



Commission to Study Primary Care Medical Practice

Meeting Materials
September 14, 2007

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Please note additional materials will be provided by the panelists at the meeting.

Commission to Study Primary Care Medical Practice
Room 209, Cross Office Building
(HHS Committee Room)

SEPTEMBER 14, 2007

PRESENTATIONS BY

Maine Department of Health and Human Services

Tony Marple, Director - Office of MaineCare Services
Roderick E Prior, M.D. - Medical Director, Office of MaineCare Services

Maine Primary Care Association

Kevin Lewis – with Reverend Robert Carlson, Dawn Cook, and Dr. Noah Nesin

Maine Hospital Association

Mary Mayhew

Maine Academy of Family Physicians

Paul Pelletier, M.D. – Deborah Halbach, Executive Director, Maine AFP attending as well

Maine Medical Association

Gordon Smith and/or Andrew MacLean

Maine Osteopathic Association

Louis A. Hansen, D.O.



Commission to Study Primary Care Medical Practice

Date: September 13, 2007
To: Members, Commission to Study Primary Care Medical Practice
From: Elizabeth Cooper, Legislative Analyst
RE: Potential Questions/Information Needed

Here is a list of questions that include input from those of you who responded to my email or letter. You may want to write down additional questions that you or other Commission members have during the meetings and I have included space on the back of this memo for you to do so.

1. What are the access points for primary care in Maine and how does this impact access, cost and quality for the patient?
 - a. How many primary care physicians practice in Maine?
 - b. Privately owned practices
 - c. Hospitals owned practices or departments
 - d. Other settings such as Federal Qualified Health Centers (FQHC), Rural Health Clinics (RHC) and the Veteran's Administration?
2. Where are primary care physicians geographically located in Maine?
3. What are the differences in primary care medical practices that are independently owned and those owned by hospitals?
 - a. Differences in payor mix
 - b. Differences in reimbursement and costs
 - c. Differences in patient access
 - d. Differences in ability to advocate for patient
 - e. Differences in access to particular medical treatments
4. How do Medicare and Medicaid rates and reimbursement impact primary care medical practices and what is the impact on patients?
5. What issues related to health insurance in Maine impact primary care medical practices?
6. How does Maine's business climate impact primary care medical practices?
7. How do Maine's malpractice laws impact primary care medical practices?
8. What issues impact the recruitment of primary care medical practices and what factors influence a physician's decision to practice independently or in another setting?
9. What are other states doing related to the relationships between hospitals and primary care medical practices?
10. How does the administrative burden differ between hospital and private practice?
11. What are differences related to questions above between small and large for profit practices and hospitals?
12. If physicians are leaving private practice, what are they going? (geographically, practice type)

Additional Questions/Information Needed

<u>Requestor</u>	<u>Date</u>	<u>Question/Info Needed</u>	<u>Responsibility</u>

Changes in the Organization and Financing of Physician Practice in Maine and New Hampshire

Preliminary Findings

Conference Call – August 24, 2007

Project supported by the MaineCare Policy
Cooperative Agreement and the New
Hampshire Comprehensive Information
System Agreement



Project in Brief

Maine's Office of MaineCare Services and the New Hampshire Medicaid Program have observed a trend in the conversion of physicians from private practice to other practice arrangements including Rural Health Clinics (RHCs), Federally Qualified Health Centers (FQHCs), and hospital-owned or affiliated practices. The extent and consequences of these changes are largely unknown.

This project includes:

1. A review of national trends and literature;
2. Key informant interviews with other states and ME and NH practices; and
3. Data analysis to document changes in practice location.

Trends in Practice Arrangements

- Other states and practice managers in Maine and New Hampshire indicate there is a trend toward larger and facility-based practice arrangements and that we may be at the end of the process.
- Dating from the 1990s, several states have been concerned by RHC growth. In Maine, the number of RHCs and their costs seem to have stabilized.
- Since 2000, there has been significant growth in FQHC clinics, sites, and MaineCare members seen.

Are Maine and New Hampshire Different from Other States?

Nationally...and in Maine

- The proportion of solo and two-person practices has declined.
- Physician practice ownership, income, and career satisfaction have declined.
- Physician employment has grown.
- Physicians are moving toward practice arrangements that allow for control over work environment.
- Medicaid, uninsured, and charity care patients have become increasingly concentrated among facility-based providers.
- *Note: We have fewer interviews conducted to date in New Hampshire and do not yet have NH claims data.*



Are Maine and New Hampshire Different from Other States?

National literature and key informant interviews reveal...

- Collaborative relationships between physicians and facilities
 1. hospital employment of physicians (ME, NC)
 2. physician practices converting to FQHC status (ME, NH, PA, WA)
 3. FQHCs “absorbing” physician practices (ME, NH, WA)
 4. RHCs converting to FQHCs (NH)
 5. practices converting to RHCs (OR)
- Hospitals have also divested practices because ownership was not profitable. These practices then converted to FQHC or RHC status. (ME, NH, PA)

Multiple Forces are Driving These Trends

Business Decisions

Several practices report choosing hospital-ownership or merging with an FQHC to manage business challenges, including...

- Increasing overhead costs and infrastructure needs (e.g., human resources, billing, coding, documentation requirements, and practice management).
- implementing health information technology
- recruiting physicians (heard consistently across practice type and size)

Individual preferences

- Retirement, family commitments, and quality of personal life are influencing practice decisions.
- Preference to be a solely a clinician rather than a clinician and small-business owner.
- Facility-based practices can offer an attractive employment package to physicians. A paycheck, benefits, and established office infrastructure have been important in attracting new physicians.



What Does This Mean?

Good news...

- Practices that might have been lost to retirement or financial failure have been maintained.
- New physicians are being recruited to rural areas.
- The financial stability afforded by FQHC status in particular seems to allow providers to focus on other initiatives, such as information technology or quality improvement.
- The literature suggests that facilities and medical groups may provide an advantage over small physician practices in implementing quality improvement initiatives. A benefit of facility-based care may be better quality and value of health care services.

Key challenges and issues...

- Given that we can not change existing practice arrangements and there is little states can do to influence federal payment policy for FQHCs and RHCs, what are the choices that Medicaid agencies face in addressing issues of cost and quality?
- What is the impact of FQHC growth on other primary care providers? Is there more competition between existing providers for Medicaid patients?



Next Steps

- Finalize literature review.
- Continue to add interviews - each interview generates additional contacts.
- Finish data analysis. Add data from New Hampshire.
- We have been asked to brief Maine's Commission to Study Primary Care Medical Practice (mid-September and November) – *our question is whether and how we should we do this?*
- Complete final report by October 31.

Cooper, Elizabeth

From: Prior, Roderick E
Sent: Thursday, September 13, 2007 10:37 AM
To: Cooper, Elizabeth
Cc: Hollander, Lucky; Marple, Tony
Subject: MaineCare PCCM Practice type (4).doc
Attachments: MaineCare PCCM Practice type (4).doc

Elizabeth, please substitute the attached document for the previous one with the same name. Shari Martin in our division was able to get the data of PCP physicians by county and by practice type. The attached document includes 3 tables:

① Practices by county and type, ② PCP physicians by county, and ③ PCP physicians by county and practice type.

Note that none of the tables count midlevel providers, who are an important and increasing source of primary care in our site. Physician assistants always work under the supervision of a physician. Nurse practitioners often do so, but are allowed to practice independently after 24 months of supervised practice.

Once, again, please include this email in the document collection. Thank you.

Rod Prior

Cooper, Elizabeth

From: Prior, Roderick E
Sent: Thursday, September 13, 2007 8:40 AM
To: Cooper, Elizabeth
Cc: Marple, Tony
Subject: FW: MaineCare PCCM Practice type (2).doc
Attachments: MaineCare PCCM Practice type (2).doc

Ms. Cooper, here is another set of information for dissemination at tomorrow's hearing. Please include the email, below. It adds some perhaps useful perspective to the Commission's discussions.

Rod Prior

From: Prior, Roderick E
Sent: Wednesday, September 12, 2007 4:41 PM
To: Hollander, Lucky
Cc: Marple, Tony; McCormick, Brenda
Subject: MaineCare PCCM Practice type (2).doc

Lucky, I'm the person on first base for OMS with regard providing data to Friday's Commission hearing. Attached is a document showing two tables. The first table shows practices by county and type - private practice, hospital-based practice, FQHC, RHC, etc. The second shows primary care provider counts by county. The 2nd table is not broken down by practice setting.


 The first table must be interpreted with the following caveat: physician groups can be large or small - 1 doc up to 40 or more. There are only a few (I'd guess 10 or fewer) large primary-care private-practice physician groups in the state, mostly in the Biddeford-to-Brunswick corridor. The other private practice groups are in the 1-4 physician size. Hospital groups are growing in size as well as number. For example, Franklin Memorial Hospital employs about 25 primary-care practitioners and a total of about 65 practitioners in all of its owned groups. The Maine Med/CMMC/MaineGeneral/EMMC groups probably run to hundreds of total docs and midlevels.

Charles Dwyer from the Maine CDC's Office of Rural and Primary Health Care has some data which he promised to have to me tomorrow.

Finally, there are a number of questions posed by the Commission which probably can't be answered from State resources, but could be answered by the MHIC using statewide data collected by the MHDO. I talked with Al Prysunka and understand that the MHDO will be present tomorrow. However, the MHDO's analysis capabilities are limited by their small staff; the MHIC has a great track record in informing with good data analysis, but we have no \$ to fund a MHIC study. Do you?

I'll share the data from MeCDC when I receive it.

Rod

9/13/2007

P14

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MaineCare Primary Care Case Management
 Practice Type Statistics by County
 09/2007

	Androscoggin	Aroostook	Cumberland	Franklin	Hancock	Kennebec	Knox	Lincoln	Oxford	Penobscot	Piscataquis	Sagadahoc	Somerset	Waldo	Washington	York	New Hampshire	Total #
Physician Groups	6	8	75	5	2	27	16	4	3	16	3	2	6	7	6	47	25	258
Hospital Based Groups	9	11	16	5	10	3	2	2	3	9	0	2	6	2	1	4	1	86
FQHC Groups	16	10	0	3	1	2	1	1	2	15	0	1	4	0	6	1	3	66
IHS Groups	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	4
RHC Groups	1	6	0	0	4	0	0	5	5	5	5	0	3	6	4	0	1	45
County Total	32	36	91	13	17	32	19	12	13	46	8	5	19	15	19	52	30	459

MaineCare Primary Care Case Management
Practice Type Statistics by County
09/2007

	Androscoggin		
	Aroostook		
	Cumberland		
	Franklin		
	Hancock		
	Kennebec		
	Knox		
	Lincoln		
	Oxford		
	Penobscot		
	Piscataquis		
	Sagadahoc		
	Somerset		
	Waldo		
	Washington		
	York		
	New Hampshire		
	Total #		
Open PCP's	55	105	98
Closed PCP's	54	26	169
County Total	109	131	267
			34
			68
			111
			37
			39
			55
			201
			21
			29
			53
			39
			47
			123
			110
			1474
			683
			791

MaineCare Primary Care Case Management
 Practice Type Statistics by County
 09/2007

	Androscoggin	Aroostook	Cumberland	Franklin	Hancock	Kennebec	Knox	Lincoln	Oxford	Penobscot	Piscataquis	Sagadahoc	Somerset	Waldo	Washington	York	New Hampshire	Total #
# PCP's Physician Groups	15	16	208	5	3	86	27	12	9	40	3	2	14	10	7	112	82	651
# PCP's Hospital Groups	44	38	59	18	39	17	5	7	6	65	0	23	23	4	3	9	9	369
# PCP's FQHC Groups	47	54	0	11	6	8	5	4	14	75	0	4	7	0	16	2	9	262
# PCP's IHS Groups	0	2	0	0	0	0	0	0	0	3	0	0	0	0	7	0	0	12
RHC Groups	3	21	0	0	20	0	0	16	26	18	18	0	9	25	14	0	10	180
County Total	109	131	267	34	68	111	37	39	55	201	21	29	53	39	47	123	110	1474

Narrative and DATA FROM DHHS

9/14/07

Dr. Prior,

I've done my best to identify some information relevant to the questions posed. I hope you might find something here that will be helpful to you.

- * Number physicians in independent primary care practices
- * Number of physicians in hospital outpatient practices/hospital owned practice and/or other settings such as FQHC or RHC

In looking at the 2003-2004 physician dataset (1414 respondents working in Maine indicated primary care as their first specialty):

531 of 1358 physicians answering this question reported their primary form of employment as self-employed (56 physicians did not answer this question)

267 physicians reported their primary form of employment as self-employed (solo practice or single owner business)

264 physicians reported their primary form of employment as self-employed (partnership or group owned practice)

827 of 1358 physicians reported being employed by an organization, facility or another physician or group

The FQHC data we collected in 2006 tells us that they employed 65.77 PCP FTE that year. We receive no equivalent data for the RHC. No previously collected workforce survey data breaks out independent and hospital-based practices. With additional time and resources an analysis could be made based on facility and location that would get to the answers being sought.

Source: DHHS, MeCDC, ODRVS, contact Marty Henson Director, Survey Operations Unit

- * Location of primary care physicians by practice type (independent and hospital-based)
- * Payor-mix for PCP (independent and hospital-based)
As mentioned above, our existing data doesn't differentiate between "independent" and "hospital based" practices so we are unable to provide that data at this point. However, we have attached a map of Maine that indicates the areas throughout the state that have the highest rates of Mainecare. Yellow areas indicate that between 25%-30% of the population of that area is on Mainecare. Red areas indicate over 30% of the population receives Medicare. This is likely to have a significant effect on the payor-mix in the specific areas.

Source: DHHS, MeCDC, Office of Rural Health and Primary Care, contact Marc Coulombe

- * Any differences in licensing, regulatory requirements for office-based/independent PCP vs hospital-based PCPs

Rural Health Centers are not licensed, they are required to follow only Federal regulations. Physician practices which are outpatient departments of a hospital must

follow the hospital regulations for outpatient departments. And independent physician practices would be handled through the individual physician's license(s) at the Board of Medicine.

Finally, The Division of Licensing and Regulatory Services is currently in the licensure reform process for hospital licensing and further information on that is available at their Web site.

Source: DHHS, Division of Licensing and Regulatory Services, contact Ali Hilt-Lash

* Any differences in health care costs, access and options related to PCPs being based in an independent practice versus hospital setting

The federal regulations require that RHC provide safety net services and post a sliding fee schedule. Their presence increases the accessibility of services to those people with no insurance and limited or ability to pay. In some areas, these are the only providers that see new Mainecare patients.

Source: DHHS, MeCDC Office of Rural Health and Primary Care, contact Charles Dwyer

* Medicaid and Medicare reimbursement for primary care physicians in different settings (independent practice, hospital-based practice, etc.)

Mainecare to answer

Please don't hesitate to contact me again if we might be of additional assistance.

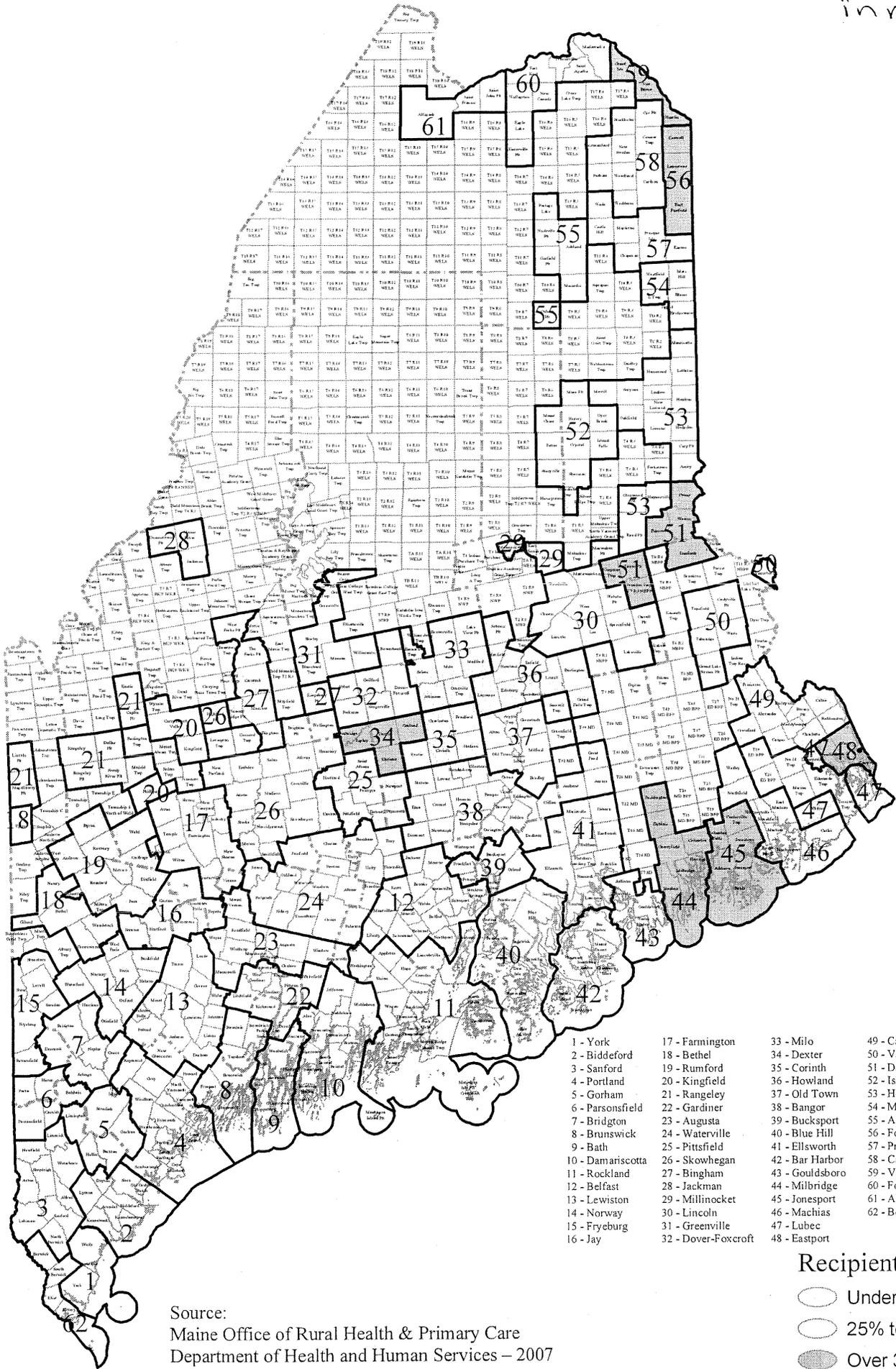
Charles

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Augusta, ME 04330-0011
ph: 207-287-5503 fax: 207-287-5431
<http://www.maine.gov/dhhs/boh/orhpc/>



MaineCare Recipients

See color copy separate in notebook



Source:
 Maine Office of Rural Health & Primary Care
 Department of Health and Human Services – 2007

Recipients

- Under 25%
- 25% to 30%
- Over 30%

ACCESS GRANTED



THE PRIMARY CARE PAYOFF

*Provided by Maine Primary Care Association
to Commission to Study Primary Care Practice 9/14/07*



The Robert
Graham Center



NATIONAL ASSOCIATION OF
Community Health Centers



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AUGUST 2007

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The information and opinions contained in research from the Graham Center do not necessarily reflect the views or policy of the American Academy of Family Physicians.



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This report is available online at www.nachc.com/research

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EXECUTIVE SUMMARY

Community Health Centers: A Smart Investment in Health Care and Communities

Americans believe in a strong health care system for all – and thus far, are willing to pay for it. In 2005 Americans spent \$2 trillion – 16% of the entire national economy – on health care.

Yet it's clear our system is not working. Costs continue to rise, yet so do the number of at-risk Americans. The challenges facing the more than 60 million uninsured or underinsured are well documented and serious, but that's only part of the story. Earlier this year, a study by the National Association of Community Health Centers (NACHC) and the Robert Graham Center found that 56 million Americans – many of them with insurance – don't have ready access to primary care. Other research shows that half of Americans aren't getting the care they need, and the numbers are even worse for minorities and the poor. Something needs to change in how we spend our health care dollars. As a nation, we are desperate for investment in better care.

This study looks at one promising model, and the results are stunning. Conducted by NACHC, the Robert Graham Center, and Capital Link, *Access Granted: The Primary Care Payoff*, finds that Community Health Centers are a smart investment for a nation desperate for high quality, accessible and affordable health care.

Over 40 years ago, Community Health Centers began delivering health care to the medically underserved. 1,100 Community Health Centers now serve more than 16 million people in 6,000 plus sites located throughout all 50 states and U.S. territories. Community Health Centers never turn anyone away for care – regardless of insurance status or ability to pay. They are local, non-profit, community-owned and federally-supported.

Seven out of ten Community Health Center patients live in poverty. They serve one in every five low income uninsured individuals, one in nine Medicaid beneficiaries, and one in four low income minorities. They are true “health care homes,” with many also providing dental and mental health services, as well as case management, transportation, translation and outreach.

Community Health Centers are a sound investment. This study shows that investing in Community Health Centers results in significant savings to the health care system and substantial economic benefit for the communities they serve. Key findings include:

- Medical expenses for Community Health Center patients are 41% lower (\$1,810 per person annually) compared to patients seen elsewhere. This is due to their patient-centered and high quality care, reducing reliance on expensive emergency rooms.
- As a result, they save the health care system between \$9.9 and \$17.6 billion a year.
- If Congress invests in Community Health Centers today, an estimated 30 million Americans could have access to their high-quality by the year 2015, resulting in health care savings of between \$22.6 and \$40.4 billion annually.
- Community Health Centers generate an overall economic impact of \$12.6 billion, and they produce 143,000 jobs in some of the country's most economically deprived neighborhoods.
- If Community Health Centers reach 30 million patients by 2015, these figures would rise to an estimated total economic impact of \$40.7 billion and over 460,000 full-time equivalent jobs.

Every dollar spent in support of Community Health Centers reduces health disparities and costs while contributing to local economies. As America searches for an answer to its growing health care challenge, the success of Community Health Centers today provides valuable lessons for the health care investments of tomorrow.

Access Granted: The Primary Care Payoff

The U.S. health care system currently faces three major challenges that will ultimately impact the health of every American: inadequate access, sky-rocketing health care costs, and a host of economic and systemic pressures that have chipped away at what experts and consumers alike understand as quality. Despite a staggering \$2 trillion or 16% of the national economy that the U.S. spent on health care in 2005,¹ 44.8 million Americans are living without health insurance coverage² and an additional 16 million are underinsured.³ Even those who are adequately insured can face daunting barriers to care, such as lack of transportation, unaffordable out of pocket costs, language differences, lack of specialized “enabling” services to facilitate health care use, and a diminishing supply of primary care doctors. Only half of all Americans receive the care they require,⁴ and the persistence of health disparities affecting the poor and racial/ethnic minorities indicate that the problem is more far-reaching in scope than mere numbers can convey.

There is a growing consensus among the nation’s political and industry leaders that the U.S. health care crisis has shifted from the realm of the poor and disenfranchised, to the doorstep of middle-class America. As policymakers debate health care reform it is critical that our elected leaders and tax-payers consider the range of proposed solutions in terms of access, cost, and quality. We submit that a growing body of evidence converges on a single critical conclusion: that expanding access to primary care has a significant impact on health care outcomes, health care costs, and the national economy. Community Health Centers are a critical platform for expanding access and there is good evidence for their delivery of all three of these outcomes.

Most Americans agree that an expansion of health insurance coverage is needed, but coverage alone is no guarantee of access to health care. A strong and evenly distributed primary care workforce is essential for good health. America, sadly, is far from reaching that goal. This report is the second in a series developed by the National Association of Community Health Centers (NACHC), the Robert Graham Center of the American Academy of Family Physicians, and Capital Link. The first report, *Access Denied: A Look at Americans Medically Disenfranchised*,⁵ revealed that a staggering **56 million Americans – nearly one in five – lack adequate access to primary health care because of shortages of such physicians in their communities.** These “medically disenfranchised” live in every state; many of them are insured. **More importantly their numbers are increasing.** The medically disenfranchised and the millions of others who face additional barriers to care require a place and a relationship in which they can receive preventive care, make sense of their conditions, integrate their care, and be coached on changing their behaviors to improve their overall health. Such medical homes have been shown to prevent sickness, manage chronic illness, and reduce the need for avoidable, costlier care such as an emergency department visits or hospitalizations.⁶

Providing a medical home to the disenfranchised has been a hallmark of the national network of Community, Migrant, and Homeless Health Centers since their inception. For over 40 years, health centers have brought affordable health care services to communities overlooked and underserved by mainstream medicine. Health center patients – who total over 16 million in all – are predominately low income, uninsured or publicly insured, and members of racial or

ethnic minorities. In fact, health centers currently serve one in every five low income uninsured individuals, one in nine Medicaid beneficiaries, and one in four low income minorities. Most health centers have broadened the scope of conventional health care services to include dental and mental health services, as well as case management, transportation, translation, and outreach. Because they go above and beyond the role of a medical home, health centers may be more appropriately described as “health care homes.”

The public health benefits that health centers generate are well-documented in a growing body of research; less appreciated, until now, has been their economic value in terms of cost-savings, economic growth, and production of jobs. The Lewin Group recently found that taking full advantage of primary care medical homes would produce \$67 billion in annual health care savings.⁷ Health centers provide access to primary care for people, and by doing so, increase potential savings. This report – prepared jointly by NACHC, the Robert Graham Center, and Capital Link – finds that people who receive a majority of their medical care at a Community Health Center have significantly lower medical expenses than do people who receive the majority of their care elsewhere, due to health centers’ record as effective medical homes. Medical expenses for health center patients are 41% lower (\$1,810 per person) compared to patients seen elsewhere. As a result, NACHC estimates that **health centers save the health care system \$9.9 to \$17.6 billion a year – a figure that could grow to \$22.6 billion or even \$40.4 billion once health centers are expanded to serve a total of 30 million people by 2015.** These substantial savings are attributed to a host of factors, not least of which is a reduced reliance on hospital emergency departments among Medicaid beneficiaries and the poor – populations increasingly marginalized from primary health care services.

Perhaps even more remarkable are the substantial economic gains that can be realized locally from the investment in primary health care services. Today, **health centers nationally generate \$12.6 billion in economic benefits for their predominately low income, rural and inner-city communities**, through direct employment of local residents, goods and services purchased from local businesses, and capital development projects. Health centers also generate more than 143,000 jobs for local residents. **Expanding health centers to serve 30 million people by 2015 will produce \$40.7 billion in overall economic gains**, predominantly benefiting the very communities that need them most.

The Primary Care Payoff

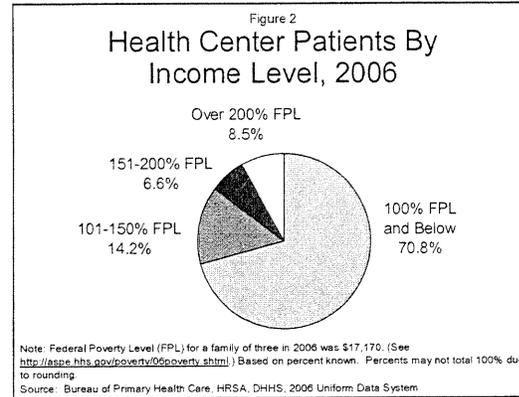
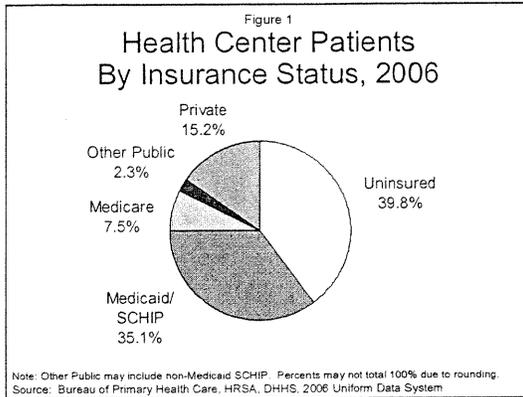
If every American made use of primary care, the health care system would see \$67 billion in savings annually.⁸ This reflects not only those who do not have access to primary care, but also those who rely extensively on costly specialists for most of their care, leading to inefficiencies in the system. More specifically, the expansion of medical homes can even more dramatically facilitate effective use of health care, improve health outcomes, minimize health disparities, and lower overall costs of care.⁹ Medical homes are patient-centered, regular, and continuous sources of care, coordinated by a team of medical professionals committed to quality improvement.¹⁰

While health insurance often facilitates access to care, it does not guarantee access to a usual source of care or to a medical home.¹¹ In fact, people who have a usual source of care but no health insurance actually receive more primary and preventive care than those who have insurance but no usual source of care. Not surprisingly, those who have both fare best.¹² Having a medical home is associated with better utilization and outcomes, including recognizing the need to seek care, receiving earlier and more accurate diagnoses, reduced emergency department use, fewer hospitalizations, lower overall costs, better prevention, fewer unmet needs, and higher patient satisfaction.¹³ Moreover, primary care characterized by enhanced accessibility, continuity, and interpersonal relationships with physicians is associated with better self-rated general and mental health, and is found to mitigate disparities related to income, race and ethnicity, and insurance inequalities.¹⁴ Low income, minority, and uninsured populations would especially benefit from the expansion of medical homes because their health is more likely to be compromised and they run the greatest risk of using costly hospital-based care for avoidable conditions.¹⁵

Clearly, medical homes play an important role in the balancing of health care cost, access, and quality. With growing numbers of uninsured and underinsured individuals, policymakers will want to pay close attention to where those individuals are able to turn for affordable, accessible primary health care, both now and after they gain coverage. One such viable solution is the national network of Community, Migrant, and Homeless Health Centers. The Health Centers Program is designed to overcome access, quality, and cost challenges in a health care marketplace that too often leaves the most vulnerable behind. The program accomplishes this by supporting the development and operation of local health centers that:

- Remove barriers by being located in areas designated as medically underserved and where too few physicians and other health care sources locate,
- Serve all without regard to insurance coverage or ability to pay,
- Customize their services to meet the specific health care and cultural needs of their patients, and
- Offer services that make accessing health care easier, such as transportation, translation, case management, health and nutrition education, and home visits.

Health center patients are predominately low income, uninsured or publicly insured, and members of racial or ethnic minorities. Nearly 40% of health center patients are uninsured, but because they have access to care, they enjoy better health.¹⁶ Another 35% of health center patients depend on Medicaid (Figure 1). Moreover, as shown in Figure 2, 71% of health center patients have family incomes at or below 100% of poverty. Two-thirds of health center patients are members of racial or ethnic minorities.



Health centers also go above and beyond the traditional role of preventive medicine, providing dental, behavioral health, pharmacy, and community outreach service. This longstanding mission of providing comprehensive health care under one roof, engagement in quality improvement initiatives, delivery of patient-centered care, and a “team approach” to care, have led to improved screening rates and outcomes, as well as reduced health care disparities, for their patients.¹⁷ In fact, numerous independent experts have found health centers’ quality of care is as good as or better than the quality of other primary care providers.¹⁸

By serving as effective medical homes – indeed, health care homes – health centers have the ability to create a much more efficient health care system. Recognizing the growing need for health center care, especially among the 56 million medically disenfranchised who come from all walks of life, NACHC’s **Affordable Comprehensive Care, Expanded to Strengthen Service (ACCESS) for All America** plan charts a course for future health center growth. The ACCESS for All America plan guides future increases in federal support for the Health Centers Program and the accompanying policy priorities necessary for continued expansion. By consistently escalating their rate of growth over the next eight years, health centers can become health care homes for nearly twice the number of patients currently served. **An estimated 30 million Americans could have access to high-quality primary care at a health center by the year 2015.** Eventually, the plan envisions program growth to reach all Americans who are without a health care home today, with health centers serving as a model and innovation leader for what primary care practice could become.

A Smart Investment in Health Care and Communities

A growing body of literature on the performance of health centers continually points to the fact that they are highly cost effective, generating savings to payers, patients, and communities.¹⁹ In light of these findings, and the fact that health centers, by their very nature, function as medical homes – indeed, as health care homes – which have been documented to generate cost savings while improving outcomes, we sought to determine how much health centers save the health care system.

The Robert Graham Center research team found that people who receive the majority of their medical care at a health center have significantly lower overall medical expenses than do people who receive the majority of their care elsewhere. **Annual medical expenses for health center patients are 41% lower (\$1,810 per person) compared to patients seen elsewhere.** The beneficiaries of these savings include both patients and payers. Payers include insurers, as well as federal and state governments who contribute to public insurance programs such as Medicaid, the State Children's Health Insurance Program (SCHIP), and Medicare. State and county governments, which bear the cost of the un- and underinsured, also benefit from the savings generated by health centers. These savings occur despite the fact that health center patients are more likely to be poor and uninsured or publicly insured than patients relying on other health care providers. Moreover, health centers' lower expenditures occur even while health centers provide important enabling services – such as transportation, case management, translation, outreach, health education, and home visits – that facilitate the use of needed health care.

The results in Table 1 show differences in total medical expenditures, not just expenditures for office-based visits. This includes hospital and outpatient visits, emergency care, medications, and out-of-pocket health care spending. We estimate average annual expenditure of \$4,379 in 2004 for persons who obtain office based care outside of a health center compared to \$2,569 for persons who obtain their care mainly in a health center. The \$1,810 difference in total cost produces an estimated overall difference of approximately \$5.8 billion for persons who routinely obtain care from a health center today. This estimate is likely quite conservative due to the evident undercount of people cared for by health centers in the MEPS. Accordingly, when extrapolating these figures to reflect actual patients of federally-funded health centers, NACHC estimates that health centers are currently generating **savings between \$9.9 and \$17.6 billion.**²⁰ NACHC's estimates do not account for the roughly 1.5 million patients served by non-federally funded health centers. Under NACHC's ACCESS for All America health center expansion plan, **health centers would generate at least \$22.6 billion, and perhaps as much as \$40.4 billion, in savings annually by 2015.**²¹

Methodology

To understand the patient centered effects of health centers as medical homes, we analyzed data from the most recent Medical Expenditure Panel Survey (MEPS) data available (2004). This survey is a nationally representative sample survey of all non-federal and non-institutionalized people, meaning that its results can be weighted to reflect health care experiences for most people living in the United States. It is maintained by the federal Agency for Healthcare Research and Quality. We identified survey respondents who reported visiting a Community Health Center or a neighborhood/family health center in the 2004 calendar year. Of the 213 million persons who had an office visit in 2004, we estimate that about 6.84 million had at least one visit to a Community Health Center. This figure is lower than the 2004 estimate of 11.6 million health center medical users reported by the federal Health Resources and Services Administration,* indicating that our estimates will be conservative. We were interested in understanding how many people of this total might depend on health centers as their medical or health care home. For this we focused on health center clients who obtained the *majority* of their care in a Community Health Center, a group we estimate at about 3.21 million people. While this is clearly lower than the actual number of health patients who rely on the health center as a medical home, the MEPS allows us to confidently measure the average and median savings for people whose medical home is a health center. We also assessed how this relationship was associated with emergency department visits.

* Bureau of Primary Health Care, Health Resources and Services Administration, DHHS. "Uniform Data System National Trend Data for Years 1996 – 2005." <http://bphc.hrsa.gov/uds/nationaldata.htm>

There are substantial differences in the potential savings across the board among different population groups (Table 1, with a more detailed table in Appendix A). The largest differences were among African Americans (\$2,312), the poor (\$2,202), those in good/fair/poor health (\$2,038), and those ages 35 to 64 (\$2,021). Health centers also generate substantial savings for those who rely on Medicaid and the uninsured. These findings demonstrate the direct impact of health centers on traditionally underserved and vulnerable patients. Interestingly, health centers generate large expenditure savings for people with private insurance. Health center patients with private insurance generally have limited coverage and likely face high levels of cost-sharing that characterize the types of private insurance coverage held by low income individuals generally. In fact, private insurance pays health centers less than 60% of the cost of treating patients.²² Consequently, health center patients who are privately insured struggle with fewer options in specialty services than privately insured patients elsewhere.

Table 1
A Comparison of Per Patient Medical Expenditures,
Health Center vs. Non-Health Center Patients, Calendar Year 2004

	Estimate of Population (1,000s)		Mean Total Medical Expenditures		
	Not-CHC	CHC	Not-CHC	CHC	Difference
Overall	208,016	3,206	\$4,379	\$2,569	\$1,810
Race					
Hispanic	22,559	1,092	\$2,680	\$1,133	\$1,548
NH, White	150,951	1,317	\$4,875	\$4,478	\$397
NH, Black	21,473	666	\$3,680	\$1,368	\$2,312
Poverty					
Not Poor	184,479	2,157	\$4,292	\$2,429	\$1,863
Poor	23,537	1,049	\$5,060	\$2,858	\$2,202
Insurance					
Medicaid	25,644	983	\$3,128	\$2,132	\$996
No Insurance	21,958	1,200	\$2,138	\$1,216	\$922
Private	121,407	638	\$3,370	\$1,456	\$1,914
Reported Health					
Excellent/Very Good	63,551	931	\$2,178	\$757	\$1,421
Good/Fair/Poor	144,465	2,275	\$5,348	\$3,310	\$2,038
Age					
0-17	51,126	1,025	\$1,416	\$1,217	\$198
18-34	38,539	883	\$2,753	\$954	\$1,798
35-64	83,696	989	\$5,130	\$3,108	\$2,021

Note: All data are weighted to produce population estimates for 211 million people in the U.S. who received care anywhere in 2004. Of these, 3.2 million received the majority of their care in a health center. Median values give a better estimate of the midpoint costs, and difference from the mean, or average, shows just how wide the differences in peoples' health care spending can be. The average difference is the figure to focus on in terms of how much health centers save per person. Some groups of people, including Medicare patients, have been removed due to inadequate sample size. The overall difference and all reported subpopulation differences between the CHC and non-CHC group reported in the table are statistically significant ($p < .05$). For more information, see Appendix A.

Source: 2004 MEPS.

Health Centers Reduce Emergency Department Use Among Vulnerable Populations

A wealth of literature documents that health centers lower Emergency Department (ED) visits for their patients, particularly among the uninsured who live near a health center.²³ State and regional Medicaid studies have also revealed reductions in ED visits among health center users,²⁴ and those who rely on health centers as their usual source of care.²⁵ Furthermore, over \$18 billion dollars are wasted annually for ED visits that are non-urgent or primary care treatable and could have been treated in a health center.²⁶

Using the MEPS to look at peoples' experiences with health care, we found that health centers are lowering ED use for certain, key subgroups. Poor and Medicaid beneficiaries who had a health center as their usual source of care were significantly less likely to have an ED visit. For Medicaid beneficiaries, this was a 35.5% relative reduction in ED visits. For the poor, there was a 31.6% reduction. The findings for poor and Medicaid beneficiaries are similar to the prior state and regional studies.²⁷ In some cases, health centers may facilitate more appropriate ED use or may have to direct patients to the ED as a way to get to subspecialty care. Others may postpone needed emergency care if they are not directed there by health center providers.

	Any ER Use Calendar Year	
	Not-CHC	CHC
Overall	16.6%	17.1%
Race/Ethnicity		
Hispanic	15.4%	13.9%
Non Hispanic, White	16.6%	21.4%
Non Hispanic, Black	20.8%	13.0%
Income		
Not Poor	15.7%	17.5%
Poor	24.0%	16.4%
Insurance Type		
Medicaid	21.4%	13.8%
No Insurance	19.0%	18.3%
Private	13.3%	18.1%
Reported Health		
Excellent/Very Good	12.4%	10.7%
Good/Fair/Poor	18.5%	19.7%
Age		
0-17	15.5%	15.9%
18-34	18.2%	17.8%
35-64	14.7%	18.0%

Note: All data are weighted. The overall difference between CHC and Not CHC is not statistically significant. Only the differences for Poor (24.0% vs. 16.4%) and Medicaid (21.4% vs. 16.4%) are statistically significant ($p < .05$). The difference observed for other groups are not sufficiently large for us to conclude that there is a true difference.

Source: 2004 MEPS.

Community Health Centers as Economic Engines

While health centers have long been recognized for the critical role they play in providing access to quality primary health care, the contributions they make to the economic viability and growth of the communities in which they are located are often less well known. Health centers employ people in their communities, including critical entry-level jobs, training and career-building opportunities that are community-based. Health centers also purchase goods and services from local businesses and engage in capital development projects. Every dollar spent and every job created by health centers has a direct impact on their local economies. Health centers also serve as anchors for existing and new businesses and investments in the community. In addition to the direct economic effects, they also provide indirect economic effects through their purchases of goods and services from other local business, as well as induced economic effects which represent the response by all local industries caused by the expenditures of new household income generated by the direct and indirect effects. To give an everyday example, imagine a health center that purchases waiting room chairs from a local furniture store (direct effect). The furniture store in turn purchases paper from an office supplies store to print receipts and a truck from a car dealer to make deliveries (indirect effect). The furniture store, the office supplies store, and the car dealership all hire staff and pay them salaries to help run the various businesses. These employees spend their income on everyday purchases such as groceries, clothing, cars, and TVs (induced effect).

Federally-supported health centers injected \$7.3 billion of operating expenditures directly into their local economies in 2005, and directly generated 89,922 full-time equivalent jobs. These expenditures produced additional indirect and induced economic activity of \$5.3 billion, and created an estimated additional 53,152 full-time equivalent jobs. Thus, **the overall economic impact of all health centers was \$12.6 billion, and they produced 143,000 jobs in some of the nation's most economically challenged neighborhoods** (Table 3). Because this analysis does not include the more than 100 health center organizations that do meet all federal requirements but do not receive federal health center grant funding (commonly known as "FQHC Look-alikes"), this is a conservative estimate. Methodology and further explanation can be found in Appendix B.

	Total Economic Impact	Employment (Full Time Equivalents)
Direct	\$7,261,975,096	89,922
Indirect	\$1,124,387,922	10,233
Induced	\$4,172,328,893	42,918
Total	\$12,558,691,911	143,073

Note: Total Economic Impact includes Value-Added Impact. For an explanation, see Appendix B. Payroll (Value-Added), estimated at 73% of Operating Expenditures, is based on Capital Link's financial database Fiscal Year 2005 median value for health centers nationally. Each Full Time Equivalent (FTE) denotes one full time employee. Total FTEs denote total workforce generated by health centers. For the definition of FTE, see Appendix B.

Source: Capital Link, Inc with MIG, Inc. IMPLAN Software Pro version 2.0.1025 and 2004 structural matrices with the 2002 state level multipliers. Direct CHC Operating Expenditures derived from Bureau of Primary Health Care, HRSA, DHHS, 2005 Uniform Data System.

Through the ACCESS for All America health center expansion initiative, federally-supported health centers are projected to serve 30 million patients by 2015, with total operating expenditures estimated at \$23.5 billion.²⁸ **These expenditures are projected to generate an estimated total economic impact of \$40.7 billion along with over 460,000 full-time equivalent jobs in 2015.** The economic impact of health centers underscores how their multiple roles as service provider, employer, and local business create a unique niche of opportunities in the surrounding community. Health centers also generate additional economic effects through capital projects and the resulting expansion of services. When a health center undertakes a capital expansion and/or renovation project, a significant economic revitalization occurs within the local community. In most instances, the capital developments and facility expansions of health centers act as catalysts for significant economic revitalizations and create a “ripple effect” of positive change in communities. This “anchor concept” is similar to the effect a large department store has in a shopping mall – the health center attracts investment and other businesses to the community. These long-term economic stimulus effects will accrue in addition to the obvious benefit of increased health services to poor, low income, and racially and ethnically diverse communities of both urban and sparsely populated rural areas.

The total economic impact of any particular health center varies according to size, urban and rural location, state, and other factors. We therefore sought to determine the average impact of a large and small health center. The tables below show the estimated 2005 economic impact of two such typical health centers, one urban and one rural. The average large urban health center (one with an annual budget of about \$12 million) generates a total economic impact of \$21.6 million for its local community, while the average small rural health center (defined by an annual budget of about \$3 million) generates about \$3.9 million. Depending on the characteristics and dynamics of a particular local economy, there are often substantial regional variations in the economic impact of the same amount of expenditures. As such, \$3 million of annual expenditures of a health center located in a large, densely populated and economically thriving area is likely to have a larger total economic impact than the same amount of annual expenditures in an area that may be less densely populated and/or economically depressed. The application of county level multipliers, which take into account the local characteristics of an economy, will present a more accurate picture of a particular health center’s economic impact within its region.

Table 4
Total Economic Activity Stimulated by an
Average Large Urban and Small Rural Health Center, 2005

	Large Urban Health Center		Small Rural Health Center	
	Total Economic Impact	Employment (Full Time Equivalents)	Total Economic Impact	Employment (Full Time Equivalents)
Direct	\$ 12,252,801	187	\$ 3,333,321	45
Indirect	\$ 2,273,314	24	\$ 261,600	3
Induced	\$ 7,114,112	70	\$ 287,124	4
Total	\$ 21,640,227	281	\$ 3,882,045	52

Note: Total Economic Impact includes Value-Added Impact. For an explanation, see Appendix B. Actual health center with an annual budget of \$12.3 million (large) and \$3.3 million (small), based on Capital Link's financial information database. Each Full Time Equivalent (FTE) denotes one full time employee. Total FTEs denote total workforce generated by health centers. For the definition of FTE, see Appendix B.

Source: Capital Link, Inc with MIG, Inc. IMPLAN Software Pro version 2.0.1025 and 2004 structural matrices with 2004 county level multiplier. Direct CHC Operating Expenditures derived from Fiscal Year 2005 audited financial statements.

Appendix C depicts the total economic impact by state. The two states with the largest number of health centers had the largest total economic impact; **California** health centers generated over \$2 billion and **New York** over \$1.1 billion. The seven states with the most health centers (**California, Florida, Illinois, Massachusetts, New York, Texas, and Washington**) generated about half of the total economic impact. Predominately rural states also see a substantial economic benefit driven by health centers. In 13 states and Puerto Rico, at least 75% of grantees are located in rural areas and together they generate a combined impact of \$1.8 billion. Furthermore, health centers located in rural areas are often among the largest employers in their communities.

Important Challenges

The promise of health center expansion relies on a strong clinical workforce, as well as funding for health center capital projects. Today, the failure of the American health care system to adopt a primary care focus results in poorer health outcomes for all Americans compared with our nation's industrialized peers, and at a much greater cost. Evidence comparing the U.S. with other industrialized nations has found that the U.S. ranked lowest in its primary care functions and lowest in health care outcomes, but highest in health care spending.²⁹ Having an adequate number of primary care physicians carries important personal and population health benefits, specifically higher rates of preventive screenings and lower rates of morbidity and mortality.³⁰ Higher primary care physician-to-population ratios and improved primary care quality also minimize health care disparities related to income and race/ethnicity. Such disparities are often co-occurring and are well-documented factors contributing to poorer access to care, poorer health outcomes, and even death.³¹ Health centers responded to the President's call to double capacity to care for people over the last five years, and further expansion is needed to meet the growing demand. This effort, however, is hampered by a persistent shortage of primary care

physicians that will have broad and far reaching impact on the entire health care infrastructure.³² The implications of the looming primary workforce shortage will be the focus of the final report in this series.

Future and existing health centers require support for capital and construction projects. Without investment, health centers cannot achieve the technological improvements and quality measurements that ensure high quality of care. Moreover, NACHC and Capital Link surveys reveal that one in three health centers currently operates in buildings that are over 30 years old, while one in five are in buildings at least 40 years old. Additionally, about two-thirds of health centers nationally need to modernize or expand their buildings or construct new facilities. Yet construction, modernization, or expansion of health centers cannot be paid for with federal grant dollars. Health centers have limited financial capital to undertake much needed facility improvements, expansions, and new site development. Preliminary results from a nationwide study recently conducted by Capital Link show an estimated \$4.4 billion in capital development needs over the next 5 years for health centers to maintain just the current level of growth. Taking into account the growth envisioned under the ACCESS for All America health center expansion initiative, overall capital needs from 2008 through 2015 are more likely to be between \$10 billion and \$11 billion, considering additional costs for new or expanded facilities and equipment, including Health Information Technology.

Conclusion

Despite measurable improvements in health care accessibility achieved by health centers, millions of Americans still do not have a medical home. Health centers are expanding to reach more people by removing geographic, language, and cultural barriers for patients who do not have a health care home. In the absence of fundamental health system change, continued growth of the un- and underinsured populations and rising health care costs only serve to elevate the importance of health centers as a nationwide system of care. Health centers provide personalized, coordinated, comprehensive, and culturally appropriate care to communities that are otherwise locked out of the system. They have conclusively demonstrated their capacity to reduce costs, improve access and quality, and reduce disparities in communities all across America. Even as policymakers work to develop solutions to the growing number of uninsured Americans, a further expansion of health centers can be undertaken immediately, paving the way for expanded insurance coverage by helping to successfully convert coverage into improved health care access that brings about better health and lower overall health care costs.

Health centers' mission to serve all regardless of ability to pay or insurance status brought the promise of good health to people like Shirley Dorsey, 51, an uninsured health center patient in Baltimore who recently told a *USA Today* reporter, "I have no idea where else I would go for health care. It's important to have some place where poor people who don't have insurance can come and not be afraid of being turned away."³³

This report finds that health centers already save billions in avoidable health care spending, and that further expanding and strengthening health centers will help to reduce overall health care spending significantly, in part because of their lower cost of care and ability to reduce

emergency department use among key at-risk populations – and it leads to far better care. At the same time, these expansions will bring vital economic benefits to underserved communities that desperately need them. Health centers are therefore an excellent public investment that generates substantial benefits for patients, communities, insurers, governments, and taxpayers – indeed, for all of America.

Appendix A
Economic Impact Analysis Definition of Terms

**Medical Expenditure Differences of Community Health Center Patients
Compared to Patients of Other Providers, Calendar Year 2004**

	Estimate of Population (in 1,000s)		Mean Total Medical Expenditures Calendar Year			Median Total Medical Expenditures Calendar Year		
	Not-CHC	CHC	Not-CHC	CHC	Difference	Not-CHC	CHC	Difference
Overall	208,016	3,206	\$4,379	\$2,569	\$1,810	\$1,380	\$421	\$959
Race								
Hispanic	22,559	1,092	\$2,680	\$1,133	\$1,548	\$669	\$282	\$387
NH, White	150,951	1,317	\$4,875	\$4,478	\$397	\$1,667	\$616	\$1,051
NH, Black	21,473	666	\$3,680	\$1,368	\$2,312	\$971	\$395	\$576
Poverty								
Not Poor	184,479	2,157	\$4,292	\$2,429	\$1,863	\$1,404	\$451	\$953
Poor	23,537	1,049	\$5,060	\$2,858	\$2,202	\$1,122	\$351	\$771
Insurance								
Medicaid	25,644	983	\$3,128	\$2,132	\$996	\$691	\$292	\$399
No Insurance	21,958	1,200	\$2,138	\$1,216	\$922	\$569	\$350	\$219
Private	121,407	638	\$3,370	\$1,456	\$1,914	\$1,251	\$629	\$622
Reported Health								
Excellent/Very Good	63,551	931	\$2,178	\$757	\$1,421	\$759	\$270	\$490
Good/Fair/Poor	144,465	2,275	\$5,348	\$3,310	\$2,038	\$1,900	\$614	\$1,286
Age								
0-17	51,126	1,025	\$1,416	\$1,217	\$198	\$498	\$223	\$275
18-34	38,539	883	\$2,753	\$954	\$1,798	\$1,002	\$309	\$693
35-64	83,696	989	\$5,130	\$3,108	\$2,021	\$2,002	\$820	\$1,182

Note: All data are weighted to produce population estimates for 211 million people in the US who received care anywhere in 2004. Of these, 3.2 million received the majority of their care in a health center. Some people, including Medicare patients, have been removed due to inadequate sample size. The median values are lower than the means because of a number of persons with very high medical costs. Median values give a better estimate of the midpoint costs, and difference from the mean, or average, shows just how wide the differences in peoples' health care spending can be. The average difference is the figure to focus on in terms of how much health centers save per person. The overall difference and all reported subpopulation differences between the CHC and non-CHC group reported in the table are statistically significant ($p < .05$).

Source: 2004 MEPS.

Appendix B

Economic Impact Analysis Definition of Terms

The *direct* economic impact is defined as the total operating expenditures of the health centers. Industries producing goods and services for consumption, in this case the health centers, purchase goods and services from other producers. These other producers, in turn, purchase goods and services and so on, thereby generating an *indirect* economic impact. Effects of increased household spending are called *induced* economic impact.

This analysis uses the “multiplier effect” – and more specifically a complete integrated economic planning tool called IMPLAN (Impact analysis for PLANning) – to capture the indirect business effects of a health center’s business operations. IMPLAN was developed by the U.S. Department of Agriculture and the Minnesota IMPLAN Group (MIG) and employs multipliers, specific to each county and each industrial sector, to determine total output, employment, and earnings.

Output Multiplier: measures the increase in total output generated in a defined regional economy for each dollar spent by a given industry. For example, if the multiplier for health care services is 3.0, then every dollar spent by a health care center would create \$3.00 in economic activity in the local community.

Value-added (Earnings) Multiplier: measures the earnings (purchasing power) that an industry generates, through payroll and the multiplier effect, for households employed by all industries within a defined area. Consequently, the Value-Added impact represents the amount of dollars that aggregate households in a given area will gain in household income based on the dollars put out into that community by a Community Health Center through operating expenditures.

Employment Multiplier: measures the number of jobs generated across all industries by the activity within a given industry needed to deliver \$1 million of products or services to a defined geographic area. The multiplier produces an estimate of the total number of new jobs that a local economy can support in all industries due to the dollars being injected into the community by the health center. In other words, the economic activity of the health center stimulates job growth because of the “snowballing” of the dollars expended.

Full –Time Equivalent (FTE) Employee: of 1.0 means that the person is equivalent to a full-time worker. In an organization that has a 40 hour work week, a person who works 20 hours per week (i.e., 50 percent time) is reported as “0.5 FTE. FTE is also based on the number of months the employee works. An employee who works full time for 4 months out of the year would be reported as “0.33 FTE” (4 months/12 months).

IMPLAN’s output, earnings, and employment figures are aggregated based on direct, indirect, and induced economic effects:

Direct effects: represents the response for a given industry (in this case, Total Operating Expenditures of Community Health Centers with the exception of Nevada).

Indirect effects: represents the response by all local industries caused by “the iteration of industries purchasing.”

Induced effects: represents the response by all local industries to the expenditures of new household income generated by the direct and indirect effects.

Within the field of economics, the multiplier effect is used to determine the impact of each dollar entering, impacting and eventually leaving a defined economy (i.e., “dollar turnover”). This results in increased production and expenditures, employment creation and attraction, and retention of new residents, businesses and investments. State multipliers are factored in to estimate the spin-off activity from the expenditures of the Community Health Center in providing health care services.

The total economic impact of \$12.6 billion is likely is a conservative estimate of the total economic impact of all health centers nationally since it includes only the federally-funded Community Health Centers located in the U.S. and Puerto Rico for which data is available through the 2005 Uniform Data System (UDS). There are approximately an additional 150 plus health centers across the country that are either not federally funded or newly funded but serve the same or similar communities. These health centers also have a considerable economic impact.

Appendix C
Total Health Center Economic Impact by State, 2005

State	Number of Federally-Funded Health Centers	Percent Rural	Number of Delivery Sites	Total Economic Impact	Total Employment (FTEs)*
Alabama	15	60%	115	\$121,382,364	1,541
Alaska	24	96%	107	\$144,528,348	1,376
Arizona	14	79%	86	\$286,830,888	3,277
Arkansas	12	83%	60	\$78,795,465	1,068
California	97	40%	716	\$2,037,609,155	22,395
Colorado	15	53%	135	\$373,364,151	4,069
Connecticut	10	20%	100	\$199,959,243	2,168
Delaware	3	33%	8	\$15,092,736	196
District of Columbia	3	0%	43	\$71,586,512	833
Florida	36	50%	202	\$537,168,777	6,434
Georgia	23	61%	105	\$163,682,141	1,873
Hawaii	11	64%	51	\$117,206,087	1,418
Idaho	10	100%	51	\$64,286,155	854
Illinois	33	18%	314	\$658,087,959	7,097
Indiana	13	15%	72	\$123,745,679	1,596
Iowa	9	33%	51	\$77,082,402	978
Kansas	9	78%	27	\$35,089,879	514
Kentucky	14	64%	66	\$145,069,297	1,850
Louisiana	18	56%	48	\$78,432,187	1,028
Maine	16	88%	67	\$95,132,259	1,203
Maryland	13	38%	80	\$201,502,347	2,123
Massachusetts	33	12%	285	\$610,958,760	6,607
Michigan	26	42%	141	\$323,832,254	3,741
Minnesota	12	25%	69	\$127,925,653	1,407
Mississippi [†]	19	84%	141	\$148,879,146	1,939
Missouri	17	47%	104	\$278,798,343	3,228
Montana	12	83%	53	\$44,619,157	593
Nebraska	5	40%	15	\$34,274,030	459
Nevada	2	50%	32	\$33,600,556	438
New Hampshire	8	63%	42	\$59,285,597	746
New Jersey	17	0%	79	\$225,955,243	2,337
New Mexico	14	79%	102	\$192,466,789	2,474
New York	47	11%	425	\$1,143,732,348	11,745
North Carolina	24	79%	112	\$203,433,165	2,519
North Dakota	4	75%	27	\$14,662,971	203
Ohio	23	35%	115	\$232,736,644	2,726
Oklahoma	9	67%	28	\$59,581,749	764
Oregon	21	62%	131	\$292,735,806	3,415

State	Number of Federally-Funded Health Centers	Percent Rural	Number of Delivery Sites	Total Economic Impact	Total Employment (FTEs)*
Pennsylvania	29	38%	164	\$337,934,781	3,968
Puerto Rico	20	80%	49	\$143,823,565	2,177
Rhode Island	7	43%	44	\$67,410,498	878
South Carolina	21	67%	132	\$201,023,876	2,529
South Dakota	7	71%	36	\$33,223,901	420
Tennessee	22	64%	111	\$171,825,379	2,037
Texas	43	47%	258	\$560,203,991	6,989
Utah	11	64%	30	\$60,401,822	688
Vermont	3	67%	20	\$34,069,199	410
Virginia	21	67%	88	\$143,116,890	1,778
Washington	23	57%	209	\$610,452,536	6,901
West Virginia	27	96%	128	\$294,209,387	2,551
Wisconsin	15	33%	59	\$229,500,072	2,313
Wyoming	5	80%	12	\$18,383,772	205
U.S.	952	52%	5,703	\$12,558,691,991	143,076

* Total Employment is in Full Time Equivalents (FTE). Each FTE denotes one full time employee. Total FTEs or employment denote total workforce generated by health centers. For the definition of FTE, see Appendix B.

Note: All numbers in the above table include direct, indirect, and induced economic impacts. Total economic impact includes Value-Added impact. For an explanation, see Appendix B. Estimates are based on UDS financial and FTE data for federally-funded health centers only and may vary from other state estimates that may include non-federally-funded health centers and reference different financial and FTE data sources. U.S. total includes Puerto Rico but not other territories given unavailable data.

Sources: Based on 2005 Uniform Data System, Bureau of Primary Health Care, HRSA, DHHS. Nevada health center data provided directly from Nevada health centers. Prepared by Capital Link, Inc using MIG, Inc. IMPLAN Software Pro version 2.0.1025 and 2004 structural matrices with the 2002 state level multipliers.

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National Association of
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The **National Association of Community Health Centers** (NACHC) represents the nation's health safety net: over 1,100 Community Health Centers, serving over 16 million people at 6,000 sites located throughout all 50 states and U.S. territories. Community Health Centers provide health care to low-income and medically underserved Americans, and they never turn anyone away – regardless of insurance status or ability to pay. They are local, non-profit, community-owned and federally funded.

NACHC is the leading source for information, data, research and advocacy on key issues affecting Community Health Centers. NACHC provides education, training, technical assistance and leadership development to promote excellence and cost-effectiveness in health delivery practice and community board governance. In addition, it builds partnerships that stimulate public and private-sector investment in quality health care services.

For more information on NACHC and Community Health Centers, please visit www.nachc.com.



The Robert Graham Center

The **Robert Graham Center** is a health policy research center that is part of the American Academy for Family Physicians and operates with editorial independence.

The Graham center exists to improve individual and population health by enhancing the delivery of primary care. The center aims to achieve this mission through the generation or synthesis of evidence that brings a family medicine and primary care perspective to health policy deliberations from the local to international levels. The Graham center focuses their efforts on themes such as: the value of primary care, health access and equity, delivery and scope of the medical home, and healthcare quality and safety.

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Capital Link is dedicated to assisting health centers in accessing capital for building and equipment projects and to providing extensive technical assistance to health centers throughout the capital development process. From financial and market feasibility reviews to program, staff & facility planning and financing assistance, Capital Link assists health centers in strengthening their abilities to plan and carry out successful capital projects.

To date Capital Link has assisted 106 individual health centers in obtaining grants and loans for capital projects totaling more than \$436 million. Through this network, and as a NACHC partner, we are able to address health center individual capital project needs more readily.

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