's hospital, Maricopa Integrated Health System (MIHS) is still required by law to treat uninsured patients, but is no longer entitled to receive county funds to cover costs associated with that care. In an attempt to offset some of its losses MIHS began charging patients without insurance up-front for any care received, other than care recieved in the emergency department.

Товассо Тах

Tobacco tax funds were originally earmarked for primary care programs for uninsured residents of Arizona who live in households with incomes up to 200 percent of the FPL and are not eligible for AHCCCS, KidsCare (SCHIP) and/or Medicare. These programs provide outreach, primary and preventive adult and well child services, immunizations, prenatal care, family planning, diagnostic laboratory and radiology, pharmacy, preventive dental services, medically necessary transportation and optional behavioral health services of assessment, counseling and referral. Funding was originally divided in two parts: Part A funding went to community-based primary care providers to develop new programs or enhance or expand current programs; Part B funding was available for qualifying community health centers with service sites in medically underserved areas that offer sliding scale fee payments.

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Tobacco tax funds are dwindling as a result of poor economic conditions and increases in the costs of AHCCCS and KidsCare. As described above, Tobacco Tax funds have been diverted to cover costs associated with Proposition 204 and increased AHCCCS enrollment. In 2001, Part A funds were cut by \$500,000; Part B funds have decreased from \$9 million to \$5.5 million over the past several years. Programs already eliminated from Tobacco Tax funding include a prescription medication program and funding for primary care capital construction. Programs are challenged as they continue to serve the uninsured while tobacco tax funds shrink and patients' needs remain high. Arizona has stepped in to provide some funding for primary care programs with state-only funds.

DISPROPORTIONATE SHARE HOSPITAL (DSH) FUNDS

Initial negotiations for the federal waiver necessary for the implementation of Proposition 204 eliminated public hospitals' eligibility for Disproportionate Share Hospital (DSH) funds.⁴⁶ This occurred because of the waiver's requirement to maintain budget neutrality. However, in the final analysis, public hospitals remained part of the DSH funding pool, and Maricopa County continued receiving DSH funds on behalf of Maricopa Medical Center (MMC). In both 2000 and 2001 private hospitals received \$15 million in DSH payments, MMC received \$13 million, and the Arizona State Hospital received \$12 million. However in 2002, as a result of Proposition 204, Maricopa County transitioned its AHCCCS eligibility functions to the state. In exchange for that transfer of responsibility, Maricopa County gave back the state the \$13 million previously provided to MIHS. Therefore in 2002, MIHS received no DSH funding.47 Simultaneously the net gain to the state's General Fund has increased over the past several years. In 2000 the state's General Fund gained \$19 million through the DSH program; in 2002, the benefit to the state General Fund increased to \$50 million, and in 2003 it reached \$75 million-the largest amount since 1995, when the state began receiving DSH funds.48

HOSPITAL TAX DISTRICT

Due to changes that occurred as a result of the passage of Proposition 204 (i.e., the loss of county's residual responsibility to fund MIHS' uncompensated care, changes in DSH), Maricopa Medical Center was left with no source of revenue for its uninsured patients. To remedy this, Maricopa County voters recently passed Proposition 414, a referendum to create a special health district and authorize a property tax increase to fund the county-run health system. This tax would provide a consistent source of revenue for the system, generating up to \$40 million a year to help shore-up finances, renovate facilities, and bring salaries to competitive levels. The current County Board of Supervisors approved the creation of a special health care district to operate MIHS, but did not take action to impose the tax. Therefore the tax will likely not be levied until 2005 after a new five-member governing board for the hospital district is elected in November 2004.

FEDERAL FUNDING

Both of the community health centers, Clinica Adelante and Mountain Park, depend heavily upon funding from the federal Bureau of Primary Health Care to offset costs for care delivered to uninsured patients. The health centers received nearly \$2.2 and \$2.7 million in grant funds, respectively, in 2002.⁴⁹ In addition, in 2003, both FQHCs received expansion grants from the Bureau of Primary Health Care; Mountain Park received nearly \$860,000 to open a new site, and Clinica Adelante received a similar amount.

FOUNDATION SUPPORT

Several charitable foundations and organizations provide significant levels of support for health care programs and services. These include: the Nina Mason Pulliam Charitable Trust, the Virginia G. Piper Charitable Trust, St. Luke's Health Initiatives (SLHI), the BHHS Legacy Foundation (Baptist Hospital and Health System), and the Arizona Community Foundation.

The safety net assessment team conducted interviews with key

stakeholders in the Metropolitan Phoenix health care community and visited safety net facilities between June 16 and 18, 2003. Our analysis of the Phoenix safety net was greatly informed by the interviews with safety net providers and local stakeholders. Informants discussed important changes in local health policy and programs, emergency department use and crowding, issues relating to access to care, significant barriers that patients face in seeking health care services.⁵⁰

FRAGMENTATION OF SERVICES

The Phoenix safety net area is a loose configuration of independent providers, with no clear coordination among them. There are primary care centers available to provide preventive and routine care, and hospitals that treat severe conditions. However, there is no one system that can provide the underserved with a comprehensive set of services to meet their health care needs. Uninsured patients in need of hospitalization are admitted to MIHS and other hospitals, but it is unclear how much patient information flows back to primary care providers after care has been delivered. Moreover, while informal relationships do exist between some providers, we found little evidence to suggest that these are widespread. Many informants described the safety net in the Phoenix Metropolitan area as "fractured."



CAPACITY CONCERNS

Opinions regarding the capacity of the safety net in Metropolitan Phoenix were mixed. Some local informants believed that expansions in primary care capacity were needed to meet the needs of the uninsured and underserved, while others felt that adequate primary care capacity does exist—though they recognized that it may be unevenly distributed across the county. Informants pointed out that some individuals in the community may not be well served by the current configuration or distribution of clinics. For example, FQHCs and county clinics are clustered within blocks of each other, while vast areas of the greater Phoenix

The Phoenix safety net area is a loose configuration of independent providers, with no clear coordination among them. area have few if any primary care options for lowincome residents. The Eastern Valley of Phoenix is vastly underserved by safety net providers, except for the free-standing psychiatric hospital.⁵¹

PHYSICIAN SHORTAGES

Physician shortages mean that even those with insurance can have difficulty locating a provider. Long wait times for appointments often result. For the uninsured or underinsured, shortages can mean even fewer doctors who may be willing to serve them. The shortages are most pronounced among the specialty services, where reported waiting times range from three to six months, and in some cases can reach 12 months. Even AHCCCS beneficiaries, who have access to a wide array of public and private providers, are often subjected to long waiting times for appointments.

Arizona's physician shortage is of particular concern since the situation is likely to get worse in the future. The number of physicians per capita in Arizona has declined by 6.2 percent between 1989 and 1999.52 Arizona has only one state medical school and a college of Osteopathic Medicine. As a result, Arizona trains fewer of its own providers than do most other states. Only 24 percent of providers practicing in the state were trained there, compared to an average of 44 percent in the rest of the country. Many Arizona medical school graduates leave to set up practice in other parts of the country. Hence, physicians must be recruited from other states to stay current with population increases and greater demand for health care. Also, Arizona has a higher percentage of older physicians than the national average; the state was ranked fifth in the percent of active physicians over age 55, and second with regard to those aged 65 and older. And, the state's physicians are now retiring earlier, at age 59 compared to age 63 ten years ago.

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FINANCING CONCERNS

Uncompensated care continues to place great burdens on area hospitals. In 2001, Maricopa Integrated Health System (MIHS) had the highest percentage of uncompensated care (18.8) per gross charges than any other hospital in the Metropolitan Phoenix area. In fact, the percent of uncompensated care delivered by MIHS exceeds the combined total of four other area hospitals that provide significant amounts of uncompensated care (17.4 percent combined). When looking at the actual dollars spent on uncompensated care in the Phoenix Valley, it is clear that other hospitals share this burden as well: Banner Health System provided \$112 million in uncompensated care, MIHS provided \$89 million, Vanguard provided \$42 million, Catholic Health Care West provided \$41 million and John C. Lincoln Health Network provided \$34 million in uncompensated care in 2001. 53

The long-term impact of Proposition 204 remains unknown. During our interviews with individuals in the Phoenix metropolitan area, we heard mixed opinions about its value to uninsured and underserved residents. Virtually everyone we spoke with agreed that by expanding AHCCCS eligibility for more lowincome Arizonians-and thereby paying for many previously uninsured patients-the initiative increased the revenues of many safety net providers. Nevertheless, many informants also noted providers that serve individuals still ineligible for AHCCCS (due either to immigration status, or remaining income or categorical eligibility requirements) have been weakened by the loss of previously available subsidies. In sum, the impact of Proposition 204 has not fully played out. Clearly, the impact depends at least in part on the size and characteristics of the group of individuals who remain uninsured despite the increase in AHCCCS eligibility.

EMERGENCY DEPARTMENT CROWDING

Uninsured patients continue to seek out hospital emergency departments because they are easy to access and wait times for care are relatively short, especially when compared to long waits for appointments with specialty providers. Hospitals and emergency departments have effectively advertised themselves as "one-stop-shopping" centers that can provide a full range of services including diagnostic, treatment, and pharmaceuticals. Despite increased opportunities for same-day appointments and longer and more convenient clinic hours at other area clinics, some patients continue to seek care at hospital emergency departments for non-emergent conditions.

While some efforts to ease crowding in emergency departments have been undertaken, it remains to be seen whether they will succeed. Maricopa Medical Center has recently opened an urgent care wing adjacent to the emergency department. Representatives there are hopeful that by triaging patients with nonemergent conditions to the urgent care wing, demand for the ED will be reduced. However, in an effort to reduce the up-front fees recently imposed at off-site Maricopa Integrated Health System clinics, a new co-payment structure will soon be put in place at the urgent care center. It is not yet clear whether this will significantly reduce the use of this center.

INSUFFICIENCIES IN BEHAVIORAL HEALTH SERVICES

Officials estimate that approximately 25 percent of the population requires some mental health care, but resources are available to serve only about 9 percent.⁵⁴ This is due primarily to a lack of capacity in the mental health system. A few clinics provide behavioral health services, but those are limited. All of Mountain Park's clinical sites provide mental health services, while Clinica Adelante does not. The resident clinic at St. Joseph's Regional Medical Center has a therapist who sees patients once a week.

In addition, budget constraints restrict state services to those under 100 percent of the federal poverty level. While outpatient services are theoretically available to all people seeking behavioral health services, in practical terms services are only available to those on AHCCCS, to seriously emotionally disturbed children, to seriously mentally ill adults, or to those who have been ordered by a court to receive care. In some cases where services are available, co-payments required of individuals above various income thresholds can deter people from seeking care. For all these reasons, people with general mental health needs often forgo care.

GAPS IN DENTAL SERVICES

Dental services are also very limited for the uninsured. Those covered by AHCCCS have a somewhat easier time obtaining dental care, but there are still challenges. St. Vincent de Paul's dental services are free but are allocated according to a lottery and waiting lists can be very long. The \$125 upfront per visit fee charged by MIHS' dental clinic is often prohibitive. Mountain Park's main site provides dental services, yet Clinica Adelante does not—though it does reimburse schoolbased health centers for dental services provided to its younger patients. Arizona also faces a shortage of dentists. Currently, more dentists retire each year than set up new practices. In an attempt to solve this problem, a new dental school has recently opened in Arizona. It focuses on training dentists to practice in rural areas with underserved populations. The school has admitted 54 students for the 2003-2004 academic year. Students will receive community clinical training in the state's community health centers. How soon and to what degree this school will alleviate the shortage remains to be seen.

BARRIERS TO CARE

Wait Times and Operating Hours: Wait times for appointments can be long for low-income and uninsured patients in the Phoenix metropolitan area. For many conditions, patients can wait months for access to specialty care. As noted earlier, when faced with waiting times of this length—or even of a few days some patients will instead opt to receive care from the emergency department.

One community health center, Clinica Adelante, has implemented open access appointments in its clinics, setting aside blocks of time each day for patients to call in by 8:00 am for same-day appointments. Interestingly, as was noted earlier, some clinics find that even when they schedule patients with same-day appointments, some do not keep the clinic appointment and instead choose to go to the emergency department. This is the case at Clinica Adelante, where 40 percent of appointments are no-shows.⁵⁵

Certain providers have started to triage patients according to their severity or to expand their hours. Las Fuentes attempts to get patients with fever, pain, or bleeding seen the same day; patients with coughs are seen the next day. At Mountain Park patients with urgent/emergency problems are seen either the same or next day. Both Clinica Adelante and Mountain Park now offer some evening and/or weekend hours. These and other clinics reported mixed results from these extended hours of operation. Both Mountain Park and Clinica Adelante reported huge increase in patient visits, while Maricopa Integrated Health System and Las Fuentes did not.

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Fees: Access to primary care at MIHS clinics has been reduced by the imposition of up-front fees to offset serious budget shortfalls. Many informants suggested that these fees are prohibitive to many low-income, uninsured residents and that MIHS has essentially placed its clinics outside the health care safety net. It remains to be seen whether the passage and eventual implementation of Proposition 414 will result in a reduction of these fees.

Transportation: Lack of transportation is a major barrier to care in the greater Phoenix area. The bus system is limited and does not cover the entire area. Many buses do not stop at convenient locations. Patients are often required to take several buses and spend hours getting to a doctor. Patients on AHCCCS can obtain non-emergency medical transportation; however, they often need to book such transportation in advance. The sheer size of Maricopa County presents a barrier to patients who do not have reliable transportation. The County is very large and it can be difficult for people living in outlying areas to traverse. Language and Cultural Competency: By and large, language competency does not appear to represent a significant barrier to obtaining health care from safety net providers in the Phoenix Valley. In Maricopa County, Spanish is the second most frequently spoken language by patients after English. To address this, the safety net providers we studied hire bilingual administrative staff and clinicians when available. Generally, safety net providers in metropolitan Phoenix appear to deliver culturally competent care as well.⁵⁶ However, we found one possible exception with regard to Native American patients in need of behavioral health services. According to informants, it can be challenging to provide services to some Native American patients in a manner that appropriately honors their culture.⁵⁷



The safety net assessment team conducted focus groups

with residents who receive their care from safety net providers in the Phoenix area. Three focus groups were held on June 16, 17 and 18, 2003, at Maricopa Integrated Health System, St. Joseph's Hospital and Medical Center, and St. Vincent de Paul Medical Clinic. Focus group participation was voluntary. Participants were recruited with the help of the local community partner, St. Luke's Health Initiatives, which involved displaying flyers announcing the sessions and their schedules. Participants received \$25 each in appreciation of their time and candor. A total of 27 individuals participated in the focus groups. Two groups were conducted in Spanish and one was in English.

The focus group discussions highlight difficulties that many uninsured and underserved residents have in accessing timely and affordable health services in the Phoenix Valley. Participants discussed issues such as primary care and prevention, access to specialty and inpatient services, their use of the ED for emergent as well as non-emergent care, their understanding of the health care system and the opportunities that are available to them, and their feelings about the provider community.

SAFETY NET PROVIDERS AND SERVICES IN METROPOLITAN PHOENIX

Many focus group participants were very appreciative of the care they received from safety net providers. Some understood that they could receive only limited care, or for limited periods of time, but valued the services tremendously. As one participant said, "Since coming here, I know what things to eat...how to take my medicines... The people here have helped me a lot." Several participants worried about where they would get care if they could no longer come to the clinic; as one woman stated, "I understand that we can't stay at this clinic, but if they were to tell us we can't come any longer, I wouldn't know where to go." Some of the participants were aware of local FQHCs, including Mountain Park and Clinica Adelante. Several of these individuals complained about the clinic locations and talked about difficulties getting to and from clinic appointments. Other participants were completely unfamiliar with these sites. There was the perception among some participants that these clinics did not take new patients and were therefore inaccessible to them.

A few participants described their experiences trying to enroll in Mercy Care⁵⁸ but finding that they did not qualify. Many found the application process to be quite difficult. Other participants had succeeded in enrolling at the clinic at St. Joseph's and were receiving their care from the Mercy Care clinic. These patients were very pleased with their services and had found it relatively easy to apply for care at the clinic. One woman stated, "*I get my blood work, x-rays, pap smear, and mammogram for \$30 a month. They've been wonderful.*" Several individuals reported very positive experiences obtaining hospital care from St. Joseph's, regardless of whether or not they were insured. One woman reported that a social worker from St. Joseph had helped her son enroll in AHCCCS.

Many participants stated that they commonly used services from Maricopa Integrated Health System (MIHS) since they had no other alternatives for care. Several participants complained of long waits in the ED. They also found the MIHS policy of charging up-front for primary care clinic visits to be a barrier to obtaining care.



"The ER is overused. If you don't have a doctor the ER is your only choice. You wait till you're sick to go."

Many of the participants reported going to the emergency department at one or more Phoenix area hospitals. In the words of a Spanish-speaking participant,

"The ER is overused. If you don't have a doctor the ER is your only choice. You wait till you're sick to go." She also stated: "There is a large Hispanic population, many are undocumented. They get paid cash, they are not offered insurance. They can't get AHCCCS because they are illegal, they are afraid to apply for their U.S. born kids. When they get desperate, they lack preventive care, they don't know about places to go, and now the community health centers don't have capacity." Another woman said simply: "All the [the primary care clinics] I called turned me down, so I go to the ER."

Participants reported that they choose the emergency department at times because it is relatively easy to access and care is given within a relatively short time. Some said that they would rather go to an emergency department and wait all day than wait weeks for an appointment.

Some focus group participants described a cumbersome process of trying to access routine mental health services. They reported that only those in crisis can get care, and that the system lacks adequate capacity, especially for the uninsured. Some reported that it can be difficult to get needed medication even if one is covered by AHCCCS. For example, one woman described difficulties getting a mental health drug for her son, who is covered by AHCCCS. When his doctor prescribed a drug that is not on the AHCCCS formulary, she had to bring him to the Regional Behavioral Health Authority to be seen by a therapist who could request the particular medication. After taking her son to the therapist, she still could not get the drug without a psychiatric evaluation, which took approximately four months to schedule. Eventually, she was told that if her son's primary diagnosis was depression, and not something considered more severe, the drug would not be covered. "By the time you get through the whole thing you're very depressed," she stated.

Focus group participants from the St. Joseph's group reported difficulties in getting needed dental care. According to one participant, "Dental care is nonexistent." One reported seeking preventive care at the dental hygiene school. Another stated, "St. Vincent de Paul's is the best place to go; you have to apply in their raffle, but if you win you get all your services."

Many of the focus group participants talked about how much they rely on AHCCCS for their care. One woman described the embarrassment she felt at applying for Medicaid, but noted that she was determined to get coverage because her son had asthma and she knew he desperately needed the care. Another woman talked about her son's serious illness and the thousands of dollars in bills generated at the hospital. If her son had not qualified for AHCCCS her family would have struggled just to pay what they could toward the bills. Yet another woman was distraught that her 21-year old son would soon be losing his AHCCCS eligibility. As she stated, "He has problems with his stomach and he's been coughing up blood. We took him to the emergency department and he got an appointment with a specialist, but the appointment is not until after he loses his AHCCCS eligibility."

BARRIERS TO CARE

When asked about use of various services from primary to emergent care, participants reported that they generally do not know the difference between an emergency, an urgent problem, or a condition that needs to be addressed soon but not immediately. This lack of understanding contributes to their preference for immediate treatment and sparks their visit to the emergency department. Several participants were particularly concerned about making the wrong decision when is comes to the health of children. One woman, for example, took her child to the doctor for what she thought was a cold, but the child had pneumonia.

Patients reported that they did not know much about the various sources of primary care available. This seemed to be particularly true among participants in the Spanish-speaking groups. Some providers do not advertise and information about their services is spread only by word-of-mouth. Several of the participants reported that the various clinics and community health centers of which they were aware already had too many patients and could not accommodate new ones.

Wait periods for scheduled appointments can take weeks or months. One man complained that he was told by a clinic to wait six months for an appointment with a pediatrician for his sick child. Patients at MIHS reported that appointments have to be made in advance, and that it can be very difficult to get care on a walk-in basis at most places. Another woman had less trouble accessing care, saying, "*If you call the clinic and tell them that your baby has a fever, they will try to get you an appointment or just have you come in.*"

Spanish-speaking participants reported that they want to have same-day access to primary care providers. They noted that they often cannot see their providers when they are sick and are given appointments several days (or even weeks) later.

Several participants talked about the costs of health care and reported that the county clinics' requirement of up-front payment is a barrier to obtaining care. Participants said that they would pay \$25 for a doctor's visit, but most clinics, including those run by the county, charge between \$40 and \$60 for an office visit. Cost is often a deterrent for going to the emergency department. For many, going to the ED is not an option because it is too expensive. One participant said, "*If I owed money [for a hospital bill], that would stop me from going to the hospital.*" Several participants reported that they also do not get preventive routine check-ups because of the cost. "We won't go. We're scared because it's too expensive." One man reported that he went to the emergency department instead of the clinic because the clinic charged \$150 for the visit and he would have to pay it up-front. "I am willing to pay for the services I receive. I don't want anything for free. But it should be affordable and easy to pay."

Transportation

The focus group participants were mixed in their assessments of the convenience of public transportation. Some of the participants had their own automobiles and did not have difficulties getting to and from doctors' appointments and other health services. However, transportation to MIHS was a problem for many participants, and many reported that they would either get a ride from someone or call an ambulance to get to the hospital. "*If you call the ambulance, it'll be very expensive.*" Several said they take a cab, which can also be very costly. Some reported that the clinics are not close to where they live.

Language

Spanish-speaking participants reported that there is generally at least one staff member available to speak with them when they seek health care services. All the Spanish-speaking participants reported that when they go for health care services, there are people who will attend to them in Spanish. The emergency department also has Spanish-speaking staff available. Few doctors, however, speak Spanish.

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Immigration Status

Spanish-speaking focus group participants discussed the impact that their immigration status had on their ability to obtain health care. According to one participant, "Health insurance is too expensive. If you don't have a social security number you can't qualify for AHCCCS." Another patient stated: "Everywhere you go you're asked if you have insurance or a social security number." Another participant described the difficulties she faces because she and many of the people she knows do not know what their rights are. This is especially true for immigrants who are undocumented. Many are afraid to even ask questions because of their immigration status. As one focus group participant said, "This is the first time that I've sat down to talk with someone to inform me of anything." Most get information from friends or neighbors who know of a place to go for free care. Also, the schools provide some health fairs at which information is available. Many participants believe strongly that care for immigrants should

be improved, regardless of whether they are documented or not, insured or uninsured. According to one participant, "I only ask that the hospitals treat people better...I wish that they wouldn't take so long to see people especially when they are in pain. Treat us, even if we don't have papers... we will pay."

According to the focus group participants, many of the immigrants from Mexico rely on home remedies and herbal treatments for all or part of their routine health care. It is not uncommon for immigrants to telephone a doctor in Mexico to ask about a health condition and then have someone bring medicine to the U.S. to treat that condition. Generally, these medicines are available within two or three days. Some of the participants receive their diabetes medications from Mexico. Others get insulin or other medications from Phoenix clinics. According to one participant, "*We can get medicines from Mexico but we need check ups.*"

As one focus group participant said, "This is the first time that I've sat down to talk with someone to inform me of anything."

OVERVIEW

The emergency department plays a critical role in the safety net of every community. It frequently serves as the safety net's "safety net," serving residents who have nowhere else to

go for timely care. Residents often choose the ED as their primary source of care, knowing they will receive comprehensive, quality care in a single visit. When and why residents use the emergency department depends largely on patients' perceptions of the quality of care in hospital EDs, primary care providers' willingness to see lowincome, uninsured populations and the accessibility of timely care outside of the ED. Whether it serves as a first choice or last chance source of care, the ED provides a valuable and irreplaceable service for all community residents, including low-income underserved populations.

Problems arise, however, when using the ED leads to crowding and ambulance diversion. When the ED is too crowded, quality of care and patient safety can be compromised. Many factors cause crowding, including limited inpatient capacity, staff shortages, physicians' unwillingness to take call, and increased demand for services from uninsured as well as insured patients. It is important to focus on all these issue when trying to address the problem.

In this section of the report, we provide an analysis of ED use at St. Joseph's Hospital and Medical Center. Using a profiling algorithm,⁵⁹ we were able to classify visits as either emergent or non-emergent. We were able to further identify what portion of those visits were primary care treatable, preventable/avoidable or non-preventable/non-avoidable. Communities should use this information to further understand the dynamics of health care delivery. These data, however, do not tell the whole story and should not be viewed as a comprehensive analysis of emergency department use in the community.

When and why residents use the emergency department depends largely on patients' perceptions of the quality of care in hospital EDs, primary care providers' willingness to see low-income, uninsured populations and the accessibility of timely care outside of the ED.

THE ED USE PROFILING ALGORITHM

In 1999, John Billings and his colleagues at New York University developed an *emergency department use profiling algorithm* that creates an opportunity to analyze ED visits according to several important categories.⁶⁰ The algorithm was developed after reviewing thousands of ED records and uses a patient's primary diagnosis at the time of discharge from the ED to apportion visits to five distinct categories. These categories are:

- 1) Non-emergent, primary care treatable
- 2) Emergent, primary care treatable
- 3) Emergent, preventable/avoidable
- 4) Emergent, non-preventable/non-avoidable
- 5) Other visits not classified according to emergent or non-emergent status

According to the algorithm, ED visits are classified as either emergent or non-emergent. Emergent visits are ones that require contact with the medical system within 12 hours.

Emergent visits are further classified as either needing ED care or treatable in a primary care setting. Visits classified as "primary care treatable" are ones that could have been safely provided in a setting other than an ED. These types of visits are ones that generally do not require sophisticated or high-tech procedures or resources (such as CAT scans or certain laboratory tests).

Visits that are classified as needing ED care are classified as either non-preventable/non-avoidable or preventable/avoidable. The ability to identify visits that



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would fall in the latter category may offer opportunities to reduce costs and improve health outcomes: patients who present with emergent but preventable/ avoidable conditions should be treated earlier and in settings other than the ED.

A significant percentage of visits remain unclassified by the algorithm in terms of emergent status. Visits with a primary ED discharge diagnosis of injury, mental health and substance abuse, certain pregnancy-related visits and other smaller incidence categories are not assigned to algorithm classifications of interest.

The data from the ED utilization category must be interpreted cautiously and are best viewed as an indication of utilization rather than a definitive assessment. This is because the algorithm categorizes only a portion of visits and does not include any visits that result in an inpatient admission. For many hospitals, visits that result in an inpatient admission are not available in ED electronic databases. Presumably, since these visits warrant inpatient treatment, none would fall into the non-emergent category. Excluding these visits may inflate the primary care treatable (both emergent and non-emergent) categories. However, ED visits that result in an inpatient admission generally do not comprise more then 10-20 percent of total ED visits and would likely have a relatively small effect on the overall findings. A larger effect could occur if more visits were categorized by the algorithm. Since a sizeable percentage of ED visits remain unclassified, percentages or visits that are classified as falling into one of the four emergent or non-emergent categories should be interpreted as a conservative estimate and may understate the true values in the population.

ED USE AT ST. JOSEPH'S HOSPITAL AND MEDICAL CENTER

As part of the *Urgent Matters* safety net assessment process, we collected information on ED visits at St. Joseph's for the period July 1 through December 31, 2002. Over this six month period, there were 19,924 ED visits that did not result in an inpatient admission.⁶¹ Table 4 provides information on these visits by race, coverage, age and gender.

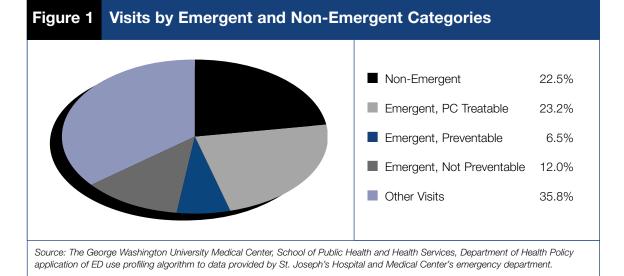
Table 4 Demographic Characteristics of ED Visits

Race Black White Hispanic	9.3% 41.6% 44.8%	Coverage Commercial Medicaid Medicare	25.5% 42.8% 9.5%	Age 0-17 18-64 65+	30.6% 63.2% 6.2%	Gender Female Male	53.9% 46.1%
Hispanic Other/unknown	44.8% 4.3%	Medicare Uninsured Other	9.5% 17.9% 4.3%	65+	6.2%		

Source: The George Washington University Medical Center, School of Public Health and Health Services, Department of Health Policy analysis of ED data provided by St. Joseph's Hospital and Medical Center's emergency department.

KEY DEMOGRAPHIC CHARACTERISTICS OF ED VISITS

- Nearly half of all ED visits at St. Joseph's were for Hispanic patients. Another four out of ten were for patients who were white.
- Only one-quarter of visits were for commercially insured patients. Many more were Medicaid patients, and nearly one-fifth were uninsured.
- Nearly a third of all ED visits were for children.



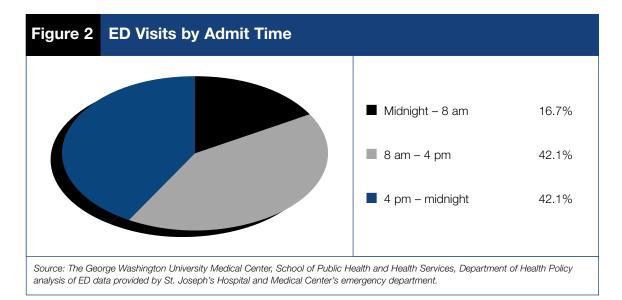
A significant percentage of visits to St. Joseph's ED could have been treated in settings other than the ED. As Figure 1 demonstrates, 22.5 percent of ED visits at St. Joseph's were non-emergent and another 23.2 percent were emergent but primary care treatable. Thus, nearly one-half of all ED visits that did not result in an inpatient admission could have been safely treated outside of the ED.

Table 5 compares the rate of visits that were emergent, that required ED care, and that were not preventable or avoidable against rates for other categories of visits. For every visit that was in the emergent, not preventable category, there were nearly two non-emergent visits and another two emergent but primary care treatable visits. These findings differed across various categories. Rates of use of the ED for non-emergent conditions were highest for patients who were covered by Medicaid (2.34) and lowest for patients on Medicare (1.31).⁶² The high rates common to the Medicaid population are at least in part a result of the large percentage of children who seek care at St. Joseph's. Contrary to the results of similar analyses conducted at many other hospitals, these results indicate that commercially insured patients were not using the St. Joseph's ED at rates than were similar to uninsured or publicly insured patients.⁶³

	able 5 Relative Rates for ED Visits at St. Joseph's Hospital and Medical Center								
		Non-Emergent	Emergent, Primary Care Treatable	Emergent, ED Care Needed Preventable/ Avoidable	Emergent, ED Care Needed Not Preventable/ Not Avoidable				
Tot	tal	1.88	1.93	0.54	1.00				
Ins	surance status								
Co	mmercial	1.53	1.53	0.39	1.00				
Me	edicaid	2.34	2.53	0.70	1.00				
Me	edicare	1.31	1.26	0.50	1.00				
Un	insured	1.86	1.87	0.45	1.00				
Ag	е								
0-1	17	2.45	3.33	1.03	1.00				
18-	-64	1.80	1.60	0.40	1.00				
65-	+	1.13	1.15	0.61	1.00				
Ra	ce								
Bla	ack	1.69	1.88	0.60	1.00				
His	spanic	1.93	2.23	0.55	1.00				
Wh	nite	1.89	1.66	0.53	1.00				
Se	x								
Fer	male	2.07	2.01	0.49	1.00				
Ma	ale	1.70	1.88	0.61	1.00				

Source: The George Washington University Medical Center, School of Public Health and Health Services, Department of Health Policy application of ED use profiling algorithm to data provided by St. Joseph's Hospital and Medical Center's emergency department.

There were smaller differences across rates when comparing the race or ethnicity of patients using the ED for non-emergent conditions. Hispanic patients had marginally higher rates of ED use for emergent, primary care treatable conditions than did black patients. Age appears to be a strong factor in ED use. Children appear much more likely to have used the ED for nonemergent and emergent primary care conditions than adults and seniors.⁶⁴ Most ED visits at St. Joseph's occurred during the hours of 8:00 am and midnight. As Figure 2 illustrates, only about 17 percent of visits that did not result in an inpatient admission occurred between midnight and 8:00 am.



Interestingly, many visits to the ED for primary care treatable conditions occurred during business hours that commonly coincide with physician and clinic hours. Table 6 illustrates the rates of use of the ED for emergent and non-emergent conditions according to three time periods—8:00 am to 4:00 pm; 4:00 pm to midnight; and midnight to 8:00 am. Patients used the ED for primary care treatable conditions at relatively similar rates during "regular business hours" and the hours of 4:00 pm to midnight.

Table 6	Relative Rates for ED Visits at St. Joseph's, by Admit Time to the ED						
		Non-Emergent	Emergent, Primary Care Treatable	Emergent, ED Care Needed Preventable/ Avoidable	Emergent, ED Care Needed Not Preventable/ Not Avoidable		
	Total	1.88	1.93	0.54	1.00		
	Admit time 8 am – 4 pm 4 pm – midnight Midnight – 8 am	2.03 1.89 1.60	1.91 2.05 1.78	0.54 0.54 0.54	1.00 1.00 1.00		
Source: The Ge	Midnight – 8 am	1.60 ty Medical Center, School	ol of Public Health and I	Health Services, Depart	_		

Source: The George Washington University Medical Center, School of Public Health and Health Services, Department of Health Policy application of ED use profiling algorithm to data provided by St. Joseph's Hospital and Medical Center's emergency department.

These data support the assertion that patients are using the ED at St. Joseph's for conditions that could be treated by primary care providers, at times during the day when primary care providers are likely to be available. This suggests that there are opportunities to improve care for patients in Phoenix while also addressing crowding in the ED at St. Joseph's. While this analysis does not address ED utilization at other Phoenix hospitals, these findings are similar to other analyses of large urban ED populations and are likely to be similar to patterns at other hospitals in the area.

KEY FINDINGS

After examining important components of the Phoenix safety net, the

assessment team identified the following key findings:

- The Phoenix safety net is a loose configuration of independent providers, with no clear coordination among them. No one system or provider offers low-income and uninsured patients a comprehensive set of services to meet their health care needs.
- Funding from the recently passed Proposition 414 will provide a consistent source of revenue for the county-run Maricopa Integrated Health System (MIHS). This tax is expected to generate up to \$40 million a year, and will be used to help shore-up finances, renovate facilities, and bring salaries to competitive levels. It is unclear whether the current Board of Supervisors will levy the tax now or wait until a new governing board is elected in November 2004.
- Upfront clinic fees, recently imposed by MIHS, pose a significant barrier to low-income, uninsured patients who rely on the county-run system for care. These fees have resulted in a sharp decrease in clinic visits and, effectively, placed its clinics outside the health care safety net. It remains to be seen whether the passage of Proposition 414 will result in a reduction of upfront costs associated with clinic visits.
- A fair amount of primary care is available to lowincome and uninsured residents in the Phoenix area, but it is poorly distributed and difficult to access. Clinics that serve the uninsured are clustered in close proximity to each other, leaving vast areas with virtually no safety net services nearby. The situation is exacerbated by the sheer size of Maricopa Count. In addition, the county has a particularly underdeveloped public transportation system that leaves many residents completely dependent on private transportation.

- A significant percentage of emergency department visits at St. Joseph's Hospital and Medical Center are for patients whose conditions are non-emergent. More than one-fifth (22.5 percent) of all emergency department encounters that did not result in an inpatient admission were for patients who presented with non-emergent conditions. Nearly one-quarter more (23.2 percent) were for patients whose conditions were emergent but could have been treated in a primary care setting.
- Physicians and dentists are in short supply in the Phoenix metropolitan area. The shortage translates into serious access problems for uninsured and underserved patients, since few of those physicians who practice in Phoenix will see uninsured patients. Access to specialty providers is particularly difficult for the uninsured. Individuals covered by the Arizona Health Care Cost Containment System (AHCCCS), the state's Medicaid program, have a better chance of seeing a general practitioner, specialist or dentist than someone without insurance. Patients wait three to six months or longer for many health care services.
- Mental health services are not readily available to the uninsured, and may be difficult to access even for individuals covered by Medicaid. Access to behavioral health services for uninsured children or adults with serious mental health problems is better, particularly if the services are court-ordered.
- Low-income and uninsured residents in the Phoenix area lack information about sources of free or lowcost care. Much of the information about clinic services and other safety net supports is spread by word of mouth. Thus, many individuals who are in need of care are unaware of alternatives to hospital emergency departments. This appears to be particularly true of Spanish-speaking residents.

ISSUES FOR CONSIDERATION

The Urgent Matters safety net assessment team offers the following

issues for consideration.

- Maricopa County should commission a study to determine what effects the dramatic changes in public financing (e.g., Proposition 204, Tobacco Tax, Proposition 414) have had on the safety net and its ability to serve the uninsured and underserved. The study should include an investigation of any unintended consequences of the legislation on the principal safety net institutions in the county. The study should also examine whether MIHS can continue to provide vital services to county residents at rates that are not overly burdensome.
- Efforts should be made to attract and retain qualified physicians in the Phoenix metropolitan area. In addition, in order to increase the supply of providers available to low-income and uninsured residents in the county, community leaders should encourage and support programs that train non-physician primary care practitioners. Nurse practitioners, physician assistants, certified nurse mid-wives and others could augment the supply of providers and improve access to important services.
- Outreach efforts to educate residents about health care services should be strengthened. Providers and other groups should consider funding community health workers and case managers to bridge the gaps between those who deliver health services and those who consume these services.
- Safety net providers should implement an information system that follows patients across systems and sites of care. Such a system would improve patients' quality of care by streamlining eligibility and registration processes and enabling providers to have more up-to-date information on a patient's clinical profile and history.
- Local officials should examine existing bus routes and evaluate the effectiveness of the transportation system in serving low-income populations. Changes in bus routes should be considered.

SECTION 5

- Institute of Medicine, America's Health Care Safety Net: Intact but Endangered (Washington, DC: National Academy Press, 2000): 21.
- 2 Demographic and economic statistics were calculated using data from the 2002 American Community Survey, a project of the U.S. Census Bureau. The ACS is a sample survey subject to sampling variability. It has a 90 percent confidence interval. The ACS universe includes only household populations and excludes populations living in institutions, college dormitories and other group quarters. The data can be found at www.census.gov/acs/www/Products/Profiles/ Single/2002/ACS/index.htm. U.S. Census Bureau, 2003. American Community Survey Profile 2002: Phoenix, Maricopa County, Profile of General Demographic, Social and Economic Characteristics. Washington, DC: U.S. Census Bureau.
- 3 U.S. Census Bureau, State and County Quick Facts, 2000, http://quickfacts.census.gov
- 4 U.S. Census Bureau, 2002 American Community Survey.
- 5 U.S. Census Bureau, 2002 American Community Survey.
- 6 These include individuals who report more than one race.
- 7 In 2003, the FPL was \$8,980 for an individual and \$18,400 for a family of four. (U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 2003).
- 8 The Arizona Medicaid program, commonly knows as AHCCCS (for Arizona Health Care Cost Containment System) is discussed on page 11 of this report.
- 9 This discrepancy may be attributable to the high number of immigrants who are not eligible for Medicaid due to their immigration status, or because they have legally resided in the U.S. for fewer than five years.
- 10 National Association of Community Health Centers, Resources to Expand Access to Community Health (REACH) Data 2002 (Bethesda, MD: NACHC, 2002). The REACH data are based on Census Bureau data and provide estimates on the number of persons by poverty level, age, gender, race, and primary sources of health insurance for each county in the U.S. in 2000. Estimates are based on the 2000-2002 pooled data from the Census Population Survey and the 2000 Census of the United States which are provided by the Bureau of Census.
- 11 J. Kamman, and H. Mattern, "Uninsured Rate Rises in State, U.S.: One million Arizonans without health care," *The Arizona Republic*, 30 September 2003.
- 12 U.S. Department of Labor, Bureau of Labor Statistics, www.bls.gov. September 2003 is the last month for which data are available for both the state of Arizona and the metropolitan area of Phoenix. Rates are not seasonally adjusted.
- **13** J. Kamman and H. Mattern, 30 September 2003.
- 14 Arizona Health Care Cost Containment System, "Acute Care Program Enrollment as of January 2004," www. ahcccs.state.az.us/Statistics/Enrollment/Acute/2004/ enrollmnt.asp
- 15 As of 2001, MMC had 375 staffed beds.

- 16 I. Singer, L. Davison, L. Fagnani, America's Safety Net Hospitals and Health Systems, 2001: Results of the 2001 Annual NAPH Member Survey (Washington, DC: National Association of Public Hospitals and Health Systems, September 2003).
- 17 M. Regenstein and J. Shearer, NAPH Ambulatory Care Source Book: Findings from the 2001 NAPH Ambulatory Care Survey (Washington, DC: National Association of Public Hospitals and Health Systems, 2001).
- **18** Singer, et al. 2003.
- 19 P. Stemmler, Crisis of Mission: The Future of the Public Hospital in Arizona, Arizona Health Futures Policy Primer (Phoenix, AZ: St. Luke's Health Initiatives, April 2003).
- 20 FQHCs are federally funded health centers that are designated to serve medically underserved populations. FQHCs are eligible for Section 330 grants from the Health Resources and Services Administration (HRSA) to offset the costs of care to uninsured patients. They also are eligible for enhanced Medicaid reimbursements.
- **21** Unpublished data from Clinica Adelante, June 2003.
- **22** Ibid.
- 23 These enabling services are common to community health centers and safety net hospitals and include interpreter services, nutrition counseling, transportation, case management, and the like.
- 24 Data come from the Uniform Data System (UDS), a national database of patient and health center characteristics managed by the Health Resources and Services Administration. Data are from 2002.
- 25 Title V providers receive block grant funding authorized under Title V of the 1935 Social Security Act to provide services to women, children, youth and families. See www.amchp1.org/aboutamchp/titlev.htm
- **26** Society of St. Vincent de Paul, *2001 Annual Report to the Community* (Phoenix, AZ: St. Vincent de Paul, 2001).
- 27 Unpublished data from Las Fuentes, June 2003.
- 28 P. Stemmler and R. Hughes, "Squeezing the Rock: Maricopa County's Health Safety Net," Arizona Health Futures, St. Luke's Health Initiatives (Winter 2002), www.slhi.org/ahf/ahf/ahf/02winter.pdf
- **29** Personal communications with interviewees. Interviews were held between summer 2003 and winter 2004.
- 30 Personal communications with interviewees. Interviews were held between summer 2003 and winter 2004.
- **31** P. Stemmler and R. Hughes, 2002.
- **32** Unpublished data from School-Based Health Care Council, June 2003.
- 33 Value Options, Maricopa County Regional Behavioral Health Authority. See www.valueoptions.com/arizona/en/ whoarewe/index.htm
- **34** Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.
- 35 Overview of AHCCCS, see www.ahcccs.az.state.gov

- 36 Arizona Health Care Cost Containment System, "Acute Care Program Enrollment by County, by Health Plan as of January 2004," www.ahcccs.state.az.us/Statistics/ Enrollment/Acute/2004/enrollmnt.asp
- 37 Arizona Health Care Cost Containment System, "KidsCare Enrollment as of January 1, 2004," www.ahcccs.state.az.us/ Statistics/KidsCare/2004/1/KCStats01-2004.pdf
- 38 C. Fiscus, "Cost soars for state Medicaid system: Legislators try to rein in health program for poor," *The Arizona Republic*, 13 April 2003, azcentral.com/specials/special12/ articles/0413ahcccs13.html
- 39 Health Insurance Flexibility and Accountability (HIFA) demonstration Initiatives, a section 1115 waiver, allows states to increase the number of individuals with health insurance coverage within current-level Medicaid and SCHIP resources. www.cms.gov/hifa/default.asp
- 40 Center for Business Research, L. William Seidman Research Institute, W. P. Caery School of Business, *The Economic Impact of Proposed Budget Cuts to Arizona's Health Care Safety Net* (Tempe: Arizona State University, 2 June 2003), www.azhha.org/public/uploads/EconomicImpactsOf ProposedBudgetCutsByASU.pdf
- 41 Arizona State Legislature, "Highlights of the FY 2004 Budget," www.azleg.state.az.us/jlbc/04app/bh2.pdf
- **42** A. Gonzales, "Budget cuts cost 2,500 their health insurance," *The Business Journal*, 14 July 2003.
- 43 P. Stemmler and R. Hughes, 2002.
- **44** Before Proposition 204, AHCCCS covered residents up to 33 percent of the FPL and the county has the residual responsibility to providing care to those up to 100 percent of the FPL.
- 45 Federal Emergency Medical Treatment and Active Labor Act (EMTALA), was passed as part of the Consolidated Omnibus Budget Reconciliation Act of 1986, to prevent hospitals from rejecting patients, refusing to treat them, or transferring them to "charity hospitals" or "county hospitals" because they are unable to pay or are covered under the Medicare or Medicaid programs. www.emtala.com
- **46** Disproportionate Share Hospital payments provide additional funding to hospitals that provide a disproportionate amount of care to Medicaid and uninsured populations.
- **47** Maricopa Integrated Health System Internal Documentation, 2003.
- 48 L. Cannon, Deconstructing DSH, Arizona Health Futures Report (Phoenix, AZ: St. Luke's Health Initiatives, July 2003), www.slhi.org/ahf/ahf/pp-DSH.pdf
- **49** Uniform Data System, 2002.
- **50** All information derived through interviews with informants was kept confidential. Many of the same questions were asked throughout the interview process. Opinions are included in the report only when they were voiced by several informants.
- **51** Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

- 52 J. Rissi, R. Hughes, "Boom or Bust? The Future of the Health Care Workforce in Arizona," *Arizona Health Futures, St. Luke's Health Initiatives* (Spring 2002).
- 53 P. Stemmler and R. Hughes, "Squeezing the Rock: Maricopa County's Health Safety Net," (Winter 2002).
- **54** Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.
- 55 The clinic also has a 40 percent walk-in rate so it is generally at capacity each day.
- **56** Our findings are based on our limited sample of informant interviews and focus groups and may not reflect the experience of the overall population of safety net users specifically, or Maricopa County residents, broadly.
- **57** Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.
- **58** Mercy Care is a program affiliated with St. Joseph's Hospital and Medical Center.
- 59 The algorithm presented here uses a methodology that has been replicated in numerous communities in the country to categorize emergency department visits data. The algorithm does not address the issue of appropriate use of the ED for non-emergent and/or primary care treatable conditions. This issue has been discussed extensively in the peerreviewed literature. For a summary of these discussions see: L. Richardson and U. Hwang, "Access to Care: A Review of the Emergency Medicine Literature," *Academic Emergency Medicine* (Volume 8, no. 11, 2001) 1030-1036.
- 60 For a discussion of the development of the algorithm and the potential implications of its findings, see: J. Billings, N. Parikh and T. Mijanovich, *Emergency Room Use: The New York Story* (New York, NY: The Commonwealth Fund, November 2000).
- **61** There were an additional 5,695 ED encounters that resulted in an inpatient admission.
- 62 It is important to note that these findings refer to the allocation of visits across emergent and non-emergent categories and do not address whether uninsured patients use the ED, per se, in greater numbers than insured patients. This assessment would not be possible in the absence of better data on ED use across many more hospitals in the Phoenix area to determine whether uninsured patients were using ED care at higher rates than insured patients.
- 63 For a discussion of increases in the use of the ED by commercially insured patients, see: P.J. Cunningham and J.H. May, *Insured Americans Drive Surge in Emergency Department Visits* (Washington, DC: Center for Studying Health Systems Change, October 2003); No. 70.
- 64 Children often use the ED for non-emergent care at higher rates than patients in other age categories. These findings are seen in several of the *Urgent Matters* ED use profiling analyses.