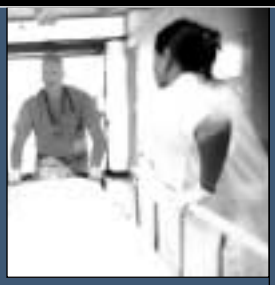
AN ASSESSMENT OF THE

SAFETY NET
in Fairfax County, Virginia



Urgent Matters

The George Washington University Medical Center

School of Public Health and Health Services

Department of Health Policy

Acknowledgments

The *Urgent Matters* safety net assessment team would like to thank our community partner, the Fairfax County Community Access Program, for its help in identifying key safety net issues in Fairfax County and connecting us with stakeholders in the community. At the Fairfax County Community Access Program, Elita Christiansen and Martine Charles were instrumental in coordinating our site visits, interviews and focus groups and an essential resource through the course of the project. The Fairfax County Community Access Program is charged with the development of a culturally competent integrated delivery system in Fairfax County, Fairfax City and Falls Church through community partnerships with over 50 organizations.

We would also like to acknowledge Thom Mayer, MD, FACEP, FAAP, at the Inova Fairfax Hospital, for providing us with important information and resources regarding the emergency department at Inova Fairfax Hospital. The *Urgent Matters* team would also like to recognize the many individuals in the Fairfax health care community, who gave generously of their time and provided important and useful insights into the local safety net system. The Fairfax, Virginia, Safety Net Assessment would not have been possible without their participation.

We are especially grateful to Pam Dickson, MBA, Minna Jung, JD, Chinwe Onyekere, MPH, John Lumpkin, MD, MPH, Calvin Bland, MS, and Risa Lavizzo-Mourey, MD, MBA, of The Robert Wood Johnson Foundation for their support and guidance throughout this project.

Finally, we would also like to thank Dina Moss for her assistance with editing this report and acknowledge Patrick McCabe and Becky Watt Knight from GYMR for their communications expertise.

The Department of Health Policy is the home for health policy research and studies at the George Washington University Medical Center, School of Public Health and Health Services. The Department of Health Policy is dedicated to providing policymakers, public health officials, health care administrators, and advocates with the information and ideas they need to improve access to quality, affordable health care. This report and other *Urgent Matters* safety net assessments are available at the Department of Health Policy website www.gwhealthpolicy.org or the *Urgent Matters* website www.urgentmatters.org.

AN ASSESSMENT OF THE

SAFETY NET

in Fairfax County, Virginia

By Lea Nolan, MA
Lissette Vaquerano
Karen Jones, MS
Marsha Regenstein, PhD

Urgent Matters
Safety Net Assessment Team
The George Washington University Medical Center
School of Public Health and Health Services
Department of Health Policy

MARCH 2004

Table of Contents

Foreword 2

Executive Summary 3

Section 1 The Health Care Safety Net in Fairfax County, Virginia 6
- Introduction 6
- Background 8
- Structure of the Safety Net in Fairfax County 9
- Financing the Safety Net 13

Section 2 The Status of the Safety Net in Fairfax County, Virginia: Challenges and Needs 15

Section 3 In Their Own Words: Results of Focus Group Meetings with Residents of Fairfax County 20

Section 4 Emergent and Non-Emergent Care at The Inova Fairfax Hospital Emergency Department 22

Section 5 Improving Care for Uninsured and Underserved Residents of Fairfax County 27
- Key Findings 27
- Issues for Consideration 28

Section 6 End Notes 29

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 Fairfax County. 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 Fairfax County, we are deeply indebted to the Fairfax County Community Access Program. 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—crowded 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.

Bruce Siegel, MD, MPH
Director, *Urgent Matters*
Research Professor
The George Washington University Medical Center
School of Public Health and Health Services
Department of Health Policy

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 Fairfax County, Virginia, 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 Fairfax County assessment draws upon information collected from interviews with senior leaders in the health care community and from on-site visits of safety net facilities. The research team also met with key stakeholders in Fairfax County 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 Fairfax County, 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 Inova Fairfax Hospital 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 Fairfax County. It provides background on the 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 Fairfax County

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

Safety net providers in Fairfax County have successfully collaborated to improve the continuum of care offered to uninsured and underserved populations. Some organizations still operate independently, however, with no formal linkages to other providers.

Fairfax County funds and operates primary care clinics that provide comprehensive primary care services exclusively to uninsured county residents. Due to limited funding, however, only about 14,000 of the county's 45,000 low-income uninsured residents are served through this program.

Specialty care services are in very short supply for low-income and uninsured residents of Fairfax County. Several programs are attempting to link uninsured individuals with providers who will see them at no cost or reduced rates. These programs ask local providers to take on a limited number of uninsured individuals or families. Program administrators note, however, that it is difficult to identify providers willing to participate. Likewise, provider participation in Medicaid is uneven.

Fairfax County residents who are either uninsured or covered by Medicaid have a particularly hard time obtaining dental services. Few providers offer services on a sliding fee basis and waits for appointments can be as long as a year.

The uninsured find it very difficult to access behavioral health services due to long waiting lists and high out-of-pocket costs, even for heavily subsidized services. Inova's Community Access Program (CAP) grant is working to alleviate some of the pressure on available service providers by funding one mental health counselor to integrate behavioral health services into primary care settings. This position will be continued and partially supported by the county after the CAP grant period has been completed.

Implementation of an automated eligibility system under Inova's CAP grant has had mixed results. The program, which streamlines the health care registration process in clinics across the county and facilitates enrollment in public programs such as Medicaid and SCHIP, has not yet been well integrated into daily clinic operations. In addition, hospital staff who register patients are not always aware of the system and hospital computers sometimes are not programmed appropriately to allow use of the system. Moreover, some important providers have chosen not to participate in the project. As operations improve, the system promises to alleviate many of the inefficiencies in the enrollment process.

Confusion exists among residents about their eligibility for the Affordable Health Care Program, the county's indigent care program. Inova staff are also uncertain of the requirements. Some patients who have previously been deemed eligible are required to reapply for benefits each time they present at the emergency department or are admitted to the hospital.

Interpreter services are insufficient to meet the needs of the community's non-English speaking populations. Although hospitals and county clinics have bilingual staff and a few professional interpreters, patients are often expected to bring their own interpreters, use cumbersome language lines, or use picture cards to communicate with providers.

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

Fairfax County should undertake a study to determine whether the streamlined eligibility system developed under the CAP grant has had an impact on ED use. If the system has, in fact, resulted in better access to primary care and reduced use of the ED for primary care treatable conditions, CAP partners and others should consider spreading the system more widely across the county.

Better training and employee education regarding the importance of the automated eligibility system would be extremely helpful. In addition, staff and providers must commit to full integration of the system in order for it to work effectively.

Efforts to apply for a Section 330 grant to establish a Federally Qualified Health Center should be strongly encouraged and supported by safety net providers in the area. The county's primary care system could be restructured to meet the requirements of an FQHC, which would result in an important new source of revenue for providing health services to uninsured and underserved residents. Alternatively, if restructuring the existing county clinics is not feasible for political or operational reasons, the county could consider pursuing the establishment of a new, federally-funded community health center, which could help expand capacity to serve the underserved.

Safety net providers would benefit from expanded collaboration to maximize opportunities for serving uninsured and underserved residents in Fairfax County. The collaborative spirit was evident in the CAP process, but some important players chose not to participate in the project. Future efforts should encourage more widespread collaboration on important projects affecting safety net populations.

Providers should continue to work to increase the number of interpreters available to local providers. Given the diversity of the population in Fairfax County and the surrounding area, as well as the wealth of educational institutions in the area, programs could be designed to identify students or community representatives to be trained in medical interpretation.

Existing bus routes should be evaluated to determine whether the transportation system is serving the needs of low-income populations. County officials may wish to consider changing certain routes to facilitate access to key health care providers.

All Fairfax County area hospitals should conduct analyses of the use of their emergency departments for emergent and non-emergent care. Such studies would help determine whether area hospitals are experiencing ED use trends that are similar to those seen in safety net hospitals. Hospitals, community providers, and other stakeholders should use the results of these studies to develop strategies for reducing crowding in hospital EDs.

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 face of major changes in the financing and delivery of health care.[1] 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, the reduction or elimination of subsidies funding charity care, and the growth of mandated managed care.

The Robert Wood Johnson Foundation established *Urgent Matters* in 2002 to further study the dynamics of the health care safety net. While the IOM report focused its review principally on ambulatory and primary care settings, *Urgent Matters* takes IOM's research a step further and examines the interdependence between the hospital emergency department (ED)—a critical component of the safety net—and other 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."[2]

The purpose of *Urgent Matters* 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 Fairfax County, Virginia.

The purpose of Urgent Matters *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.*

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 the 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 Fairfax assessment team conducted a site visit on September 9-11, 2003, touring safety net facilities and speaking with numerous contacts identified by the community partner and others. During the site visit, the community partner convened a meeting of key stakeholders who were briefed on *Urgent Matters,* the safety net assessment, and the key issues under review. This meeting was held on September 11, 2003, at the Inova Fairfax Physician Conference Center.

Through the site visits and a series of telephone conferences held prior to and following the visit to Fairfax County, 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. Where appropriate, the confidentiality of the individuals with whom we spoke was maintained. The team also drew upon secondary data sources to provide demographic information on the population in Fairfax County as well as data on health services utilization and coverage.

We also conducted focus groups with residents who use safety net services. The assessment team worked with the community partner to recruit patients who were likely to use safety net services. Finally, the assessment included an application of an ED profiling algorithm to emergency department data from Inova Fairfax Hospital. The algorithm classifies ED encounters as either emergent or non-emergent cases.

Section one of the Fairfax County safety net assessment provides a context for the report, presenting background demographics on Fairfax County and Virginia. It further describes the structure of the safety net, identifying the providers and facilities that play key roles in providing 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 Fairfax 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 Inova Fairfax Hospital. This analysis includes demographic information on patients who use the emergency department and examines the extent to which the emergency department at Inova Fairfax 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 Fairfax County area may want to consider as they work together to improve care for uninsured and underserved residents in their communities.

Background

Fairfax County is a large suburban county in Northern Virginia covering 395 square miles and containing a population of just under one million residents (see Table 1). Fairfax County is a highly diverse area both in terms of the cultural backgrounds of its residents and their socioeconomic status. Fairfax County's demographics have changed markedly over the last decade. The county has experienced an influx of Hispanic, Asian, Middle Eastern, and African immigrants. Foreign-born persons made up 26.3 percent of the residents of Fairfax County in 2000.[3] Many of these immigrants are not proficient in English (44.7 percent), and nearly one-third speak a language other than English at home.[4] They typically have low incomes and jobs that do not provide health care benefits. As a result, many of these immigrants depend heavily on the health care safety net.

Table 1 A Snapshot of Fairfax County and Virginia

Selected Demographics	Fairfax County	Virginia
Population		
Size	990,830	7,063,247
Density: Persons/square mile	2,508.4	178.4
Race		
White	72.4%	74.1%
Black	8.2%	19.7%
Asian	15.4%	4.0%
American Indian/Alaska Native	0.4%	0.3%
Other	3.3%	1.6%
Hispanic origin and race	12.3%	5.1%
Birthplace/Language		
Foreign born	26.3%	8.8%
Language other than English spoken at home	32.9%	11.5%
Age		
18 years and over	74.4%	75.0%
65 years and over	8.2%	10.9%
Median age (in years)	37.3	36.5

Source: American Community Survey Profile, 2002. U.S. Census Bureau.

Fairfax County is a relatively wealthy county, one of the most affluent in the nation. The average sale price of existing single-family homes is $395,000 and the median sale price for new single-family homes is $640,450.[5] The median household income for Fairfax County residents is $85,310, which is nearly twice as high as the median income statewide. Over three-quarters (76.9 percent) of county residents have four-year college degrees or more.

Table 2 Income, Poverty Levels and Insurance Coverage in Fairfax County and Virginia

	Fairfax County	Virginia
Income and poverty^		
Living below poverty	4.5%	9.9%
Median household income	$85,310	$48,986
Insurance coverage*		
Commercial	67.1%	62.0%
Medicare	8.3%	11.8%
Medicaid and FAMIS#	11.8%	12.9%
Uninsured	12.8%	13.3%

^ American Community Survey Profile, 2002. U.S. Census Bureau.
** Resources to Expand Access to Community Health (REACH) Data, 2002, National Association of Community Health Centers.*[6]
 # FAMIS, the Family Access to Medical Insurance Security Plan, is Virginia's State Children's Health Insurance Program.

Amid this economic prosperity and affluence reside a small yet significant portion of the population who live in poverty (4.5 percent, see Table 2) and an even greater portion who are working poor.[7] The high cost of living adds greater strain to struggling, working poor families, many of whom do not have health insurance. Approximately 13 percent of Fairfax County residents lack health insurance and about 12 percent are covered by Medicaid or the State Children's Health Insurance Program,[8] the Family Access to Medical Insurance Security Plan (FAMIS).

Structure of the Safety Net in Fairfax County

The safety net in Fairfax County is composed primarily of three Community Health Care Network (CHCN) clinics and five hospitals run by the Inova Health System. The CHCNs are operated by the County Health Department. The two principal Inova safety net hospitals are Inova Fairfax Hospital and Inova Mount Vernon Hospital. Other important safety net organizations include Northern Virginia Community College, Community Services Boards, and a number of private physicians and dentists who provide free or discounted care to low-income and uninsured patients.

The supply of primary care and specialty physicians is proportionately lower in Fairfax County than in Virginia as a whole (see Table 3). Approximately 61.8 primary care providers, 23.6 medical specialists and 26.2 surgical specialists per 100,000 residents are counted in the Fairfax County area.[9] By comparison, Virginia has 77.5 primary care providers, 26.6 medical specialists and 38.6 surgical specialists per 100,000 residents. The county also has a relatively low supply of hospital beds and has far fewer emergency department visits compared to utilization statewide. Fairfax County has 1.19 beds and 162 emergency department visits per 1,000 residents, compared to twice as many beds (2.35) and ED visits (330) across Virginia.

Table 3 Physician and Hospital Supply, Fairfax County and Virginia

	Fairfax County	Virginia
Physician Supply *(per 100,000)*		
Primary care providers	61.8	77.5
Pediatricians	71.3	71.1
OB/GYN	27.9	31.9
Medical specialist	23.6	26.6
Surgical specialist	26.2	38.6
Hospital Supply/Utilization *(per 1,000)*		
Inpatient beds	1.19	2.35
Admissions	78	104
Emergency department visits	162	330

Source: Data are for 1999. Billings and Weinick. Monitoring the Health Care Safety Net Book II: A Data Book for States and Counties, Agency for Healthcare Research and Quality, 2003.

Fairfax County's health care safety net includes the following organizations:

Primary Health Care: The Fairfax County Health Department's three Community Health Care Network (CHCN) clinics provided nearly 40,000 visits to approximately 12,600 users in the last year. These visits represented an increase of 10 percent over the previous year. As is illustrated in Table 4, the patient population that uses these clinics speaks many different languages. About half of the clinics' clientele speaks Spanish. English-speaking patients make up an additional 22.7 percent of patients. A significant percentage of patients also speak Urdu, Farsi, Vietnamese, Arabic and Korean.

Table 4 CHCN Patient Profile, by Languages Spoken

Language	Percent of Patients at Community Health Care Network Clinics
Spanish	44.6%
English	22.7%
Urdu	4.4%
Farsi	4.3%
Vietnamese	3.9%
Arabic	3.0%
Korean	2.0%

Source: CHCN unpublished data, September 2003.

To be eligible for enrollment at CHCN clinics, individuals must be uninsured, show a proof-of-denial letter for Medicaid, and have incomes at or below 200 percent of the federal poverty level (FPL).[10] Nearly two-thirds (61 percent) of patients have incomes below 100 percent of the poverty level. Co-pays at the CHCN clinics range from $2-$10 per visit, depending on income, and prescription co-pays are $5-$15 per medication. The clinics are open Monday and Tuesday from 11:00 a.m. – 7:30 p.m. and other weekdays from 8:00 a.m. – 4:30 p.m. The CHCN clinics provide a comprehensive array of primary care services and referrals for specialty care through a network of specialists willing to accept discounted Medicare rates for services. Hospital services for CHCN patients are provided through the Inova Health System. The budget for the clinics is approximately $10 million a year, which comes from county general funds raised primarily through property taxes.

The CHCN clinics and Inova Hospital have partnered to provide prenatal care to low-income pregnant women. Pregnant patients who receive their care from CHCN obtain their first and second trimester prenatal care from the county clinics and are then transferred to Inova's obstetrics (OB) clinic for their third trimester care and delivery. To be eligible for the OB clinic, patients must be uninsured and meet Fairfax County poverty guidelines.[11] The clinic also sees women with high-risk pregnancies through all three trimesters, regardless of whether they qualify for prenatal care through the health department clinics.

Other organizations in the community that serve the uninsured include the Herndon Free Clinic, located in the western part of the county, and the Arlington Free Clinic.[12] Northern Virginia Community College also has a mobile van and five community-based clinics. These clinics are open two days a week from 9:00 am – 3:00 pm. To be eligible to receive services, an individual must be uninsured and an area resident. The clinics provide school physicals, blood pressure screens, diabetes screening, and breast and cervical cancer screenings. Roughly 65 percent of the patient population is Hispanic. As a group, these five clinics had a total of 5,000 visits over a one-year period. The surrounding area of Fairfax County does not currently have a Federally Qualified Health Center[13] but is exploring opportunities for creating one.

Hospitals: The Inova Health System includes Inova Fairfax, Inova Fairfax Hospital for Children, Inova Mt. Vernon, Inova Fair Oaks, and Inova Alexandria Hospitals. Inova Health System is the principal source of hospital services for uninsured patients. In 2003, the cost of uncompensated care delivered by Inova Health System exceeded $185 million.[14] Inova facilities were built on land owned by the county using county resources and the system is therefore obligated to provide services to indigent patients. Inova Hospital provides approximately 73,000 emergency department visits per year; 8 percent of these are related to trauma. Just over a quarter (26 percent) of patients who use the emergency department are admitted to the hospital.[15]

Inova Health System also operates the Inova Pediatric Center and the Inova Obstetrics Clinic, two clinics that serve primarily low-income, Medicaid-enrolled and/or uninsured patients. The obstetrics clinic delivers between 1,900 and 2,500 babies each year, or nearly one-quarter of all the hospital's deliveries. In July 2003, the obstetrics clinic had 3,500 visits. The health system also operates the Inova HealthPlex, an urgent care center located in Springfield, VA.

Inova Health System was the primary grantee for a Community Access Program (CAP) grant, awarded by the Health Resources and Services Administration in fiscal year 2000. Approximately $900,000 was awarded under the CAP grant to develop a coalition of 75 public and private providers to create a Community Health Alliance and institute an integrated service delivery model for uninsured populations. Inova partnered with the Fairfax County Health Department and other providers on the project. Inova Health System is developing an automated system to streamline eligibility determination and more easily identify CHCN patients at the point of registration. Under this new system, demographic information obtained with the patient's permission is entered into a database. This database enables providers to verify eligibility and to access information such as language needs. Once fully operational, the automated system will link multiple components of the safety net, increasing provider collaboration and communication. As of January 2004, nearly 50,000 records were entered into the system.[16]

The safety net in Fairfax County is composed primarily of three Community Health Care Network (CHCN) clinics and five hospitals run by the Inova Health System.

Behavioral Health Care: Behavioral health services are provided through the Fairfax County-Falls Church City Community Services Board (CSB). The CSB has six mental health services sites and several other substance abuse sites. The CSB sites provide comprehensive services, including emergency services, outpatient care and case management, inpatient care, day support, residential services, prevention, early intervention, and transportation. In fiscal year 2000, the CSB served 11,948 individuals and provided over $38 million in mental health services.[17] During the same period, the CSB provided drug and alcohol services to 6,183 individuals at a cost of nearly $20 million.[18] The CSB accepts all types of insurance and provides services to uninsured people on a sliding fee scale based on income. The maximum fee subsidy is 50 percent of charges. The CSB is willing to arrange a payment plan for patients who are unable to pay in full.

Dental Care: Dental care is extremely limited for the uninsured in Fairfax County and is provided mainly by two groups. The Northern Virginia Dental Clinic serves a limited number of patients and has restrictions on service delivery due to high demand and long lists of people waiting for dental services. The Clinic was created by the Dental Society, and has one director, three paid dentists, volunteer dentists from the Dental Society and a volunteer hygienist. The Dental Society recruits dentists for this clinic from its membership. Fairfax County government acts as the clinic's fiscal agent. Rent is paid by Fairfax County, Arlington County and the cities of Alexandria, Fairfax and Falls Church under a memorandum of understanding. The dental clinic is located on Columbia Pike in Falls Church, centrally located on major bus routes.

Services at the Northern Virginia Dental Clinic include full diagnostic exams, restorative services, oral surgery and several other services exclusive of emergency care. Patients with emergent needs are sent to local emergency departments. Social service agencies serve as screening and referral sources to the program and perform the intake and eligibility screen. To be eligible, a prospective patient must be a resident of the Northern Virginia area, have an income of under 200 percent of the FPL, and be over 18 years old. Once eligible, individuals are added to a waiting list that is currently 10 months long. An upfront fee of $30 is required to get on the waiting list; this fee is applied to the first 45-minute visit. Each additional dental visit is $30 per 45 minutes of work and must be paid in advance at the time the next appointment is made. If the patient does not present for an appointment and does not call two days ahead to reschedule, his or her $30 fee is forfeited. Patients are permitted three missed appointments only, after which they are dropped permanently from the program. The dental clinic gives each client one year to remain in the program. After the one-year period, the individual returns to the waiting list. From August 2002 to 2003, the program served 1,500 people with over 4,600 scheduled appointments. The no-show rate is under 10 percent. Ninety-two percent of patients have incomes below 125 percent of poverty; 40 percent of patients are Hispanic.

A small but important oral health care provider is the Northern Virginia Community College School of Dental Hygiene, which runs a dental clinic. The clinic's days and hours of operation are limited, especially during summer sessions when most students are not available. Dental hygiene students and their preceptors provide preventive care, cleanings, wisdom tooth extractions and patient education. Services are provided on a first-come, first-served basis.

The Health Department also provides preventive dental care for uninsured children who live in households with incomes at or below 200 percent of the FPL and for children enrolled in Medicaid or FAMIS. The dental clinic offers a sliding fee for uninsured patients. There is no fee for those with incomes that fall below 110 percent of the FPL.

Other Resources: The Fairfax County Office of Partnerships administers programs that supplement the county's safety net. The Office of Partnerships creates and develops public/private partnerships, bringing resources together to address the needs of low-income families. For example, the Medical Care for Children Partnership (MCCP) was created in 1986 to provide comprehensive medical care to uninsured children of working poor families through the combined

efforts of the county government, medical providers, and area businesses. Physicians, dentists, pharmacies, laboratories and Kaiser Permanente provide services at reduced fees; the county government covers all of the program's administrative costs. Services include primary care, urgent care, well-child care, immunizations, x-rays, laboratory tests, short-term physical therapy, and mental health services. About 500 doctors are recruited into the program and each is asked to take 10 families into his or her practice. Approximately 6,000 children are served by the program each year, many of whom are immigrants.

Another Office of Partnerships program is the Adult Health and Dental Partnership. Under this program, medical and dental services are provided at a reduced cost to low-income adults who cannot afford health insurance. Participants access health care either through case managers who link patients to private physicians or dentists at reduced costs, or through the Kaiser Permanente "Bridge Program" which enrolls participants in the HMO at a reduced cost. Participants enroll for 24 months and premiums range from $13-$90 per month depending on income. At the end of the 24 months, participants have the option of enrolling at full price.

The Partnership for Healthier Kids (PHK) is another resource that supplements the safety net. PHK collaborates with Inova Health System, Northern Virginia Family Services and Fairfax County Public Schools to identify children without doctors or health insurance. PHK then provides the family with assistance in enrolling in a health care program such as Medicaid, FAMIS, Community Health Care Network, or the Medical Care for Children Partnership.

Financing the Safety Net

The Fairfax County safety net is funded by a combination of federal, state and local revenues. This funding supports institutional programs as well as care for individual residents needing safety net services.

Medicaid

Virginia's Medicaid program currently has almost 340,000 enrollees statewide.[19] The State Children's Health Insurance Program, FAMIS,[20] has more than 52,000 enrollees. Virginia's medically indigent Medicaid program generally covers pregnant women and children with a family income below 133 percent of the FPL. The program covers families who meet financial and other eligibility requirements of the program.[21] Children up to 200 percent of the FPL are eligible for FAMIS, depending on the service. Some co-payments of between $2 and $5 apply.

Virginia is currently facing a severe long-term budget crisis. The state's $2.4 billion general fund shortfall for the 2002-04 biennium was addressed by a series of one-time and short-term solutions that will not be available for future funding gaps.[22] In October 2002, the state implemented $858 million in budget cuts in a wide variety of programs and increased user fees for many services. Included in the cuts was a reduction of $114.5 million from the state's Department of Health and Human Resources that affected public health programs including emergency medical services programs and programs for the elderly. Thus far, funding for the Medicaid program has been untouched, although the governor has signaled that it is a likely candidate for future cuts.[23] Medicaid accounts for $238 million of the state's general fund, and has experienced an average annual increase of 10.8 percent over the last 20 years.[24] In addition, Medicaid prescription drug costs have experienced sharp increases in recent years.

Disproportionate Share Hospital (DSH) Funding

Disproportionate Share Hospital payments provide funding to hospitals that provide a disproportionate amount of care to Medicaid and uninsured populations.[25] In 1999, total DSH allotments to Virginia equaled $163.7 million and were spread across 43 hospitals. Inova Fairfax Hospital received a total of $654,885 and Inova Alexandria Hospital received $461.[26] No other Inova hospital received DSH funding in that year.

Fairfax County Funding

Fairfax County government finances a significant amount of the county's health care safety net. The county Health Department operates on a $25 million budget. The majority of this funding comes from the county general fund and is raised primarily through property and sales taxes. About $6 million comes from the state. However, the local government alone cannot provide all the resources needed to meet the demand for safety net services. Because the political climate in Virginia is generally not supportive of tax increases, the county is looking for creative mechanisms to fund health services for the uninsured that do not rely on increasing property taxes. One idea under consideration is seeking a Medically Underserved Area (MUA)[27] designation for the most underserved and low-income areas, as a first step toward applying for funding to support a Federally Qualified Health Center (FQHC).

The county is unsure if it will attempt to convert the community health care network (CHCN) clinics to FQHC-status. Such a move would require the creation of a community board, which would replace the county as the governing body for the clinics. If the CHCN clinics became FQHCs, they would be required to serve all patients in need of care, and could no longer focus solely on uninsured patients.

In exchange for Inova Fairfax Hospital's agreement to provide health care to the poor, the county funded the construction of the hospital on county-owned land. Inova provides care to uninsured patients through a charity care program. Although Inova Fairfax Hospital is not a public hospital, under the terms of the lease agreement, the Fairfax County Board of Supervisors reviews and approves the hospital's budget.

Other Funding Sources

The State of Virginia also provides a small amount of funding to safety net providers in Fairfax County. Additional funding comes from grants from foundations or federal agencies and includes funding from the Virginia Health Care Foundation, the *Hablamos Juntos* program,[28] and the HRSA Community Access Program (CAP) grant. The Medical Care for Children Partnership receives grant funding from the private business sector but is administratively supported by the county.

The safety net assessment team conducted interviews with key stakeholders in the Fairfax County health care community and visited safety net facilities during its assessment of the local safety net. The analysis of the Fairfax County safety net was greatly informed by the interviews with safety net providers and other local stakeholders. Informants discussed important changes in local health policy and programs, emergency department use and crowding, issues relating to access to care, and significant barriers that patients face.

Overview

Fairfax County has taken a lead in the state in its commitment to support health services for uninsured and underserved populations. The county has attempted to create a system of care for its most vulnerable residents. It has developed comprehensive primary care clinics and created a network of specialty providers who are paid by the county. It has also worked with hospitals to provide necessary inpatient and emergency services. Fairfax County has implemented many of these initiatives on its own, with no funding from the state. Still, because of limits on resources, only about one-third of the uninsured in the county currently benefit from these efforts.

Fairfax County has a strong safety net but is facing challenges in meeting the needs of a growing immigrant population. While substantial, the safety net is also fragmented and in need of better integration. There are several primary care sites for routine care and hospitals for acute episodes and specialty care. Outside of the hospitals, there is little specialty care for uninsured patients.

Need for Additional Primary Care Services

Many people in Fairfax County lack a regular source of health care. As was mentioned earlier, CHCN clinics are a major source of care for uninsured and underserved residents of the county. Current county resources, however, allow the CHCN clinics to serve only about 14,000 of the estimated 45,000 eligible for service at the clinics.[29] To stretch resources and improve accessibility to this important source of care, CHCN clinics recently completed a strategic review and planning process that redesigned the eligibility criteria for enrollment. The strategic planning committee determined that, given the large number of patients with chronic conditions who need many different services, the clinics would continue to provide a comprehensive set of services, but limit the numbers of patients eligible to receive them.

Currently, only uninsured residents are eligible for CHCN services. These clinics no longer accept patients with Medicaid, Medicare, or FAMIS coverage. Current and potential CHCN patients are screened by the Department of Family Services for FAMIS or Medicaid eligibility. Those found eligible for these programs are referred to providers in the community who have agreed to take new Medicaid and FAMIS patients. CHCN clinics use the automated system created under the CAP grant to help with this process to determine eligibility. This system helps providers and administrators track patients and their insurance status across CHCN sites. These administrative changes have decreased wait times dramatically. Prior to the review, the Bailey's Health Center had a nine-month waiting list for 2,000 families to enroll as new patients; now, the wait is one month or less. At South County Clinic, the wait is now three months.

Uninsured residents who do not have easy access to the clinic sites have difficulties finding providers who will treat them. There are no primary care providers in two outlying cities in the far western part of the county, Centreville and Chantilly, who are willing to see uninsured patients who cannot fully cover the costs of their care upfront.[30] The closest provider is a private urgent care center, which has no sliding fee available and requires uninsured patients to pay full charges.

Fairfax County has a strong safety net but is facing challenges in meeting the needs of a growing immigrant population.

Pregnant CHCN patients who require care from Inova's obstetrics clinic have also found it difficult to access services at the hospital because of location. Low-income patients must often rely on public transportation, which can take several hours. Patients living outside of Fairfax County have few options other than the hospital clinic.

Publicly insured residents in Fairfax County also frequently find it difficult to find primary care providers willing to treat them. Many providers are reluctant to participate in either Medicaid or FAMIS due to low reimbursement rates. During the 2003 legislative session, payment levels were frozen and in some cases rolled-back, as an attempt to avoid cutting or reducing beneficiary enrollment. Many community residents are concerned that further cuts to state budgets will create even greater disincentives for physician participation in these programs. Some providers in Fairfax County have also shied away from treating patients covered by public programs because of requirements that they provide interpreter services—an unfunded obligation that, according to the providers, can make the encounter too costly.[31]

Need for Additional Specialty Care Services

Specialty care can be very difficult for uninsured patients to access. CHCN has 300 specialists willing to provide care to clinic patients. Under an agreement with the specialists, the county pays 50 percent of the Medicare rate for services provided to CHCN patients. In some cases, the county will also pay a portion of a doctor's malpractice insurance, depending upon the proportion of CHCN patients he or she sees. The specialists can choose to see patients in their office or at one of the county's clinics. The most common specialty referrals are for orthopedics, neurology, podiatry, and general surgery. If a specialist is not available, patients will be sent to the University of Virginia in Charlottesville, which is 100 miles away.

Overburdened Hospitals

Inova Fairfax and Mt. Vernon hospitals see the majority of the uninsured and underserved patients in Fairfax County and provide a significant amount of uncompensated care. Mt. Vernon Hospital is said to be losing money and significant changes are rumored to be forthcoming, although no official announcements have yet been made.[32] Several possibilities are being examined for the hospital's future viability, including maintaining the emergency department and rehabilitation units while closing all other departments.

Need for Full Implementation of the Automated Eligibility System

The automated eligibility system developed under the CAP grant provides patients with more efficient, patient-friendly access to care from community safety net providers. Participating providers across 27 sites share access to client records. This allows low-income uninsured patients to access care from multiple providers without continually repeating the CHCN application process.

At the time of our site visit, the automated eligibility system was still not fully implemented among the primary safety net providers in Fairfax County. The system was first implemented in May 2002 at the Inova Fairfax Hospital. By the following summer, it was clearly well integrated in the CHCN clinics, but was less so at Inova Fairfax and Inova Mount Vernon Hospitals. Some hospital registration staff were unaware of the existence of the automated system. At times, when staff attempted to use the system, it could not be accessed on the computer at the hospital registration desk. Informants reported that although patients had already enrolled in the automated system at a CHCN clinic, when they presented at the ED, they were told that they did not qualify for charity care. As a result, some patients had to reapply when presenting at the emergency department.[33] In addition, informants reported that some patients received hospital bills for services that are covered under the CHCN program and are therefore not the responsibility of the patients. These sorts of glitches have increased the perception

among many of the uninsured that Inova Health System's commitment to providing care to indigent patients has waned.

Since our site visit, Inova Health System has accelerated its training program for the CAP streamlined eligibility system. As of January 2004, there were a total of 391 trained users of the system. In total, fourteen training sessions have been provided, three of which were presented to Inova Mount Vernon Hospital in January 2004.

The full potential of the automated eligibility system is lessened by the fact that several important safety net providers do not use the system. For example, the Northern Virginia Dental Program, the Northern Virginia Community College Dental Hygiene Clinic, and the Adult Health and Dental Partnership, run through the Office of Partnerships, do not participate on the CAP project and therefore do not coordinate registration information for patients across various sites of care.

Emergency Department Crowding

Inova Fairfax Hospital's emergency department, one of the largest in the region, is often crowded and patients frequently face long waits, with some patients boarding in the hallways until inpatient beds become available. Inova Fairfax Hospital is a major trauma center and receives a much higher number of severe injuries and trauma cases. Wait times at Mt. Vernon Hospital are shorter, often in the one-hour range.[34]

Staff at Inova Fairfax Hospital have spent a considerable amount of time studying ED crowding and offered five reasons why their ED is being used by patients whose conditions are either non-emergent or emergent but primary care treatable. The reasons are:

1. The ED provides care that is commonly considered state-of-the-art and of outstanding quality.
2. The ED provides a form of "one-stop shopping," where diagnostic examinations, treatments and medications can be obtained all at the same time and in the same place.
3. The ED provides a level of anonymity that community physicians may not provide.
4. The convenient hours of operation are also a significant factor for its overuse (despite the fact that the waits for care may be inconveniently long).
5. Even with limited public transportation, the hospital is included on several bus routes.

Need for Additional Behavioral Health Services

There are not enough behavioral health care services to meet the demand for care in Fairfax County. Many informants indicated that the behavioral health system in Fairfax County is fragmented and under-funded. State funding for mental health care services was cut by 50 percent in July 2003; this is on top of cuts of various amounts over the last four years. The Community Services Board (CSB) does not have the resources to meet the demands of existing clients. Although the CSB offers a subsidy of up to 50 percent for services, these services are expensive and unaffordable for low-income people. For example, even after the maximum subsidy, a group session would cost $30.

Several hospitals in the area have reduced the number of their psychiatric beds. Inova Fairfax Hospital seldom takes mental health patients in crisis, though on-call psychiatrists have been described as "excellent."[35] The declining numbers of providers at Inova Fairfax Hospital also presents a challenge. Three years ago, 400 psychiatrists were available for call at Inova Fairfax Hospital; today that number is 100.[36] Many informants reported that immigrants are not accustomed to using behavioral health services or are reluctant to seek them because of the associated stigma. Although mental health service providers are trying to cope with the increased diversity in client populations, many more multilingual and multicultural providers are needed.

The CAP grant included funding for a mental health counselor to integrate behavioral health services in the primary care setting. This initiative was designed to reduce the stigma of seeking behavioral health services since people are less embarrassed seeking that help through their primary care provider. Patients feel

more comfortable since others in the waiting room do not know that they are seeking behavioral health care. As a result of this program, 4,198 hours of counseling and consultation services were delivered in three CHCN clinics and the Inova Pediatric Center between April 2001 and October 2003. Mental health counseling services were provided to 466 people through 688 individual and 104 family sessions. CAP bilingual mental health therapists facilitated 45 crisis interventions, made 181 referrals to community resources, and supported clients through intensive case management. Since the conclusion of the CAP grant, the CHCN clinics and the Inova Pediatric Center have integrated the cost of the services into their budgets and continue to provide these services to their clientele.[37]

Need for Additional Dental Services

Dental care is extremely limited, and has been identified as a primary unmet need among Medicaid enrollees and the uninsured in Fairfax County. Services for uninsured adults are particularly scarce. The Northern Virginia Dental Clinic is a unique model that has proven its effectiveness. Volunteer and staff dentists provide a comprehensive set of treatment and restorative services, and patients who have pre-paid for their services have a vested interest in keeping their appointments. Unfortunately, tight budgets and scarce resources prevent Fairfax County and adjacent counties from funding additional sites despite the enormous need for adult dental services. Generally, Medicaid patients have difficulties finding dentists willing to treat them. Adult dental care was cited by many informants as the biggest unmet need for the uninsured.

Provider Issues: Limited Supply But Active Collaboration

Although Northern Virginia does not have a shortage of health care providers, too few providers are willing to participate in publicly-funded programs. Pediatric psychiatrists are in very short supply, as are bilingual providers to address the needs of a growing immigrant population. Medical Care for Children Partnership (MCCP) is one of the few programs that has successfully recruited private doctors and specialists to provide health care at reduced cost to the uninsured. Severe shortages of emergency psychiatric providers are also a challenge; the number available at Inova Fairfax Hospital has declined significantly in recent years.

Many organizations and agencies in the community have demonstrated their ability to collaborate and cooperate with each other. Past projects such as the CAP grant and *Hablamos Juntos* have brought organizations and agencies together and forged relationships among them. In particular, the Community Health Care Alliance, created under the CAP grant, brought together 75 public and private providers to address concerns about health care access for uninsured and underinsured county residents. During the project's first year, the Alliance focused on redesigning the child health safety net by increasing efficiency and access to care through outreach and education, enrollment, and provider recruitment. As a result, 844 children were enrolled in a medical home.[38] Year two activities included developing a plan to recruit more private sector providers to serve Medicaid enrollees to free up more public sector slots for uninsured patients. The Alliance also established a collaborative system for continuous quality improvement (CQI) that includes providers from both the private and public sectors.

The Alliance has also focused on developing cultural competence training for safety net providers and providing language interpretation and translation for patients with limited English proficiency. Three continuing medical education training sessions on cultural competency were held that were attended by nearly 200 health care providers. Through the CAP Outreach and Education Task Force, community health workers in Fairfax County were brought together in two focus groups to identify their education support needs and to explore patients' barriers to care such as transportation, language, fear and mistrust, lack of insurance, and cultural beliefs. In September 2003, a one-day conference was held for 126 community health workers in Northern Virginia to further discuss the barriers identified in the focus groups. Organizations collaborating with CAP also provided outreach and community education to the Vietnamese, Hispanic and Korean communities. Through Meyer Foundation

funding, minority community organizations provided outreach to more than 4,700 individuals, conducted 25 workshops and facilitated 45 educational group sessions/seminars. As a result of such activities, over 400 people were connected to a medical home.[39]

Barriers to Care

Language and Cultural Competency

In Fairfax County, many users of the safety net speak a language other than English. The six most common foreign languages are Spanish, Chinese, Korean, Urdu, Arabic and Farsi. Despite concerted efforts to address the needs of immigrant populations, interpreter services are still inadequate. Inova Hospital has one full-time interpreter, but the interpreter has trouble meeting current demand for care.[40] Patients must often bring their own interpreters (generally family members, including children), or are forced to use cumbersome language lines or picture cards to communicate with providers.

As of January 2003, 200 bilingual staff members from Inova Fairfax Hospital have gone through the training and can be used as interpreters on an as-needed basis.[41] Inova's *Hablamos Juntos* grant from The Robert Wood Johnson Foundation will also help reduce language barriers by providing funding to hire six additional Spanish language interpreters in February 2004, four of whom will be placed at Inova Fairfax Hospital. This funding will run through September 2005.[42] The Fairfax County Health Department is working to provide culturally competent care. For example, the county has hired the Northern Virginia Area Health Education Center to train its interpreters.

While many safety net providers are addressing the language needs of their Hispanic patients, other ethnic groups feel left out.[43] For instance, the attempt by some CHCN clinics to serve Spanish-speaking patients with Spanish-speaking staff has led some Asian groups to feel unwelcome.[44] There is a concern that patients may respond to this by forgoing necessary primary care and preventive services.

In addition to lacking proficiency in English, immigrants often lack knowledge concerning the types of services that are available to them and how they go about accessing them. Many are also unaware of the importance of receiving preventive care. Cultural norms and stigma may play a role in hindering refugees and immigrants from seeking mental health and substance abuse services.

Transportation

Transportation is a major barrier to accessing health care. The bus system in South Alexandria runs only north and south; there is little to no public transportation in the outer edges of the county. The sheer size of the county requires patients to travel for miles on highways. There is no cross-county bus system; buses generally travel to and from the District of Columbia for commuters. Patients who lack access to private transportation must often spend several hours on two or three buses to reach a health care provider. Inova Fairfax Hospital, for example, is not located on a major bus route and many patients report that taking the bus there is difficult and can take hours. Many patients rely on friends or family members with cars to get to their appointments. Residents in the South County area have perhaps the most accessible bus routes to the CHCN clinic and to Mt. Vernon Hospital. However, they must often travel to Inova Fairfax Hospital, which can be a challenge. Many patients at the South County and Bailey's CHCN clinics described the challenge of traveling to Inova Fairfax Hospital's obstetrics clinic for frequent third trimester prenatal care.

The safety net assessment team conducted two focus groups

with residents who receive their care from safety net providers in the Fairfax County area. The focus groups were held on September 9 and 11, 2003, at the Bailey's Crossroads Clinic and the South County Clinic, both of which are locations within the Community Health Care Network. Focus group participation was voluntary. Participants were recruited with the help of the local community partner, the Fairfax County Community Access Program. Recruitment efforts involved displaying flyers announcing the sessions and their schedules. Participants received $25 each in appreciation of their time and candor. A total of 18 individuals participated in the focus groups. One group was conducted in English and one was in Spanish.

The focus group discussions highlighted the difficulties that many uninsured and underserved residents have in accessing timely and affordable health services in Fairfax County. Their comments addressed issues related to 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.

The focus group discussions highlighted the difficulties that many uninsured and underserved residents have in accessing timely and affordable health services in Fairfax County.

Access to Care

For many participants, the CHNC clinics were the only option they were aware of for seeking primary care. When asked what they would do if the clinics were no longer there, one patient said she would feel abandoned and unable to find any affordable care. Some participants also said that they used clinics when they could, but went to the emergency department after hours, when the clinic was closed. Another patient complained that although the clinics have an after-hours emergency telephone number, the calls generally go unanswered. Several of the participants expressed concerns about rumors of the closing of Mt Vernon Hospital, which would only make access to other hospitals in the area all the more difficult.

Patients at one of the clinics complained about its policy to limit patients to one specialist referral per year.[45] One patient described driving over two hours to Charlottesville to see a specialist, since she had already used her one referral from the clinic. Other patients described very long waits to access specialty care. Some had waited three or four months to see a specialist physician.

Many of the participants had difficulties obtaining prescription medications because of their high cost. Some patients tried to stretch their medications—for example, breaking their pills in half—so they would last longer until they could afford more.

Finances

Nearly all participants in both focus groups reported having difficulty at certain times obtaining charity care at Inova hospitals. The majority of focus group participants reported that, although they had been found eligible for care via the county's clinic program, they had to reapply for charity care eligibility when they presented at the ED or were admitted to the hospital. Many reported being told that they did not qualify for charity care. These patients reported that payment for hospital services is often demanded upfront. They have also been billed numerous times for hospital services, and these bills eventually were turned over to collection agencies. Several participants described discourteous behavior on the part of staff at hospitals or clinics in the Fairfax County area. Several people felt they were treated differently because they were uninsured and receiving charity care. Focus group participants felt they waited longer than insured patients to receive care, even in the ED. They suggested that hospital and clinic staff receive periodic sensitivity training and customer service coaching.

Transportation

Most of the participants reported difficulties reaching Inova Fairfax Hospital using public transportation. One patient had to reschedule an eye appointment because he could not get there and had to wait several more weeks for the rescheduled appointment. Patients reported that traveling to Inova Fairfax Hospital for third trimester prenatal care is very inconvenient.

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 also often choose to use 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 low-income, 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 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 have been cited as causes of 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 issues when trying to address the problem.

In this section of the report, we provide an analysis of ED use at Inova Fairfax Hospital. Using a profiling algorithm,[46] we were able to classify visits as either emergent or non-emergent. We were able to further allocate these visits to determine whether the emergent visits were primary care treatable, preventable/avoidable or non-preventable/non-avoidable. Communities should use this information to help 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.[47] 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 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 Inova Fairfax Hospital

As part of the *Urgent Matters* safety net assessment process, we collected information on ED visits at Inova Fairfax Hospital for the period July 1 through December 31, 2002. There were 21,199 ED visits for the six-month period that did not result in an inpatient admission.[48] Table 5 provides information on these visits by race, coverage, age and gender.

Table 5 Demographic Characteristics of ED Visits

Race		Coverage		Age		Gender	
Asian	4.9%	Commercial	61.5%	0-17	26.6%	Female	51.4%
Black	9.3%	Medicaid	8.6%	18-64	63.3%	Male	48.6%
White	42.1%	Medicare	9.4%	65+	10.1%		
Hispanic	15.8%	Uninsured	19.0%				
Other	27.9%	Other	1.5%				

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

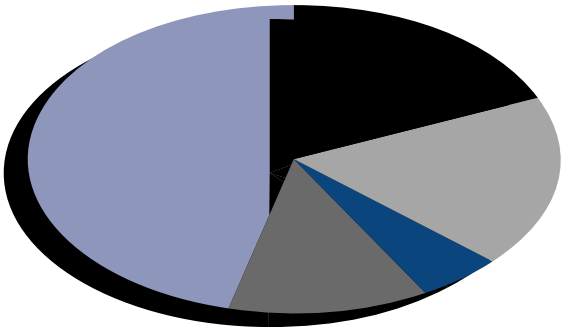
Key Demographic Characteristics of ED Visits

About two of five ED visits at Inova were for white patients. Approximately 25 percent of visits were for black or Hispanic patients.

More than 60 percent of ED visits were for patients who had commercial insurance. Approximately one of five visits to Inova were for uninsured patients. Less than 10 percent of ED visits were for patients covered by Medicaid.

Over one-fourth of all ED visits were for children.

Figure 1 Visits by Emergent and Non-Emergent Categories



Non-Emergent	18.5%
Emergent, PC Treatable	18.1%
Emergent, Preventable	5.2%
Emergent, Not Preventable	12.2%
Other Visits	46.1%

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

A significant percentage of visits to the Inova Fairfax Hospital ED could have been treated in settings other than the ED. As Figure 1 demonstrates, 18.5 percent of ED visits at Inova Fairfax Hospital were non-emergent and another 18.1 percent were emergent but primary care treatable. Thus, one-third of all ED visits that did not result in an inpatient admission could have been safely treated outside of the ED.[49]

Table 6 compares the rates 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 three visits that were either non-emergent (1.51) or emergent, but primary care treatable (1.48).

These findings differed across various categories. In terms of insurance coverage, relative rates of use of the ED for non-emergent conditions were highest for patients who were on Medicaid (2.22) and lowest for patients on Medicare (1.11). Contrary to the results of similar analyses conducted at many other hospitals, these results indicate that commercially insured patients were not using the Fairfax Hospital ED at rates similar to uninsured or publicly insured patients.[50,51]

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 Fairfax Hospital. The largest variation in terms of ED use for non-emergent conditions is seen across age groups, with children more than twice as likely to be in the ED for non-emergent conditions as for emergent, non-preventable ones. Likewise, children were also more than twice as likely to be seen in the ED for emergent primary care treatable conditions.

Table 6 Relative Rates for ED Visits at Inova Fairfax Hospital

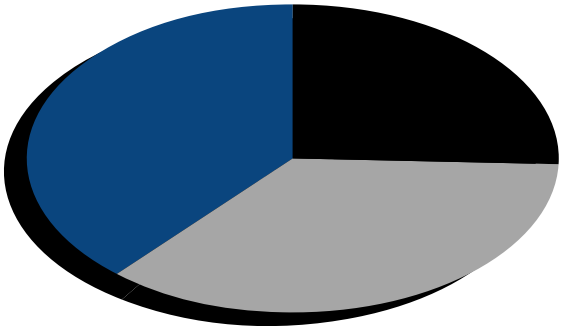
	Non-Emergent	Emergent, Primary Care Treatable	Emergent, ED Care Needed Preventable/ Avoidable	Emergent, ED Care Needed Not Preventable/ Not Avoidable
Total	**1.51**	**1.48**	**0.42**	**1.00**
Insurance status				
Commercial	1.42	1.38	0.37	1.00
Medicaid	2.22	2.48	0.89	1.00
Medicare	1.11	1.01	0.35	1.00
Uninsured	1.88	1.78	0.44	1.00
Age				
0-17	2.38	2.52	1.03	1.00
18-64	1.38	1.32	0.29	1.00
65+	1.05	0.97	0.34	1.00
Race				
Asian	1.52	1.51	0.42	1.00
Black	1.61	1.66	0.57	1.00
Hispanic	1.92	1.91	0.50	1.00
White	1.33	1.28	0.39	1.00
Sex				
Female	1.57	1.54	0.39	1.00
Male	1.43	1.40	0.46	1.00

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

Hispanic patients had higher relative rates of ED use for non-emergent conditions than did patients of other races. Hispanic patients had 1.92 non-emergent visits per emergent, non-preventable visit, compared to 1.33 non-emergent visits for white patients, 1.52 per Asian patients, and 1.61 per black patients.

Most ED visits at Inova Fairfax Hospital occurred during the hours of 8:00 am and midnight. As figure 2 illustrates, only about one-fourth of the visits that did not result in an inpatient admission occurred between midnight and 8:00 am.

Figure 2 ED Visits by Admit Time



Midnight – 8 am	25.6%
8 am – 4 pm	35.9%
4 pm – midnight	38.5%

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

Interestingly, many visits to the ED for primary care treatable conditions occurred during business hours that commonly coincide with physician and clinic availability. Table 7 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 use the ED for primary treatable conditions at relatively comparable rates during "regular business hours" and the hours of 4:00 pm to midnight.

Table 7 Relative Rates for ED Visits at Inova Fairfax Hospital, 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	**1.51**	**1.48**	**0.42**	**1.00**
Admit time				
8 am – 4 pm	1.51	1.44	0.44	1.00
4 pm – midnight	1.40	1.55	0.46	1.00
Midnight – 8 am	1.64	1.44	0.36	1.00

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

These data support the assertion that patients are using the ED at Inova Fairfax Hospital for conditions that could be treated by primary care providers, at times during the day when primary care providers are likely to be available. The data show that children are especially likely to use the ED for primary care treatable emergent and non-emergent conditions. This suggests that there are opportunities to improve care for patients in Fairfax County while also addressing crowding in the ED at Inova Fairfax Hospital. While this analysis does not address ED utilization at other area 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 Fairfax County safety net, the assessment team identified the following key findings:

Safety net providers in Fairfax County have successfully collaborated to improve the continuum of care offered to uninsured and underserved populations. Some organizations still operate independently, however, with no formal linkages to other providers.

Fairfax County funds and operates primary care clinics that provide comprehensive primary care services exclusively to uninsured county residents. Due to limited funding, however, only about 14,000 of the county's 45,000 low-income uninsured residents are served through this program.

Specialty care services are in very short supply for low-income and uninsured residents of Fairfax County. Several programs are attempting to link uninsured individuals with providers who will see them at no-cost or reduced rates. These programs appeal to local providers to take on a limited number of uninsured individuals or families. Program administrators note, however, that it is difficult to identify providers willing to participate. Likewise, provider participation in Medicaid is uneven.

Fairfax County residents who are either uninsured or covered by Medicaid have a particularly hard time obtaining dental services. Few providers offer services on a sliding fee basis and waits for appointments can be as long as a year.

The uninsured find it very difficult to access behavioral health services due to long waiting lists and high out-of-pocket costs, (even for heavily subsidized services). Inova's Community Access Program (CAP) grant is working to alleviate some of the pressure on available service providers by funding one mental health counselor to integrate behavioral health services into primary care settings. This position will be continued and partially supported by the county after the CAP grant period has been completed.

Implementation of an automated eligibility system under Inova's CAP grant has had mixed results. The program, which streamlines the health care registration process in clinics across the county and facilitates enrollment in public programs such as Medicaid and SCHIP, has not yet been well integrated into daily clinic operations. In addition, hospital staff who register patients are not always aware of the system and hospital computers sometimes are not programmed appropriately to allow use of the system. Moreover, some important providers have chosen not to participate in the project. As operations of the system improve, it will alleviate many of the inefficiencies in the enrollment process.

Confusion exists among residents about their eligibility for the Affordable Health Care Program, the county's indigent care program. Inova staff are also uncertain of the requirements. Some patients who have previously been deemed eligible are required to reapply for benefits each time they present at the emergency department or are admitted to the hospital.

Interpreter services are insufficient to meet the needs of the community's non-English speaking populations. Although hospitals and county clinics have bilingual staff and a few professional interpreters, patients are often expected to bring their own interpreters, use cumbersome language lines, or use picture cards to communicate with providers.

Issues for Consideration

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

Fairfax County should undertake a study to determine whether the streamlined eligibility system developed under the CAP grant has had an impact on ED use. If the system has, in fact, resulted in better access to primary care and reduced use of the ED for primary care treatable conditions, CAP partners and others should consider spreading the system more widely across the county.

Better training and employee education regarding the importance of the automated eligibility system would be extremely helpful. In addition, staff and providers must commit to full integration of the system in order for it to work effectively.

Efforts to apply for a Section 330 grant to establish a Federally Qualified Health Center should be strongly encouraged and supported by safety net providers in the area. The county's primary care system could be restructured to meet the requirements of an FQHC, which would result in an important new source of revenue for providing health services to uninsured and underserved residents. Alternatively, if restructuring the existing county clinics is not feasible for political or operational reasons, the county could consider pursuing the establishment of a new, federally-funded community health center, which could help expand capacity to serve the underserved.

Safety net providers would benefit from expanded collaboration to maximize opportunities for serving uninsured and underserved residents in Fairfax County. The collaborative spirit was evident in the CAP process, but important players chose not to participate in the project. Future efforts should encourage more widespread collaboration on important projects affecting safety net populations.

Providers should continue to work to increase the number of interpreters available to local providers. Given the diversity of the population in Fairfax County and the surrounding area, as well as the wealth of educational institutions in the area, programs could be designed to identify students or community representatives to be trained in medical interpretation.

Existing bus routes should be evaluated to determine whether the transportation system is serving the needs of low-income populations. County officials may wish to consider changing certain routes to facilitate access to key health care providers.

All Fairfax County area hospitals should conduct analyses of the use of their emergency departments for emergent and non-emergent care. Such studies would help determine whether area hospitals are experiencing ED use trends that are similar to those seen in safety net hospitals. Hospitals, community providers, and other stakeholders should use the results of these studies to develop strategies for reducing crowding in hospital EDs.

1 Institute of Medicine, *America's Health Care Safety Net: Intact but Endangered* (Washington, DC: National Academy Press, 2000).

2 Ibid, 21.

3 U.S. Census Bureau, State and County QuickFacts, 2000, http://quickfacts.census.gov

4 Ibid.

5 Fairfax County Department of Management and Budget, "Economic Indicators," July 2003, www.fairfaxcounty.gov/comm/economic/economic.htm (as of November 2003).

6 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.

7 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. See: U.S. Census Bureau, *American Community Survey Profile 2002: Fairfax County, Virginia, Profile of General Demographic, Social and Economic Characteristics* (Washington, DC: U.S. Census Bureau, 2003), www.census.gov/acs/www/Products/Profiles/Single/2002/ACS/index.htm

8 The State Children's Health Insurance Program (SCHIP), also known as Title XXI, was passed as part of the Balanced Budget Act of 1997. SCHIP provides $40 billion in Federal matching funds over 10 years to help states expand health care coverage to uninsured children.

9 Figures apply to 100,000 persons who would be the provider's patient population. Adult primary care providers represent the number of providers per 100,000 individuals 18 years of age and older; pediatricians represent the number of providers per 100,000 children age 17 and younger; ob/gyns represent the number of providers per 100,000 adult females.

10 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).

11 The county health department uses 200 percent of the FPL as a guideline, while the hospital uses 250 percent of the FPL.

12 This is in Arlington County, but is adjacent to Fairfax County and easy for Fairfax County residents to access.

13 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.

14 Unpublished data from Inova Health System.

15 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

16 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

17 Fairfax-Falls Church Community Services Board, "Mental Health FY2000 Statistical Summary," http://www.co.fairfax.va.us/service/csb/mhs/mhsbudata.htm (as of October 2003).

18 Fairfax-Falls Church Community Services Board, "Alcohol and Drug FY2000 Statistical Summary," http://www.co.fairfax.va.us/service/csb/ads/adsbudata.htm (as of October 2003).

19 Virginia Department of Medical Assistance Services, "2003 Update: Virginia's Health Insurance Programs for Children," 2003, http://www.famis.org/English/PressReleases/FAMIS_Outreach_Polycom.ppt (as of December 2003).

20 Family Access to Medical Insurance Security Plan.

21 Virginia Department of Social Services, "Medicaid Coverage," www.dss.state.va.us/benefit/medicaid_coverage.html (as of December 2003).

22 Fiscal Analytics, LLC, "Virginia's Fiscal Crisis," Originally published in the *Richmond Times Dispatch*, 16 April 2002, see http://filebox.vt.edu/chre/elps/EPI/Perspectives/416crisis.pdf (as of December 2003).

23 M.J. Freeman, "'Fiscal Fascists' Guide State Budget Slashing," *Executive Intelligence Review*, 1 November 2002, www.larouchepub.com/other/2002/2942states_slash.html (as of December 2003).

24 Fiscal Analytics, LLC, "Virginia's Fiscal Crisis."

25 Disproportionate Share Hospital payments provide additional funding to hospitals that provide a disproportionate amount of care to Medicaid and uninsured populations.

26 Centers for Medicare and Medicaid Services, "Total DSH Allotments SFY 1999: Virginia," www.cms.hhs.gov/dsh/vadsh99.pdf (as of December 2003).

27 Established under the U.S. Public Health Service Act, MUAs are federal designations of a geographic area (usually a county or a collection of townships or census tracts) which meet the criteria as needing additional primary health care services. See www.in.gov/isdh/publications/llo/shortages/shortage.htm

28 *Hablamos Juntos* is a national program of the Robert Wood Johnson Foundation that provides grants to ten communities in regions with new and fast-growing Hispanic populations. The program is designed to improve communication between health care providers and their patients with limited English proficiency. See www.hablamosjuntos.org

29 Community Advisory Committee's Strategic Review of the Community Health Care Network, *Report to the County Board of Supervisors*, 19 February 2003.

30 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

31 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

32 L. Smith, "Inova cuts 113 staffers, reduces work hours: Health system cites costs, low revenue," *The Washington Post,* 1 July 2003.

33 The system was designed to resolve this very problem of patients having to go through the registration process at each encounter and separate sites of care unable to access patient registrations and other records.

34 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

35 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

36 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

37 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

38 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

39 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

40 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

41 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

42 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

43 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

44 Personal communication with interviewees. Interviews were held between summer 2003 and winter 2004.

45 CHCN had a one referral policy for a very short time but reversed its decision during its strategic review. Follow-up visits are covered.

46 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 peer-reviewed 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.

47 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).

48 There were an additional 8,754 ED visits that resulted in an inpatient admission.

49 These figures are relatively low compared to findings from analyses of other *Urgent Matters* grantee hospitals' data. Inova Fairfax has a high percent of visits that are not included in the algorithm. Thus, the findings may indicate that there is lower use of the ED for non-emergent or primary care treatable conditions; in the alternative, the data could reflect the limitations of the method of analysis and understate the amount of primary care conditions that are being treated in the ED.

50 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 Fairfax county area to determine whether uninsured patients were using ED care at higher rates than insured patients.

51 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*, Issue Brief 70 (Washington, DC: Center for Studying Health Systems Change, October 2003). http://www.hschange.org/CONTENT/613/

Urgent Matters Grantee Hospitals and Community Partners

Atlanta, Georgia
Community Partner: National Center for Primary Care, Morehouse School of Medicine
Project Director: George Rust, MD, MPH FAAFP
Grantee Hospital: Grady Health System
Project Director: Leon Haley, Jr., MD, MHSA, FACEP

Boston, Massachusetts
Community Partner: Health Care for All
Project Director: Marcia Hams
Grantee Hospital: Boston Medical Center
Project Director: John Chessare, MD, MPH

Detroit, Michigan
Community Partner: Voices of Detroit Initiative
Project Director: Lucille Smith
Grantee Hospital: Henry Ford Health System
Project Director: William Schramm

Fairfax County, Virginia
Community Partner: Fairfax County Community Access Program
Project Director: Elita Christiansen
Grantee Hospital: Inova Fairfax Hospital
Project Director: Thom Mayer, MD, FACEP, FAAP

Lincoln, Nebraska
Community Partner: Community Health Endowment of Lincoln
Project Director: Lori Seibel
Grantee Hospital: BryanLGH Medical Center
Project Director: Ruth Radenslaben, RN

Memphis, Tennessee
Community Partner: University of Tennessee Health Sciences Center
Project Director: Alicia M. McClary, EdD
Grantee Hospital: The Regional Medical Center at Memphis
Project Director: Rhonda Nelson, RN

Phoenix, Arizona
Community Partner: St. Luke's Health Initiatives
Project Director: Jill Rissi
Grantee Hospital: St. Joseph's Hospital and Medical Center
Project Director: Julie Ward, RN, MSN

Queens, New York
Community Partner: Northern Queens Health Coalition
Project Director: Mala Desai
Grantee Hospital: Elmhurst Hospital Center
Project Director: Stuart Kessler, MD

San Antonio, Texas
Community Partner: Greater San Antonio Hospital Council
Project Director: William Rasco
Grantee Hospital: University Health System
Project Director: David Hnatow, MD

San Diego, California
Community Partner: Community Health Improvement Partners
Project Director: Kristin Garrett, MPH
Grantee Hospital: University of California at San Diego
Project Director: Theodore C. Chan, MD