

THE GEORGE  
WASHINGTON  
UNIVERSITY  
MEDICAL CENTER  
WASHINGTON DC

# **Primary and Preventive Healthcare: A Critical Path to Healthcare Reform for Florida**

## *The Role of Florida's FQHCs*

**Sara Rosenbaum, JD  
Peter Shin, PhD, MPH  
Brad Finnegan, MPP, PhD (cand.)  
Ramona Whittington, MPH (JD cand.)**

**The George Washington University  
School of Public Health and Health Services  
Department of Health Policy  
Geiger Gibson Program in Community Health Policy**

**January 2009**

## Executive Summary

Florida's health care system faces numerous challenges: a high proportion of residents without health insurance, a declining supply of primary care physicians at the same time that the state faces a growing need for high quality and cost efficient care for uninsured persons, and a growing emphasis on medical homes, especially for culturally diverse patients with complex chronic conditions. Nearly 3.8 million Florida residents lack health insurance, while more than 8 million lack access to a regular source of primary health care.

Assuring access to timely and high quality primary health care is a key dimension of any health reform plan. The importance of focusing on primary care in health reform arises from the relationship between primary care on one hand and improved health status, reduction of population health disparities, and cost control on the other. The health care safety net represents one of the state's most important assets in any broader effort to improve the quality and accessibility of primary health care. Florida's safety net consists of hospital outpatient clinics, emergency departments, rural health clinics, public health and county volunteer clinics, and federally-qualified health centers (FQHCs). As in other states, FQHCs merit particular focus; their community location and mission and the affordability and comprehensiveness of their care make them a key foundation of primary health care reform.

FQHCs repeatedly have been found to be especially effective in terms of both cost and quality, due to their community accessibility and their ability to furnish timely and high quality comprehensive primary health care and "enabling services" such as transportation, case management, and translation, in a culturally appropriate manner.

Health centers repeatedly have been recognized for their capacity to serve as medical homes to diverse populations, particularly patients with serious and long term chronic conditions that can be effectively managed in community settings. Extensive evidence suggests significant potential savings from investing in health centers. Indeed, this analysis finds that community based primary care could result in an estimated savings of between \$720 million and \$794 million because of improved access, and a nearly \$5 billion reduction in emergency care expenditures.

Despite their importance to the state's overall health care system (in 2006 Florida's health centers served an estimated 1 in 9 state residents) funding shortfalls limit their ability to reach the state's 8 million state residents without a regular source of health care. Between 1996-2006, when the number of uninsured residents grew by 32 percent, the number of uninsured patients served by FQHCs grew by 51 percent.

Our analysis supports two recommendations. First, Florida's health reform efforts should focus not only on improving health insurance coverage but also on investing in a strong system of medical homes for all state residents. Second, FQHCs represent an especially important and cost-effective foundation for the primary care safety net but requires further investment to meet the needs of increasing uninsured and underserved residents.

## **Introduction**

A strong system of primary health care that can assure all patients of a medical care home is a fundamental goal of any health reform initiative, whether state or federal. This analysis examines the importance of comprehensive primary care to Florida's health care system, and the foundational role played by the state's 42 Federally Qualified Health Centers (FQHC) in achieving this goal for its most vulnerable populations.

The analysis begins with a summary of the literature regarding the role and importance of primary health care. It then presents an overview of health care access and quality challenges in Florida, as well as an overview of the state's safety net providers. Federally-funded health centers are particularly noted for their effectiveness not only with respect to their role in anchoring access to preventive care in the primary care safety net, but also in how they effectively manage patients with chronic illnesses that uncontrolled, can lead to premature and preventable disability and death as well as uncontrolled costs. The analysis concludes with a discussion of ways in which the reach and strength of the primary care safety net might be advanced through health reform.

## **The Role of Primary Health Care**

There has been an increasing emphasis on primary care due in part to several recent studies on the effectiveness of the medical home model.<sup>1</sup> Assuring access to timely and high quality primary health care is a core element of any endeavor to improve health outcomes, reduce population health disparities, and control costs. An extensive body of literature supports the idea that primary care is associated with an increase in positive health outcomes and a decrease in socioeconomic health disparities; the literature also suggests that comprehensive primary health care may reduce mortality rates for conditions that are most strongly associated with population health disparities, such as heart disease and cancer.<sup>2</sup>

The benefits of primary health care models embodying the key attributes identified by Grumbach and Bodenheimer have been exhaustively researched by Barbara Starfield, Leiyu Shi, and James Macinko. Their seminal literature review of the impact of primary health care underscores that regardless of which classic measure of primary health care is used in health services research — primary care physician supply, having a regular source of care, or receiving health care in settings with primary care attributes — the results are uniform: *The better the primary care, the greater the cost savings, the better the health outcomes, and the greater the reduction in health and health care disparities.*<sup>3</sup> The most critical elements of the authors' synthesis can be summarized as follows:

### *Physician supply*

- Studies show a direct relationship between primary care physician supply and health outcomes, rates of mortality from cancer and stroke, infant mortality, and heart disease and low birth weight.
- Rural counties with higher numbers of primary care physicians exhibit increased levels of health, including 2 percent lower mortality rates from all causes, 4 percent lower mortality associated with heart disease, and 3 percent lower mortality associated with cancer.

### *Primary care as a regular source of care*

- Adults whose regular source of care is a primary care physician rather than a specialist report a lower mortality rate over a five-year time period.
- Persons who report a particular person as a primary care provider are more likely to receive appropriate preventive care, fewer prescriptions, fewer diagnostic tests, and to experience decreased hospitalization and emergency care.
- Having a primary care physician as the first contact decreases the likelihood of specialty care and increases the effectiveness and appropriateness of care.

### *Primary care and health disparities*

- Primary care can reduce the health differentials between rich and poor. Compared to the population mean, communities with high income inequality but a high ratio of available primary care physicians showed a 17 percent lower post-neonatal mortality rate, while those with low levels of primary care showed a 7 percent higher rate of post-neonatal mortality.
- The relationship between abundant primary care and decreased mortality among persons with low socio-economic status is particularly pronounced in the case of the African American population, thereby demonstrating that better primary care can reduce racial health disparities.

### *Primary care and the overall cost of care*

- Primary care supply reduces the cost of health care. The higher the primary care/patient ratio, the lower the overall cost of care as a result of increased preventive care and reduced use of hospital services.

- Medicare spending is directly related to the supply of primary health care physicians; the greater the supply of primary care, the lower the Medicare spending rate.
- Primary care increases the prevalence of preventive interventions to reduce the incidence of chronic and costly disease, using interventions such as smoking cessation, obesity regulation, physical activity, seat belt usage, and breast feeding.
- Primary care is associated with earlier detection of melanoma, breast, colon, and cervical cancer.
- Primary care is particularly effective in the management of health problems that can cause serious complications or require emergency care and hospitalization.
- The greater the rate of primary care, the lower the likelihood of hospitalization for ambulatory care-sensitive conditions.

Comprehensive providers of primary health care that possess the capacity to serve as “medical homes” in terms of the range and quality of care they offer have been recognized as particularly important. The features that make primary care providers effective can be found in a range of service delivery models such as private group practices and hospital and freestanding clinic services. In the case of populations at significant risk for medical underservice, federally qualified health centers (FQHCs) have been repeatedly evaluated as especially effective in terms of both cost and quality, because of their community accessibility and their ability to furnish timely and high quality care in a manner adapted to patient need. Recognized as one of the federal government’s most effective programs,<sup>4</sup> FQHCs in essence are part of any state’s primary health care foundation.

- The experiences of FQHCs offer valuable lessons for primary care investment as a whole. Beginning in 1999, the federal Bureau of Primary Health Care launched a Health Disparities Collaborative, whose aim is to reduce health disparities through the introduction of systemic quality improvements aimed at the management of chronic diseases that collectively account for much of the excess mortality and morbidity experienced by minority and low income populations in the U.S. Recently reported results from a study of a large group of collaborative sites showed marked improvement in health status, improved use of primary care, and reductions in sporadic and ineffective use of diabetes care.<sup>5</sup> Therefore, investments in a strong primary health care system that provides the comprehensive, community-based primary care such as FQHCs help to improve health outcomes.<sup>6</sup>

- The number of primary care providers per capita shows a strong correlation with health status, including decreases in mortality from heart disease, cancer, or stroke.<sup>7,8</sup> Disparities in overall population mortality rates, infant mortality rates, tuberculosis case rates, and access to prenatal care were found to be smaller, particularly as the penetration of FQHCs increased into low-income communities.<sup>9</sup>
- Low-income uninsured and Medicaid patients served by FQHCs were more likely to report having a regular source of care and receiving comprehensive care than those nationally. In fact, health center uninsured patients were much more likely to have had 4 or more visits to a general physician than all uninsured patients.<sup>10</sup>
- Effective access to primary health care providers has been shown to result in reduced emergency room visits and lower health care costs.<sup>11</sup> One study found while communities with high emergency room use for non-urgent problems is associated with lack of primary care capacity, FQHCs help to reduce use of the emergency room by low-income populations.<sup>12</sup> Populations served by FQHCs show lower rates of costly health conditions and significantly lower rates of preventable hospitalizations compared to those who do not live within close proximity to a health center (5.8 fewer preventable hospitalizations per 1000 persons).<sup>13</sup> FQHCs have been shown to reduce ambulatory care-sensitive hospitalizations for children.<sup>14</sup> In general, FQHCs provide a cost-effective source of primary care, particularly for populations facing major barriers to care.

Although much of state health reform efforts focus largely on access to health insurance, the literature also indicates greater investments in primary health care capacity must also be simultaneously pursued. In fact, studies show communities with greater health center capacity and increased insurance rates were also more likely to have residents reporting a usual source of care.<sup>15</sup> As a result of greater primary care capacity and improved coverage, barriers that may be needed to address preventable chronic health conditions are reduced, the continuity and stability of care improves, and the primary care is enabled to function as a medical home capable of offering comprehensive management.

### **Health Care Needs Among Florida Residents**

Florida is a state that shows the combined challenges that arise from a high level of uninsurance, a decreasing physician supply, an increasing need for systems of care for uninsured persons, and the challenges associated with creating effective systems of care that are capable of responding to the complexity of chronic conditions in a culturally appropriate fashion, and in a manner that promotes disease management and care coordination.<sup>16,17,18</sup>

## A Portrait of Florida's Uninsured

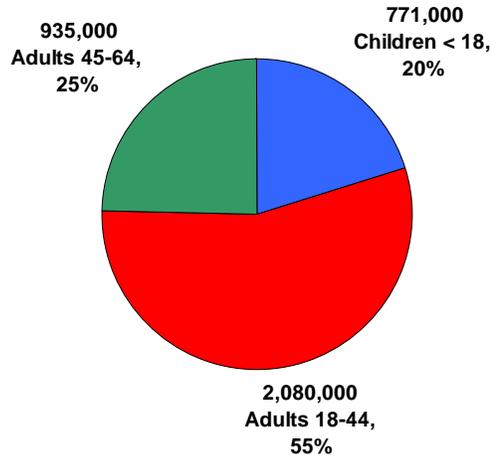
Over the 2004-2006 time periods, an estimated 20 percent of nonelderly Florida residents were uninsured. Furthermore, the lack of health insurance is not a brief or episodic event. Results from a 2004 survey of Florida residents found the lack of health insurance is a persistent problem, with 54 percent of the uninsured (14% of the entire nonelderly population) reporting having been without coverage for more than a year. Nearly 19 percent of all residents reported having never been covered during 2004.<sup>19,20,21</sup> As is true nationally, the report found that uninsured Floridians are from low-wage working families:

- 2 out of 3 are employed
- 4 out of 5 are working age adults
- 1 out of 4 are employed by small businesses
- 3 out of 4 have incomes below 250% of the federal poverty level
- 1 out of 4 lives in the Miami-Dade area.

Furthermore, the lack of health insurance coverage crosses all age groups, economic and racial and ethnic sub-populations. Data from the Census and Kaiser Family Foundation show:

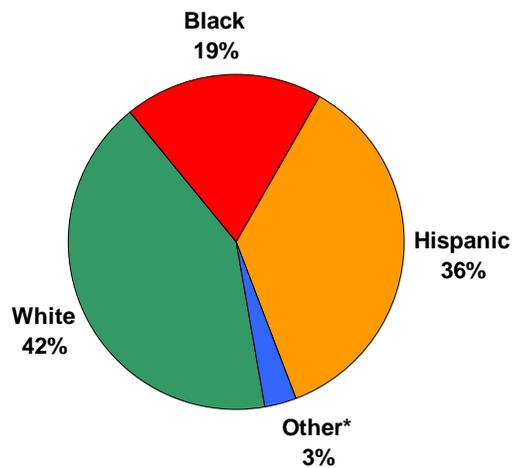
- Individuals without insurance come from all age groups, including nearly 950,000 older adults in the age 45-64 category.
- As seen in Figure 1, more than 2 million adults age 18-44 lack health insurance.
- The lack of health insurance covers all races and ethnicities, but disproportionately affects minority populations with 58 percent of uninsured coming from racial and ethnic minority groups. (Figure 2)
- Though the majority of uninsured are below poverty or near the poverty level, 37 percent of the uninsured earn 200% or more of the Federal Poverty Level. (Figure 3)

# 1. Florida Non-elderly Uninsured By Age



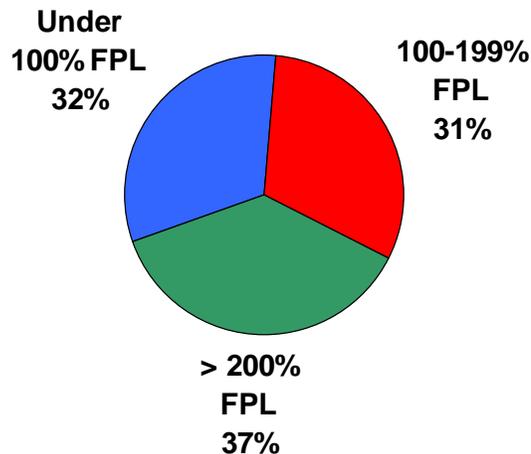
Source: U.S. Census Bureau 2006 Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC)

# 2. Florida Non-elderly Uninsured by Race



\*Other includes, Asian, Pacific Islander, Native America, Alaskan Native  
Source: [www.statehealthfacts.org](http://www.statehealthfacts.org) Florida: Distribution of the Nonelderly Uninsured by Race/Ethnicity, states (2005-2006), U.S. (2006)

### 3. Florida Non-elderly Uninsured by Income level

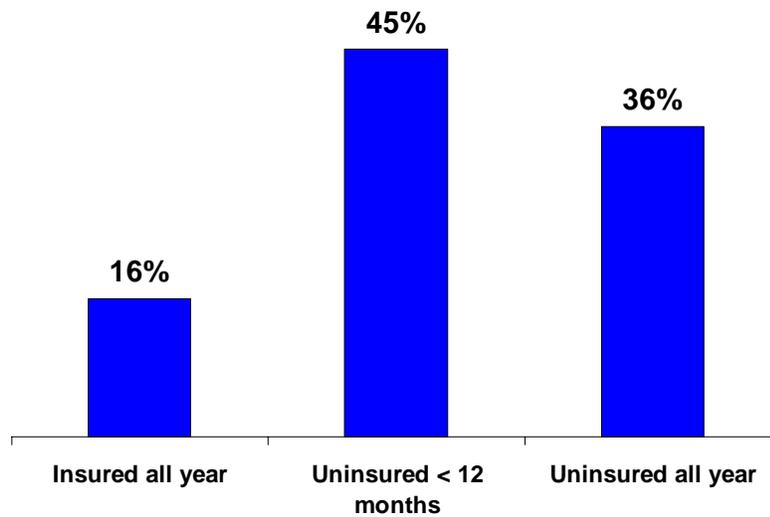


Source: [www.statehealthfacts.org](http://www.statehealthfacts.org) Florida: Distribution of the Nonelderly Uninsured by Race/Ethnicity, states (2005-2006), U.S. (2006)

Being without health insurance coverage has serious consequences for primary health care:

- Key findings from *A Profile of Uninsured Floridians* underscore the relationship between being without health insurance and lacking primary health care. The lack of a usual source of care stood at 22 percent for the state, a figure that reflects the national average.<sup>22</sup> But when controlled for health insurance status, the results changed significantly. Figure 4 shows where having a regular source of care was concerned, the study found a two-to-three fold difference between persons with and without insurance. While 16 percent of persons with year round coverage reported no usual source of care, the figure nearly tripled for uninsured persons with a gap of less than a year in coverage (45%) and persons without health insurance for at least one year (37%) had no continuous primary care source.

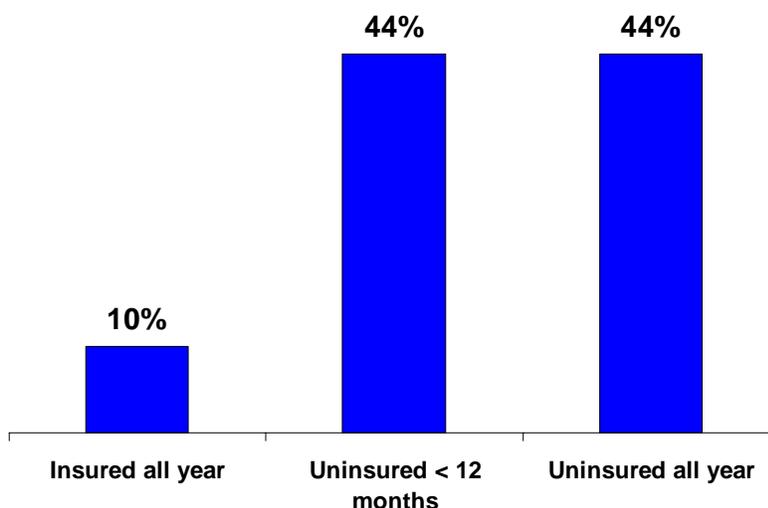
#### 4. Access to usual source of care by insurance status



Source: 2004 Florida Health Insurance Study

- Being uninsured also is correlated with delays in seeking needed medical care, as well as the associated costs that might have been avoided had lower cost primary health care been more readily available. *A Profile of Uninsured Floridians* reports that while nearly 10 percent of respondents with year-round insurance coverage reported delaying care because of cost, the figure skyrocketed to 44 percent among persons with coverage gaps of less than one year and for a year or longer. (Figure 5)

## 5. Patients Who Delayed Care Due to Costs



Source: 2004 Florida Health Insurance Study

### THE HEALTH CARE SAFETY NET

Like other health care safety nets nationwide, Florida's loose network of hospitals, rural clinics, health department clinics, private practices, and FQHCs struggle with a growing uninsured and aging population, decreasing primary care physician supply, and increasing need for comprehensive care and care management. According to the Florida Hospital Association, Florida's hospital uncompensated care costs have increased 73 percent from \$1.36 to \$2.35 billion between 2000 and 2006.<sup>23</sup> Approximately one-third of Florida hospitals are also at financial risk in part due to insufficient public financing. Even though Medicaid and Medicare account for 58 percent of patient days, they represented only 50 percent of revenues.

With over 9,100 licensed medical, dental, vision, and other professional health care volunteers, Florida's free clinics are another source of care for thousands of uninsured with 290,000 patient visits reported in 2006-07.<sup>24</sup> In sparsely populated areas with fewer health care resources, the 152 rural health clinics also play a role as safety net providers.<sup>25</sup>

While there are several primary care providers in Florida that supply care to the medically underserved, FQHCs are unique community based providers which have been essential to providing care to low-income Florida residents. Unlike other safety net providers, FQHCs are governed by patient-majority boards to ensure community health care needs are addressed. The FQHCs must also report user and service characteristics, financial data, and staffing information to

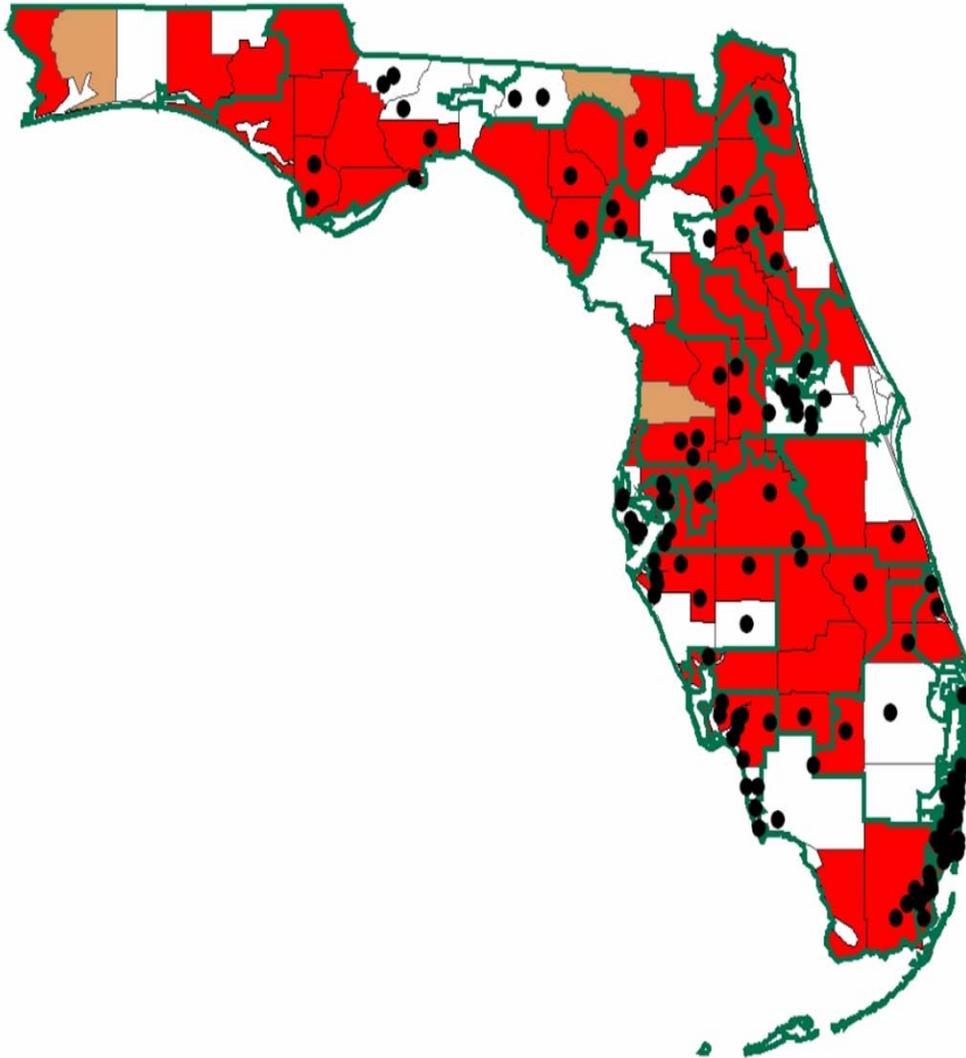
the Health Resources and Services Administration as part of its grant requirements to demonstrate their ability to improve access to comprehensive care that is cost-effective and high quality. Therefore, the following analysis focuses on FQHCs not only because of their essential role in primary care safety net but also due to the availability of their data.

## **FEDERALLY QUALIFIED HEALTH CENTERS: THEIR ESSENTIAL ROLE IN FURNISHING PRIMARY HEALTH CARE AND THE CHALLENGES THEY FACE**

### *FQHCs: Florida's Essential Primary Health Care System*

FQHCs serve as the backbone of an efficient, safe and effective primary care system for medically underserved populations and low-income communities. In 2006, the state's 38 FQHCs served as medical homes to 702,000 patients across 232 sites. (Figure 6)

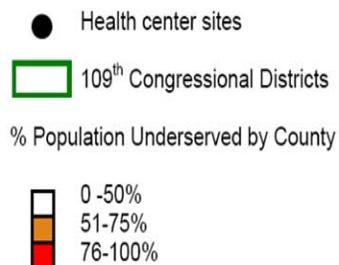
## 6. Health Center in Underserved Areas



Notes: Not all health center locations appear on this map, and some dots may overlap due to scale. This map does not include non-federally funded health centers, and the number of patients above only includes those served by federally-funded health centers.

Medically underserved are those individuals who live in areas designated by the federal government as Medically Underserved Areas/Populations (MUA/MUP). These individuals have inadequate access to traditional primary health care services and rely on safety net providers.

Sources: Site information based on Bureau of Primary Health Care, HRSA, HHS 2004 Uniform Data System. Underserved estimates based on NACHC 2000 REACH data which applies 2000-2002 Census population data and HRSA MUA designations.



In 2006, Florida's FQHCs ranged from some of the largest and most sophisticated primary health care practices in the state to small FQHCs critically located in rural underserved communities. FQHCs in 2006 served as the practice home for nearly 1530 primary care professionals, including 328 physicians, 1,200 clinical support staff, 65 dentists, 152 behavioral health professionals, 128 pharmacy personnel, and 357 enabling services staff, and 1,700 administrative staff. FQHCs have been shown to be economic powerhouses for the communities they serve, generating seven dollars for every one dollar invested.

In addition to general health care cost savings, FQHCs contribute significantly to the state economy by stimulating job growth and household incomes, as well as generating the production and consumption of health care goods and services. One study found Florida's 36 FQHCs contributed over \$537 million dollars and over 6,400 jobs to the state's economy in 2005.<sup>26</sup> In terms of the return on the economic investment in FQHCs, this translates to \$7 million in new economic activity and 83 jobs for every \$1 million invested in FQHCs.<sup>27</sup> For many poor urban and rural communities, such investments not only result in greater access to care but also a healthier workforce and new opportunities for economic growth.

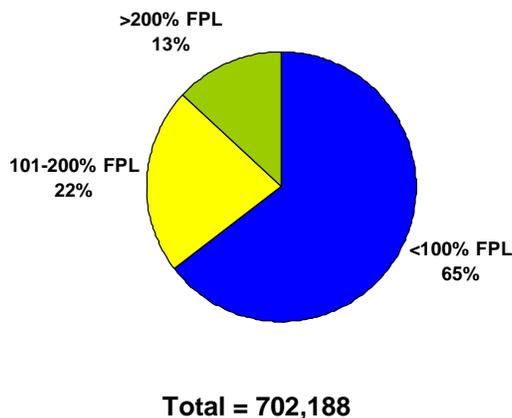
FQHCs in Florida, like health centers nationally, are nonprofit corporations that are distinguished by 4 key characteristics:

- Location in or service to communities and populations designated by law as medically underserved or as experiencing a shortage of primary health care professionals
- The provision of comprehensive primary health care
- Provision of care in accordance with a prospective schedule of charges that is prospectively adjusted in accordance with ability to pay
- Governance by a community board, a majority of whose members are patients of the health center

Figures 7 – 10 present information on FQHCs derived from Uniform Data System which contains critical patient, staffing, utilization, and financial data on all FQHCs that receive federal grants from HRSA.<sup>28</sup> Data are for 2006, the latest year for which national data are available.

- *Florida's FQHCs serve the poorest patients.* Nearly 87 percent of all Florida health center patients in 2006 had family incomes of less than 200% of the federal poverty level.<sup>29</sup> Figure 7 shows that 65 percent of health center patients that year had family incomes below 100% of the federal poverty level – nearly four times the Florida poverty rate of 16 percent.<sup>30</sup> Additionally, more than 10 percent of patients are homeless.

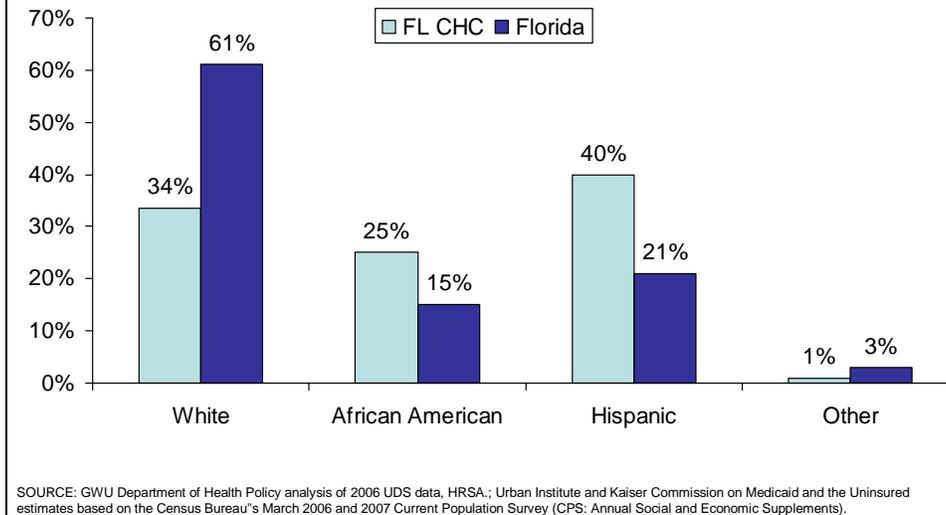
## 7. Health Center Patients by Income, 2006



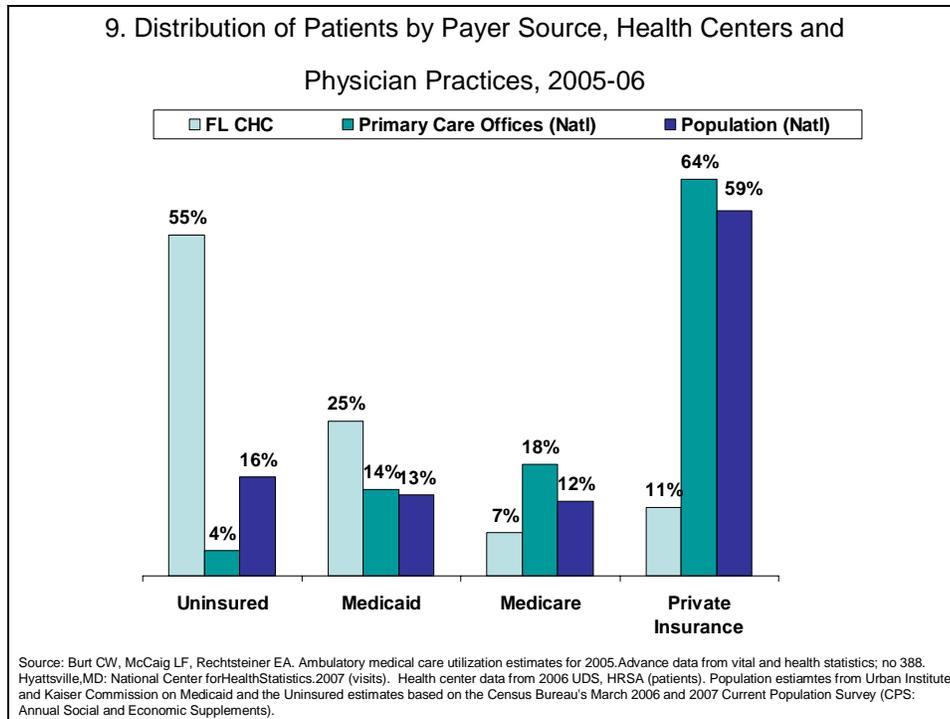
SOURCE: GWU Department of Health Policy analysis of 2006 UDS data, HRSA.

- *FQHCs are a crucial source of care for Florida's minority families, who are significantly more likely to be poor.* In 2006, Florida's FQHCs furnished extensive health care to the state's minority population; that year, two-thirds of health center patients were non-white. This is significant because of the elevated poverty rate among Florida residents who are members of racial or ethnic minority groups. In 2004, persons who reported their race as Black alone were three times as likely to be living below the poverty level as those reporting their race as White alone.<sup>31</sup> Similarly, persons of Hispanic origin were 1.6 times more likely to fall below the poverty level than non-Hispanics (22.9 percent and 17.8 percent respectively). One-third of the state fell below 200% of the poverty level.<sup>32</sup>

## 8. Health Center Patients by Race/Ethnicity, 2006



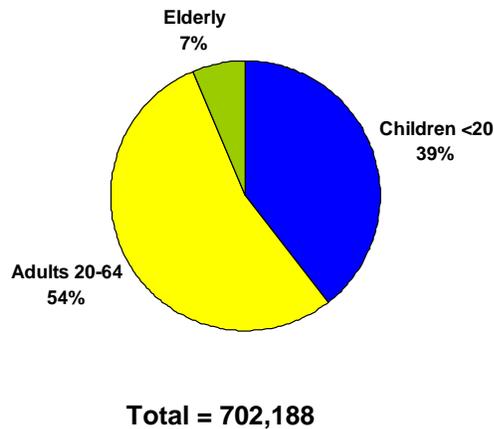
- *Health center patients in Florida are especially likely to be uninsured.* In 2006, as Figure 9 shows, 55 percent of Florida health center patients were uninsured, a figure significantly higher than the national average of 16 percent. Correspondingly, in 2006, 25 percent of health center patients in Florida were covered by Medicaid, a figure significantly lower than the national estimate of 13 percent.



The impoverishment of health center patients, coupled with FQHCs' critical role in caring for minority patients, elevates the likelihood that patients will be uninsured. Indeed, the 2004 Florida Health Insurance Study found that health insurance varies significantly by race and ethnicity. Although about 80 percent of White residents had continuous health insurance coverage, continuous coverage is available to only 61 percent of Hispanics and 72 percent of Blacks. Similarly, the study reported that Hispanics are more likely to be uninsured all year (25.3 percent) than white non-Hispanic (9.4 percent) and Black (15.6 percent) residents.<sup>33</sup>

- *FQHCs serve the state's most vulnerable patients.* Figure 10 shows children and adults who are most likely to be low income accounted for most health center patients. Approximately 39 percent of patients were children and 54 percent were working-age adults. The frail elderly accounted for remaining 7 percent of health center patients.

## 10. Health Center Patients by Age, 2006



SOURCE: GWU Department of Health Policy analysis of 2006 UDS data, HRSA.

- *FQHCs are essential to the state's agricultural industry.* Although migrant and seasonal farmworkers face significant risk for job related injuries and illnesses, nearly 9 out of 10 are uninsured and are unable to access care.<sup>34</sup> FQHCs are a critical source of care for this population. The 2006 UDS data shows FL FQHCs served approximately 70,000 migrant and seasonal agricultural workers and their families, and 12 FQHCs received federal funds specifically for the care of migrant and seasonal workers.
- *FQHCs accounted for approximately 6 percent of the state's births in 2006.* FQHCs reported approximately 26,000 prenatal care users and nearly 14,000 births.<sup>35</sup> FQHCs also provide critical access to prenatal care for women in farmworker families who are at elevated risk for poor birth outcomes, including low birth weight and pre-term births.<sup>36</sup>
- *FQHCs are a critical component of the state's strategy for addressing its primary health care shortage.* The state's FQHCs play a vital role in providing a medical home for some of the neediest populations without access to care, particularly, as primary care capacity continues to shrink. According to a survey of physicians conducted by researchers at the Florida State University College of Medicine, 30 percent of physicians reported that they intended to leave their practice within the next 5 years.<sup>37</sup> Without further investments and incentives for primary care providers to remain in practice, the need for FL FQHCs is likely to grow.

## FQHCs' Special Role in Health Care Quality: Primary Prevention and the Management of Ambulatory Care Sensitive Conditions

Numerous studies underscore the high quality of health center care in both primary and preventive care and the management of chronic illnesses and conditions that, if left untreated cause disability and death while pushing health costs ever higher.<sup>38</sup> These conditions lie at the heart of the nation's health disparity crisis.

This section of the analysis considers FQHCs role in addressing the high volume of chronic health conditions experienced among Florida residents, particularly those who are low income and uninsured.

Since 1999, chronic diseases have constituted six of the ten leading causes of death in Florida.<sup>39,40,41,42</sup> According to the CDC, these chronic diseases are some of the "most prevalent, costly, and preventable of all health problems."<sup>43</sup> In 2002, 71 percent of all deaths in Florida were due to chronic diseases. The leading causes of death were: coronary heart disease, cancer, stroke, chronic lower respiratory disease (CLRD), unintentional injuries, diabetes, pneumonia/influenza, suicide, chronic liver disease (CLD) and HIV/AIDS.

In 2005, cardiovascular disease was the primary cause of death for Floridians accounting for 59,613, or 35 percent, of all deaths. While cardiovascular disease is more common in older adults, it represents almost 9,000 deaths under the age of 65. Stroke and coronary heart disease make up the largest percentage of cardiovascular disease contributing to the high rate of mortality. Coronary heart disease is the leading cause of death in Florida, representing 34,310 deaths. This number is 58 percent of all cardiovascular deaths and 20 percent of deaths overall, with age adjusted rates consistently being 50 percent higher for men than for women.<sup>44</sup> Stroke was the fourth leading cause of death in Florida in 2005. Stroke was the cause of 9,321 deaths, or approximately 5 percent, with rates being 88 percent higher for blacks.<sup>45,46</sup> With respect to diabetes, a significant risk factor for cardiovascular disease and the sixth leading cause of death in Florida the rate of death was 174 percent higher for blacks than whites.<sup>47</sup> In 2005, diabetes accounted for 5,181 deaths, and those with diabetes are 2 to 4 times as likely to experience cardiovascular disease. Blacks are also more likely than whites to report having been told they were diabetic (10.3 percent and 8.6 percent respectively).<sup>48</sup>

There are several other risk factors associated with cardiovascular disease and stroke, including: high blood pressure, high cholesterol, smoking, and nutrition. Table 1 shows that Floridians have slightly higher risk factors than the national average.

**Table 1**

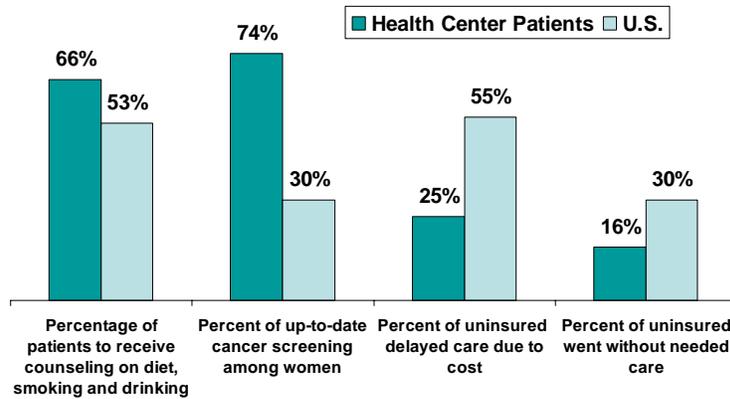
<b>Risk Factors for Cardiovascular Disease</b>	<b>US</b>	<b>FL</b>
Ever been told had high blood pressure	24.8	29.3
Ever been told had high blood cholesterol	33.1	35.1
Current Smoker	22.0	23.9
People reporting diabetes diagnosis	7.1	8.5
No Leisure time physical activity	23.1	27.9
Adults who reported being overweight	36.8	38.7
Adults who reported not eating five fruits and vegetables per day	77.6	76.4
Source: Centers for Disease Control and Prevention. Chronic Diseases: The Leading Causes of Death, Florida. 2005. <a href="http://www.cdc.gov/nccdphp/publications/factsheets/ChronicDisease/florida.htm">http://www.cdc.gov/nccdphp/publications/factsheets/ChronicDisease/florida.htm</a> and BRFSS, 2004		

Cancer, the second leading cause of death for Floridians, accounted for 39,088 (23 percent) deaths in 2001.<sup>49</sup> Of the 1.4 million estimated new cancer cases nationwide in 2007, Florida is the expected to have the second highest rate of new cases with 106,560 (7 percent) new diagnoses in 2007. With a cancer related expected daily death of 1,500, it is estimated that 559,650 people died from cancer in 2007. Florida was also expected to have to have the second highest rate of deaths 40,430 (7 percent) in 2007.<sup>50</sup> There are several risk factors associated with various forms of cancer as well. Many of these risk factors are similar or the same as those for cardiovascular disease, namely, tobacco use, nutrition, physical activity, and in general, the adoption of healthy lifestyles. Along with reducing these risk factors, cancer related deaths may be reduced by preventive screening services.

For both cancer and diabetes, early diagnosis through timely screening is also expected to lead to lower costs. Although it is difficult to estimate how many cancer and diabetic or related complications cases were prevented in FQHCs, they effectively serve populations most vulnerable to preventable health problems and help to positively change diet and exercise behavior and lifestyle generally. As a consequence of greater access to quality care, health care costs are greatly diminished. In fact, preventing onset of diabetes is expected to save approximately \$10,000-\$13,000 per person.<sup>51</sup>

A literature review of studies consistently found that more and higher quality primary care improves health outcomes, and studies consistently show FQHCs effectively manage patients at risk for poor health and costly chronic illnesses.<sup>52,53,54</sup> Figure 11 shows such evidence of the high quality of care at FQHCs nationally that exceed the national average. For example, health center patients are more often screened and counseled to improve health behavior. FQHCs are also more likely to receive preventive cancer screening. Most notably, FQHCs improve uninsured access and care by providing timely care. In effect, FQHCs provide effective care management and quality of care for high-risk populations, and significantly improve access and health outcomes, which result in reduced disparities and lower health care costs.<sup>55,56</sup>

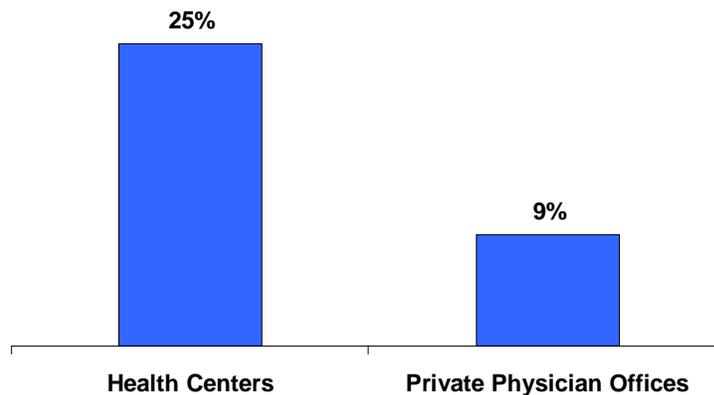
## 11. Quality of Care at Health Centers



SOURCE : The two composite estimates include diet and eating habits, smoking, and drinking and pap smear, mammography and breast exam from Politzer R, et al. "Inequality in America: The Contribution of Health Centers in Reducing and Eliminating Disparities in Access to Care." *Medical Care Research and Review* 2001; 58:234-248.

The impact of FL FQHCs on costly complex chronic conditions is also obvious due to the association of poverty and chronic conditions. Therefore, it is not surprising to find that FL FQHCs have a high proportion of patients with chronic illnesses. In fact, Figure 12 shows a comparison of national patient visits to private physicians and indicates FL FQHCs tend to have a higher concentration of patients with similar serious and chronic health conditions. As a result, FQHCs not only provide quality care for some of the most costly health conditions but also significantly impact health care costs.

## 12. Serious and Chronic Conditions Among Health Center Patients, 2005



Notes: Estimates based on comparable diagnoses of diabetes, hypertension, asthma, heart disease and mental illness as a proportion of total medical visits. Source: Burt CW, McCaig L F, Rechtsteiner EA. Ambulatory medical care utilization estimates for 2005. Advance data from vital and health statistics; no 388. Hyattsville, MD: National Center for Health Statistics. 2007. Health center data from 2006 UDS, HRSA.

Lack of health insurance and gaps in health insurance coverage generally translate to an inability to maintain a regular source of primary care. With more than 1 out of 2 patients without health insurance, FQHCs have been shown to effectively serve as a primary care home for those at high risk for poor health by providing quality care. As a consequence, FQHCs significantly help to reduce Florida's health care costs.

### FQHCs Show Cost Savings

FQHCs provide cost-effective alternative to other sources of care, earning high efficiency scores under federal evaluation<sup>57</sup> with cost growth that fall well below national expenditure trends.<sup>58</sup> One study analyzing Medicaid claims data showed costs for the care of diabetic patients at one South Carolina health center was approximately \$438 less per patient than other primary care settings.<sup>59</sup> With nearly 43,000 diabetic patients served by FQHCs in Florida, this translates to over \$1.9 million in cost-savings.

According to another estimate using the 2004 Medical Expenditure Panel Survey, the care of similar patients cost on average 43 percent less at FQHCs than other outpatient settings.<sup>60</sup> The study found FQHCs effectively reduce health care expenditures by \$400-\$2,200 for each patient served. This translates to approximately a minimum of \$280 million in total savings for 702,000 patients already served by FL FQHCs.

In general, studies indicate greater access to primary care not only improve health outcomes but can also minimize unnecessary and costly visits to the emergency department (ED). For example, the American Hospital Association estimated a total of \$31.2 billion in uncompensated costs at U.S. community hospitals in 2006.<sup>61</sup> Florida's hospitals carry a disproportionate share of these costs with \$2.35 billion in 2006.<sup>62</sup> Additionally, the Florida Agency for Health Care Administration reported more than 6.7 million ED visits in 2005 alone.<sup>63</sup> One study found that 43 percent of ED visits were for minor or low-moderate acuity level conditions, yet these visits had mean charges of \$444 and \$984 in 2005.<sup>64</sup> When the visits classified as being of moderate acuity level (meaning non emergent but requires treatment) are considered, the evidence suggests that non emergent visits account for 73 percent of all ED visits and some \$4.7 billion in care that could have been supplied generally by primary care providers at a significantly reduced cost.<sup>65,66</sup>

FQHCs can play a major role in reducing such unnecessary costs. One study found health centers reduce unnecessary ED visits by 32 percent.<sup>67</sup> Other studies indicate FQHCs profoundly help to reduce uninsured patient visits to the emergency room; for example, when Kansas provided greater funding to FQHCs in 1990, ED visit by uninsured decreased by 25 percent and saved the state over \$12 million.<sup>68</sup> Though it is difficult to estimate the amount of ED costs that Florida's FQHCs already are able to save, these studies suggest that greater investments in primary care may significantly lower unnecessary ED costs and preventable complications of undetected and untreated conditions (e.g., diabetes).

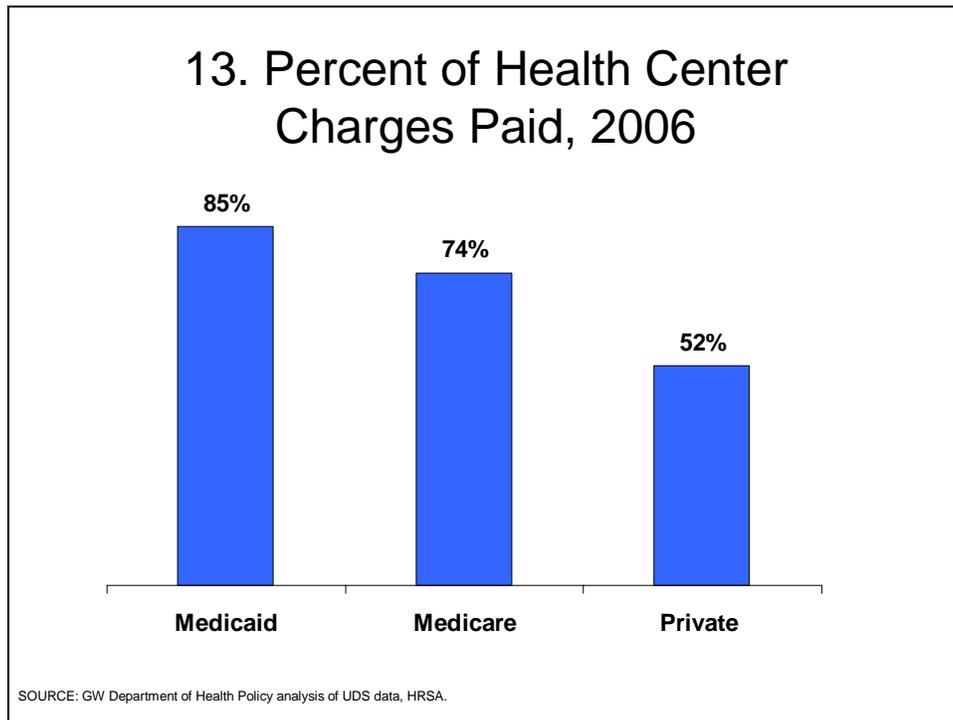
Data related to the cost of care lend further weight to the expectation of savings. In 2006, the national per capita expenditure for physician and clinical services was \$1,493.<sup>69</sup> In comparison, primary care visits at Florida's FQHCs cost only \$468 per patient in 2006, with only \$362 per patient for the medical component alone (excluding including enabling, mental health, and dental care).<sup>70</sup> Translated into an aggregate comparison, the substitution of FQHC services for other forms of primary health care services would yield a cost-savings of \$720 million to \$794 million for the 702,000 served in 2006. Although such cost-saving estimates rely on extrapolation of other state and national data and from case studies, the results consistently indicate FQHCs are effective and efficient safety net providers, saving millions in unnecessary health care expenditures.

It is estimated that over 8 million Florida residents are without access to a regular sources of primary care.<sup>71</sup> The evidence indicates further investment in the state's primary care system is needed. However, the extent of Florida's current activities, and their success in providing greater access to FQHCs and other primary care providers serving the poorest communities, is unclear.

## FQHCs Face Key Challenges

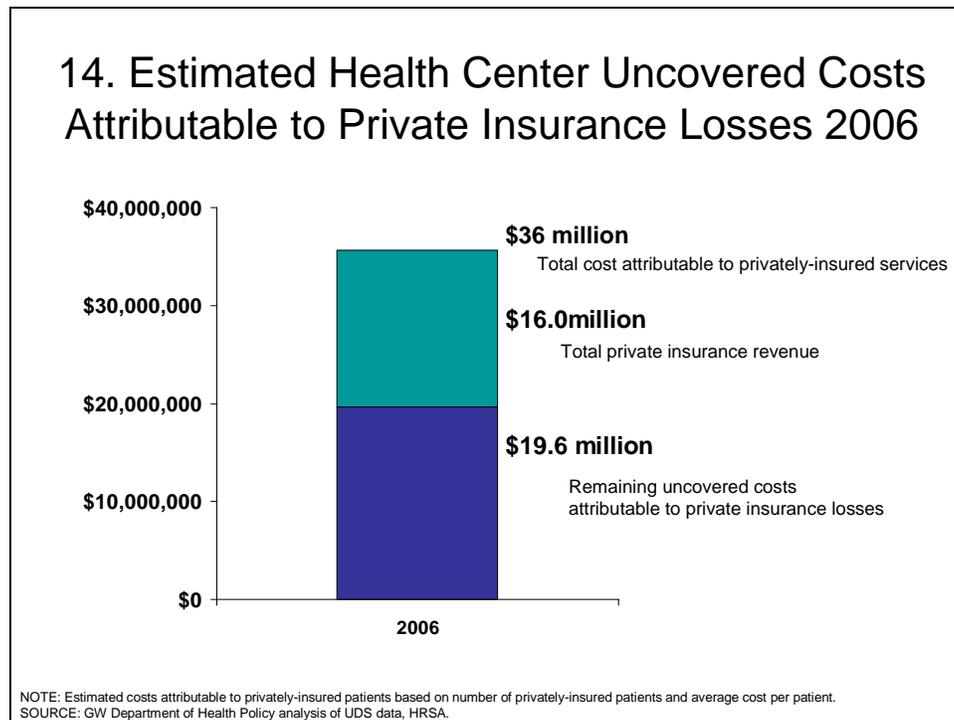
Despite the essential role they play, Florida's FQHCs face key challenges. Because they are located in and accessible to the very communities that need them most, FQHCs are far less likely to be found in more affluent neighborhoods and communities. Because of the relationship between economic affluence -- high wages and private health insurance -- and place of residence, FQHCs are far less likely to serve privately insured patients and far more likely to rely on public grants and public health insurance.<sup>72,73</sup> In other words, because of where they are, whom they serve, and what they do, FQHCs rely on public financing to carry out their mission.

The challenges of relying on public financing are intensified by the gap between what sources of health care financing pay and FQHCs' operating costs. Using UDS data from Florida's FQHCs, Figure 13 shows that in 2007, the gap between the amount of charges covered by third party revenues stood at 74 percent for Medicare, 85 percent for Medicaid, and only 52 percent for private health insurance. The particularly large gap in the case of private insurance payments is a reflection of the use of high deductibles and cost sharing, more limited coverage, and lower payment rates.<sup>74</sup>



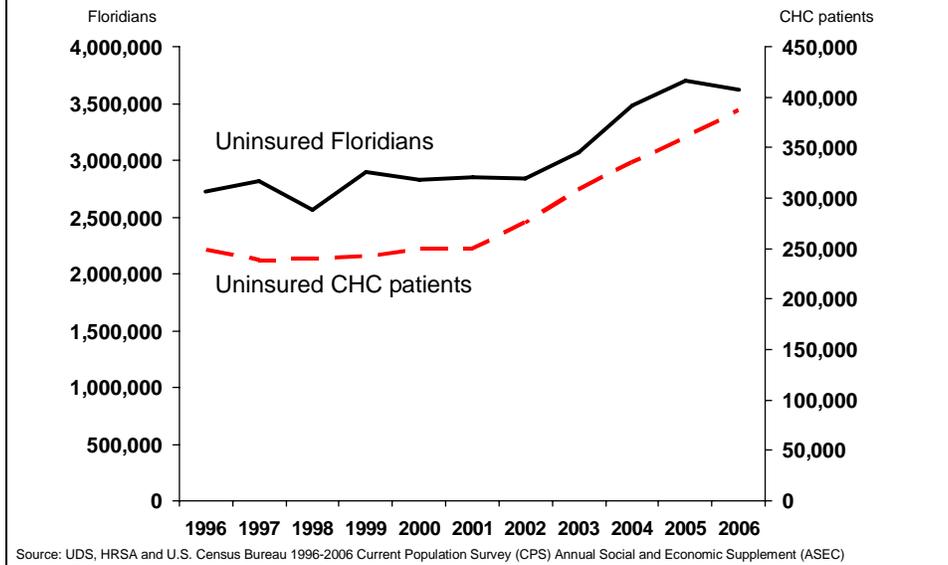
It is tempting to treat the private health insurance payment gap lightly, since as Figure 9 shows, privately insured patients comprise only 11 percent of all patients served by Florida FQHCs, compared to 64 percent of patients treated in private physician offices. However, based on the average health center expenditure per patient and the actual revenues collected from private insurers,

Florida FQHCs are estimated to have experienced nearly \$20 million in uncovered losses in 2006 alone. Figure 14 shows FQHCs spent approximately \$36 million in treating privately-insured patients, while they received only \$16 million. Without payment reform or additional funding, FQHCs are unlikely to sustain their efforts in the long run.



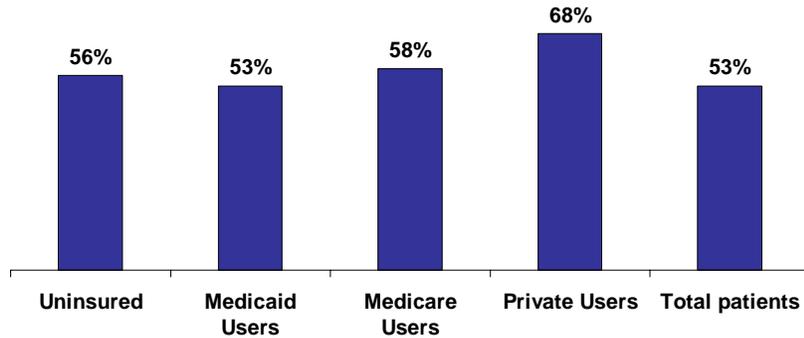
This fact underscores two crucial issues. First, as the number of Florida’s uninsured grew by 32 percent overall, the number of uninsured patients grew by 51 percent at FQHCs between 1996 and 2006.<sup>75</sup> Figure 15 shows that the number of uninsured patients grew from 248 thousand to 386 thousand patients between 1996 and 2006. Although FL FQHCs served approximately 1 in 9 uninsured patients in 2006, the losses as a result of underpayments from private insurers may have limited their ability and capacity to expand further access. In other words, the \$19.6 million in uncovered costs translates to an additional 23,000 uninsured residents who could have been served.

### 15. Number of Uninsured and Uninsured Patients Served by Florida Health Centers



Second, while patient volume at Florida’s FQHCs grew by 53 percent overall during the past decade it grew by a remarkable 68 percent among privately insured patients. (Figure 16) This growth pattern, which mirrors the national pattern, is undoubtedly a reflection of the declining willingness of private physicians to treat low income privately insured patients because of reductions in the scope of private health insurance coverage.<sup>76</sup> As deductibles and cost sharing escalate, patients who cannot combine their insurance coverage with large cash down-payments or a credit card presented at the time of service risk the loss of their regular source of care and must turn to subsidized sources of health care such as FQHCs, where charges are adjusted in accordance with family income.

### 16. Percent Change in Volume of Health Center Patients by Payment Source, 1996 vs. 2006

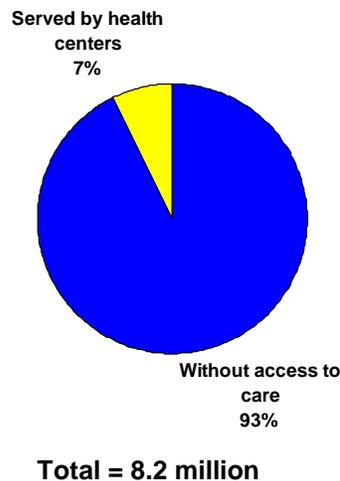


SOURCE: GW Department of Health Policy analysis of UDS data, HRSA.

Figure 16 also shows a significant increase in the number of Medicare patients, a function of an aging population, and the high financial exposure faced by low income Medicare patients who do not have Medicaid coverage. Medicare patients with low family incomes face disproportionate health care risks compared to their non-low income counterparts.

Even as FQHCs have responded dramatically to growing need, Figure 17 shows the state's FQHCs are able to reach only 1 in 14 low income disenfranchised residents. An estimated 8.2 million medically underserved residents remain without access to a regular source of primary care.<sup>77</sup>

## 17. Florida Residents Without Access to Primary Care (2005)



SOURCE: The Robert Graham Center and the National Association of Community Health Centers, *Access Denied*, 2007.

### CHARTING AN AGENDA FOR PRIMARY CARE REFORM: THE ROLE OF MEDICAID AND COMPREHENSIVE REFORM EFFORTS

The potential of primary health care to positively shape and rationalize a health care system means that its growth and strength should be a principal goal of health reform. In this regard, several basic elements lie at the heart of a reform effort whose focus is on improving the accessibility and quality of primary health care.

#### Health insurance coverage

- Stable and continuous health insurance coverage that assures access to necessary and appropriate continuum of health care, and that emphasizes and incentivizes comprehensive primary care. Elements of this type of coverage are:
  - Coverage of comprehensive primary health care for children, including regular health examinations in accordance with professional standards of care, assessment of growth and development, and the earliest possible treatment and services to prevent and ameliorate physical, mental, and dental conditions that can affect growth and development.

- Coverage of clinical preventive care recommended by the United States Preventive Services Task Force (Table 3); exemption of preventive services from otherwise applicable deductibles and annual and lifetime coverage maximums; and the imposition of modest cost sharing in relation to preventive screening and assessment services.

Sample 2007 recommendations based on evidence of effectiveness:

- Breast, Cervical, Colorectal Cancers, Screenings
- Depression, Screening
- Diabetes Mellitus in Adults, Screening
- Diet, Behavioral Counseling in Primary Care
- High Blood Pressure, Screening
- Obesity in Adults Screening
- Dental Caries in Preschool Children, Prevention
- Visual Impairment in Children Younger than Age 5 Years, Screening

Source: U.S. Preventive Services Taskforce, *Guide to Clinical Preventive services*, 2007.

- Comprehensive coverage of primary health care, case management, and low cost sharing for primary care treatments and services related to the treatment and management of chronic physical, mental, and health conditions that are considered ambulatory care sensitive.
- Comprehensive treatment and management of pre-conception and inter-conception health services for women, as identified by the CDC, as well as comprehensive primary health and dental care for pregnancy and pregnancy-related conditions
- Payment arrangements that favor primary health care interventions and that encourage the maximum possible participation of primary health care professionals, while at the same time encouraging participation by specialists in those situations in which specialty care is medically appropriate.

Direct investments in primary health care, a primary health workforce, and an effective public health system

- Capital funding to develop primary health care access points and to expand and strengthen the service capability of existing programs and services

- Ongoing direct support of primary care sites that must provide specific adaptive services to effectively reach their communities, such as transportation and translation/interpreter services, and services and supports aimed at assisting patients locate and make effective use of health, educational, and social services.
- Investment in health information systems as a fundamental aspect of primary health care improvement. Such systems, have been shown to enable clinical quality, the integration of clinical primary care with the state's public health assessment, planning, and surveillance needs
- Investment in health professions training programs through direct grants, scholarships, and loan repayment strategies to encourage careers in the primary health care professions, including medical, nursing, mental, and dental care, as well as reform of laws that may impede the full scope of practice by primary health professionals.
- Investment in public health activities that, in partnership with employers, schools, and communities, can work to advance family and individual health literacy, consumer knowledge and understanding of health promotion practices, positive changes in nutrition and exercise, school readiness, healthy schools and workplaces, and programs to aid healthy aging.

This type of careful and balanced approach to health reform would ultimately go far to rectify the profound mis-alignment of money and incentives that currently affects the accessibility and quality of health care both in Florida and throughout the nation. Expansion efforts under "Cover Florida," which focuses on access to limited benefits and high cost-sharing plans, is only likely to result in few enrollees without mitigating the burden on the safety net.<sup>78</sup>

Whether the current reform course charted by the state will achieve these results is open to serious question. Since 2006, Florida has operated its Medicaid program in part as a §1115 demonstration, focusing on Broward and Duval counties initially, with an expansion into Baker, Clay and Nassau counties in July 2007. The impetus for this demonstration was the high annual rate of increase in Medicaid spending, coupled with a high degree of concern about the limited value of the state's investments in health care for low income and medically at risk individuals and families. The main thrust of the reform involved limitations on coverage – rather than its enrichment – and elevated cost sharing for adults, rather than a cost sharing design aimed at encouraging preventive care.<sup>79</sup> The state is now considering whether the results of these pilot projects offer a pathway to statewide reform.<sup>80</sup>

Although Florida's Medicaid Reform initiative is still in its early stages, several preliminary reports, assessments, and program reviews already have been released. Comparison of health plan offerings in the first and second years of the demonstration underscore that rather than increasing primary care investments, participating health plans have reduced benefits and increased cost sharing. Indeed, no participating health plan appears to have revised its financing structure to heavily emphasize preventive health activities or the active management of chronic physical and mental conditions<sup>81</sup>

While performance, quality and cost data are not yet available to evaluate the effects and cost-effectiveness of the Medicaid Reform Pilot, the early evidence suggests that the design of the intervention runs counter to the best evidence regarding how to re-align health care financing while improving community health. For example, the Georgetown University Health Policy Institute, reporting on a small survey of state physicians, concluded that the early effects of the plan have been to reduce access to care as a result of health plan coverage and access restrictions, as well as reductions in payment rates.<sup>82</sup> In fact, 51 percent of responding physicians reported that it was harder for children to secure access care in the wake of the demonstration. At the same time, recent survey of state Medicaid directors, Florida indicated that all its plans has waived or reduced cost sharing and has expanded coverage of full dental care.<sup>83</sup>

The reports do not end at academic studies. The AHCA Inspector General has found that providers of indigent care for the uninsured population are at financial risk.<sup>84</sup> Although Florida's Medicaid director indicated that all its plans have waived or reduced cost sharing and have expanded coverage of full dental care,<sup>85</sup> the Inspector General recommended that further expansion of the health reform demonstration be delayed due to lack of reliable data and evidence of improvement.

The ultimate effect of the current approach to health reform cannot be known. But these early signs suggest a distressing degree of direction away from the types of investments that can make a real difference in population health and health care spending. To the extent that the current approach leads to a continuing decline in primary care capacity and access, health reform that is focused principally on cost will have an effect that is precisely the opposite in the long term of what was intended. Even more significantly perhaps, the strains caused by reforms are threatening to disrupt and destabilize the network of care that does remain. Because of the economic downturn, Florida Legislature must now consider cuts in both its Medicaid and indigent care pool programs, leaving FQHCs (and other safety net providers) once again to meet the growing health care demand with fewer resources.

## CONCLUSION

As the literature indicates, a strong primary care system, based on the medical home model, is essential to an effective and efficient health care system. In particular, FQHCs that are anchored in high risk communities can lead to decreased hospitalizations, a reduction in socioeconomic and racial health disparities, increased preventive care leading to a reduction in health care costs, reduction in the prevalence of chronic conditions and resulting mortalities, and an increase in overall healthcare outcomes.

Safety net providers, especially FQHCs, are optimally situated to improve timely access to preventive services to both low-income uninsured and insured, and provide effective management of chronic conditions, reduce disparities, lower health care costs, and help local economies. However, these FQHCs cannot handle the increasing uninsured populations and chronic conditions without further investments in the primary care system.

In general, the large proportion of the population without any or adequate health insurance coverage makes ongoing support grants absolutely critical to the survival of the primary health care safety net. The federal funds that flow to FQHCs represent an operational subsidy lifeline that help anchor FQHCs in communities that otherwise could not afford to maintain a health care infrastructure. Yet even for FQHCs, these funds cover only a fraction of the health care they must furnish to their uninsured patients and provide seriously inadequate support for referral and specialty care. The same need for operational subsidies through a strong uncompensated care pool exists in the Low-Income Pool, which reimburses safety net providers with a large proportion of uninsured patients.

At the same time, there is very little evidence regarding the adequacy of primary care compensation among private insurers and health plans. Therefore, any health reform effort should also focus on the extent to which in their compensation arrangements, private insurers and plans are emphasizing payments for quality and in the most cost-effective settings.

Although Florida's reform efforts build on managed care concepts that are meant to control Medicaid costs, it is unclear to what extent they support and enhance capacity of providers that efficiently provide timely access, effective management of chronic conditions, and high quality of care. FQHCs, which anchor the primary care safety net, have proven effective serving as medical homes to the growing number of uninsured patients and patients with complex health problems. As a result, Florida FQHCs save the state significant health care costs through reduction of unnecessary emergency department visits, increased access to preventive services, and provision of cost-effective disease management. Further evaluations should be conducted to ensure reform efforts continue to protect and build on the cost-saving practices of Florida FQHCs.

## COST STUDY LIMITATIONS

In order to conduct an accurate economic analysis of primary care in Florida there are several essential elements required, including: the number of patients served by primary care providers, the insurance status of patients, prevalence of disease in patient populations, number of patients that utilize emergency department care, costs of providing care in emergency departments, cost of providing care in primary care environments, prevalence rates of key diseases (diabetes, asthma, mental illness and childhood diseases such as ear infections), staffing information of primary care facilities, and rough salary information of primary care staff. Though this detailed information would allow for thorough analysis of all benefits of the primary care system, a rough estimate could be provided by obtaining information on the follow: the number of patients served by primary care providers, the insurance status of patients, prevalence of disease in patient populations, number of patients that utilize emergency department care, costs of providing care in emergency departments, and cost of providing care in primary care environments. Detailed information on where uncompensated care pool funds are being distributed and for what illnesses would also provide great insight into the amount of money saved by using primary care as compared to emergency departments. Other cost comparison with national health expenditures and Medicaid data should be interpreted with caution. These are shown to approximate differences in scale and should not be considered as accurate estimates.

While there have been primary care, family physician and community health center economic impact analysis conducted for other states, there is no assurance or certainty in any estimate. This is because there is no standard way of defining or measuring both the direct and indirect costs and benefits to the state. For example, the direct costs and benefits of primary care may include the amount spent and saved by providing comprehensive primary care or certain preventive services to individuals at primary care facilities. The indirect costs and benefits may also involve a host of factors, including avoided costs of preventing major disease, quality of life-adjusted years (QALY), the economic effect of those employed by the primary care facilities and the economic effect of those who benefit from primary care.

## REFERENCES

---

- <sup>1</sup> C. Sia et al., "History of the Medical Home Concept," *Pediatrics* 113, no. 5 Supp. (2004): 1473–1478.
- <sup>2</sup> *National Healthcare Disparities Report: Summary*. February 2004. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/qual/nhdr03/nhdrsum03.htm>
- <sup>3</sup> Starfield B, Shi L, Macinko, J., Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly*. 2005. 83(3): 457-502
- <sup>4</sup> Office of Management and Budget. Program Assessment Rating Tool, FY06. 2005. <http://www.whitehouse.gov/omb/budget/fy2006/part.html>
- <sup>5</sup> Chin MH, et al. "Improving and Sustaining Diabetes Care in Community Health Centers with the Health Disparities Collaboratives." December 2007 *Med Care* 45(12).
- <sup>6</sup> Starfield B, Shi L. Policy relevant determinants of health: an international perspective. *Health Policy* 2002; 60: 201–18
- <sup>7</sup> Starfield, B., Shi, L., Macinko, J., Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly*. 2005. 83(3): 457-502
- <sup>8</sup> Shin, P., Jones, K., and Rosenbaum, S. *Reducing Racial and Ethnic Health Disparities: Estimating the Impact of High Health Center Penetration in Low-Income Communities*. National Association of Community Health Centers, 2003. [http://www.gwumc.edu/sphhs/departments/healthpolicy/chsrp/downloads/GWU\\_Disparities\\_Report.pdf](http://www.gwumc.edu/sphhs/departments/healthpolicy/chsrp/downloads/GWU_Disparities_Report.pdf)
- <sup>9</sup> Shin P, Jones K, and Rosenbaum S. *Reducing Racial and Ethnic Health Disparities: Estimating the Impact of High Health Center Penetration in Low-Income Communities*. Prepared for the National Association of Community Health Centers, September 2003.
- <sup>10</sup> Shi, L and Stevens, GD. "The Role of Community Health Centers in Delivering Primary Care to the Underserved." April-June 2007 *J Ambulatory Care Manage* 30(2):159-170.
- <sup>11</sup> The Robert Graham Center, Capital Link, and the National Association of Community Health Centers, *Primary Care Payoff*, 2007. [http://www.nachc.com/client/documents/issues-advocacy/policy-library/research-data/research-reports/Access\\_Granted\\_FULL\\_REPORT.pdf](http://www.nachc.com/client/documents/issues-advocacy/policy-library/research-data/research-reports/Access_Granted_FULL_REPORT.pdf)
- <sup>12</sup> Cunningham P. "What Accounts for Differences in the Use of Hospital Emergency Departments Across U.S. Communities?" July 2006 *Health Affairs* 25:W325-W336.
- <sup>13</sup> Arnold Epstein, 2001. "The role of public clinics in preventable hospitalizations among vulnerable populations" *Health services research* 32:2. 405-420.
- <sup>14</sup> Garg A, Probst JC, Sease T, Samuels ME. "Potentially Preventable Care: Ambulatory Care-Sensitive Pediatric Hospitalizations in South Carolina in 1998." September 2003 *Southern Medical Journal* 96(9):850-8.
- <sup>15</sup> Hadley J, Cunningham P, and Hargraves JL. "Would Safety-Net Expansions Offset Reduced Access Resulting from Lost Insurance Coverage? Race/Ethnicity Differences." November/December 2006 *Health Affairs* 25(6):1679-1687.
- <sup>16</sup> Relevant literature regarding primary care includes: Institute of Medicine 2001. *Crossing the Quality Chasm* (National Academy Press, Washington D.C.); Institute of Medicine, *Primary Care: America's Health in a New Era* (National Academy Press, Washington D.C.); Barbara Starfield. 1998. *Primary Care* (Oxford University Press, NY, NY), Eli Ginsberg. 1994. Improving primary care from the poor: lessons from the 1980s," *JAMA* 271:6. 464-467 Barbara Starfield, Leiyu Shi, and James Macinko. 2005. Contribution of primary care to health systems and health. *Milbank Quarterly* 83:3. 457-502. Kevin Grumbach and Thomas Bodenheimer. 2002. A primary care home for Americans: putting the house in order. *JAMA* 288:7 889- 893; Thomas Bodenheimer, Edward Wagner, and Kevin Grumbach, 2002. Improving primary care for patients with chronic illness. *JAMA* 288:14. 1775-1779 and 288:15. 1909-1914; Mark Murray and Donald M. Berwick. 2003. Advanced access: reducing waiting and delays in primary care. *JAMA* 289:8. 1035-1040; Mark Murray, Thomas Bodenheimer, Diane Rittenhouse and Kevin Grumbach. 2003 Improving timely access to primary care: case studies of the advanced access model. *JAMA* 289:8. 1042-1046. *JAMA* 289:8. 1035- 1040. Ann Zuvekas. 2005. Health centers and the healthcare system. *JACM* 28:4. 331-339; Fitzhugh Mullan. 2002. Big doctoring in America: profiles in primary care. (Univ. of Calif. Press, Los Angeles); John Billings and colleagues. 1993. *Datawatch*; Health

---

Affairs (Spring) 162-174; John Billings, Geoffrey Anderson, and Laurie Newman. 1996. Recent findings on preventable hospitalizations. *Health Affairs* (Fall) 239-250. Kevin Grumbach, Karen Vranizan, and Andrew Bindman. 1997. Physician supply and access to care in urban communities. *Health Affairs* 16:1. 71-87. Diane Rittenhouse and colleagues. 2004. Physician organization and care management in California; from cottage to Kaiser *Health Affairs*. 23:6. 51-63; Andrew Bindman, Jonathan Weiner, and Azeem Majid. 2001. Primary care groups in the United Kingdom; quality and accountability. *Health Affairs* 20:3. 132-146; Karen Davis, Stephen Schoenbaum, and Anne-Marie Audet. 2005. A 2020 vision of patient-centered primary care. *J. Gen. Int. Med.* 20: 953-957; Meredith Rosenthal and colleagues. 2005. Early experience with pay for performance: from concept to practice. *JAMA* 294:14. 1788-1793; Mark Murray and Donald Berwick. 2003. Advanced access: reducing waiting and delays into primary care. *JAMA* 289:8 (Feb. 26) 1035-1040; Pamela Gordon and Matthew Chin. 2004. Achieving a new standard in primary care for low-income populations: case studies of redesign and change through a learning collaborative; Leiyu Shi and Barbara Starfield. 2001. The Effect of Primary Care Physician Supply and Income Inequality on Mortality Among Blacks and Whites in US Metropolitan Areas. *American Journal of Public Health*. 91:8. 1246-1250; Leiyu Shi, Barbara Starfield, Bruce Kennedy and Ichiro Kawachi. 1999. Income Inequality, Primary Care, and Health Indicators. *Journal of Family Practice*. 48:4. 275-284; Christopher Forrest. 2006. Strengthening Primary Care to Bolster the Health Care Safety Net. *JAMA*. 295:9; Leiyu Shi, James Macinko, Barbara Starfield, Robert Politzer and Jiahong Xu. 2005. Primary care, race, and mortality in the US states. *Social Science & Medicine* 61. 65-75.

<sup>17</sup> Ibid.

<sup>18</sup> Kevin Grumbach and Thomas Bodenheimer. 2002. A primary care home for Americans: putting the house in order. *JAMA* 288:7 889- 893

<sup>19</sup> Duncan RP, Porter CK, Garvan CW, Hall AG, 2005. "A Profile of Uninsured Floridians: Findings from the 2004 Florida Health Insurance Study." The Department of Health Services Research, Management and Policy, University of Florida

<sup>20</sup> Ibid.

<sup>21</sup> Health Insurance Study Updates available at [http://ahca.myflorida.com/medicaid/quality\\_management/mrp/Projects/fhis2004/PDF/fhis\\_fact\\_sheet\\_3\\_sep2005.pdf](http://ahca.myflorida.com/medicaid/quality_management/mrp/Projects/fhis2004/PDF/fhis_fact_sheet_3_sep2005.pdf)

<sup>22</sup> Fryer GE, Dovey SM, Green LA. The importance of having a usual source of health care. *Am Fam Physician* 2000;62:477.

<sup>23</sup> Florida Hospital Association, Financial Health of Florida's Hospitals – Overview, 2000-2006,

<sup>24</sup> Florida Department of Health, Volunteer Health Services Program 2006-2007 Annual Report.

<sup>25</sup> Centers for Medicare and Medicaid Services, Rural Health Center, Medicare Certified Rural Health Clinics as of 2/6/2008, available at <http://www.cms.hhs.gov/center/rural.asp>.

<sup>26</sup> The Robert Graham Center, Capital Link, and the National Association of Community Health Centers, *Primary Care Payoff*, 2007. [http://www.nachc.com/client/documents/issues-advocacy/policy-library/research-data/research-reports/Access\\_Granted\\_FULL\\_REPORT.pdf](http://www.nachc.com/client/documents/issues-advocacy/policy-library/research-data/research-reports/Access_Granted_FULL_REPORT.pdf)

<sup>27</sup> Shin P, Finnegan B, and Rosenbaum S, How does Investment in Community Health Centers Affect the Economy. RCHN Community Health Foundation, 2008.

[http://www.gwumc.edu/sphhs/departments/healthpolicy/chsrp/downloads/DHP\\_RCHN\\_HealthCenterInvestmentReport.pdf](http://www.gwumc.edu/sphhs/departments/healthpolicy/chsrp/downloads/DHP_RCHN_HealthCenterInvestmentReport.pdf)

<sup>28</sup> For more detailed description, see <http://bphc.hrsa.gov/uds>

<sup>29</sup> In 2006, federal poverty level was \$16,600 for family of three. 71 FR 3848-3849.

<sup>30</sup> Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2006 and 2007 Current Population Survey (CPS: Annual Social and Economic Supplements).

<sup>31</sup> 2004 Florida Health Insurance Study

<sup>32</sup> U.S. Census Bureau, 2000 Decennial Census, summary file 3.

<sup>33</sup> Ibid

<sup>34</sup> Rosenbaum, S., Shin, P. Migrant and Seasonal Farmworkers: Health Insurance Coverage and Access to Care. GW Department of Health Policy, Center for Health Services Research and Policy, Kaiser Commission on Medicaid and the Uninsured. May 2005.

- <sup>35</sup> 2006 UDS data, HRSA
- <sup>36</sup> Rosenbaum, S., Shin, P. Migrant and Seasonal Farmworkers: Health Insurance Coverage and Access to Care. GW Department of Health Policy, Center for Health Services Research and Policy, Kaiser Commission on Medicaid and the Uninsured. May 2005.
- <sup>37</sup> Brooks, R.G., Menachemi, N., Clawson, A., and Les Bietsch. Availability of Physician Services in Florida, Revisited. *Archives of Internal Medicine*. 2005;165:2136-2141
- <sup>38</sup> See studies cited in National Association of Community Health Centers, 2008. Studies on health centers improving access to health care, quality, disparities, and cost. Washington D.C. Available at <http://www.nachc.com/literature-summaries.cfm>
- <sup>39</sup> Centers for Disease Control. The burden of chronic diseases and their risk factors. National and State Perspectives, 2004.  
<http://apps.nccd.cdc.gov/BurdenBook/DeathCause.asp?BookID=2&state=fl>
- <sup>40</sup> National Center for Injury Prevention and Control. 10 Leading Causes of Death, Florida. 2005. Available at: <http://webappa.cdc.gov/sasweb/ncipc/leadcaus10.html>
- <sup>41</sup> Centers for Disease Control and Prevention. Chronic Diseases: The Leading Causes of Death, Florida. 2005. <http://www.cdc.gov/nccdphp/publications/factsheets/ChronicDisease/florida.htm>
- <sup>42</sup> Florida Department of Health. Florida Chronic Disease Report. 2002.  
<http://www.doh.state.fl.us/Family/chronicdisease/websites.html#data>
- <sup>43</sup> Centers for Disease Control and Prevention. Chronic Diseases: The Leading Causes of Death, Florida. 2005. <http://www.cdc.gov/nccdphp/publications/factsheets/ChronicDisease/florida.htm>
- <sup>44</sup> Florida Department of Health. Cardiovascular Surveillance Summary, 2007.  
<http://www.doh.state.fl.us/family/heart/statistics.html>
- <sup>45</sup> Centers for Disease Control. The burden of chronic diseases and their risk factors. National and State Perspectives, 2004.  
<http://apps.nccd.cdc.gov/BurdenBook/DeathCause.asp?BookID=2&state=fl>
- <sup>46</sup> Ibid
- <sup>47</sup> Florida Department of Health. Cardiovascular Surveillance Summary, 2007.  
<http://www.doh.state.fl.us/family/heart/statistics.html>
- <sup>48</sup> Centers for Disease Control and Prevention. Chronic Diseases: The Leading Causes of Death, Florida. 2005. <http://www.cdc.gov/nccdphp/publications/factsheets/ChronicDisease/florida.htm>
- <sup>49</sup> Centers for Disease Control. The burden of chronic diseases and their risk factors. National and State Perspectives, 2004.  
<http://apps.nccd.cdc.gov/BurdenBook/DeathCause.asp?BookID=2&state=fl>
- <sup>50</sup> American Cancer Society, Cancer Facts and Figures, 2007.  
[http://www.cancer.org/docroot/STT/stt\\_0\\_2007.asp?sitearea=STT&level=1](http://www.cancer.org/docroot/STT/stt_0_2007.asp?sitearea=STT&level=1)
- <sup>51</sup> American Diabetes Association, "Economic Costs of Diabetes in the U.S. in 2007. [www.diabetes.org/uedocuments/cost-diabetes-executive-summary.pdf](http://www.diabetes.org/uedocuments/cost-diabetes-executive-summary.pdf).; "Economic Costs of Diabetes in the U.S.," *Diabetes Care*, vol. 26, no. 3 (2003).
- <sup>52</sup> Shin P, Markus A, Rosenbaum S, and Sharac J. Adoption of Health Center Performance Measures and National Benchmarks. *Journal of Ambulatory Care Management*. 31(1):69-75, January/March 2008.
- <sup>53</sup> Starfield B, Shi L, Macinko, J., Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly*. 2005. 83(3): 457-502
- <sup>54</sup> Chin MH, et al. "Improving and Sustaining Diabetes Care in Community Health Centers with the Health Disparities Collaboratives." December 2007 *Med Care* 45(12).
- <sup>55</sup> Shin P, Jones K, and Rosenbaum S, "Reducing Racial and Ethnic Health Disparities: Estimating the Impact of High Health Center Penetration in Low-Income Communities," Fact Sheet, October 2004,  
<http://www.nachc.org/advocacy/HealthDisparities/files/DisparitiesFactSheet.pdf>
- <sup>56</sup> Shi, L and Stevens, GD. "The Role of Community Health Centers in Delivering Primary Care to the Underserved." April-June 2007 *J Ambulatory Care Manage* 30(2):159-170.
- <sup>57</sup> [www.whitehouse.gov/omb/expectmore/detail/10000274.2007.html](http://www.whitehouse.gov/omb/expectmore/detail/10000274.2007.html)
- <sup>58</sup> Heffler S, et al. (2005) "US Health Spending Projections for 2004-2014." *Health Affairs Web Exclusive* w5-47. Smith C, et al. (2005) "Health Spending Growth Slows in 2003." *Health Affairs*

---

24(1):185-194. Levit K, et al. (2004) "Health Spending Rebound Continues in 2002." *Health Affairs* 23(1):147-159.

<sup>59</sup> Proser M, Deserving the Spotlight: Health Centers Provide High-Quality and Cost Effective Care. *Journal of Ambulatory Care Management*, 2005; 28(4): 321-330.

<sup>60</sup> The Robert Graham Center, Capital Link, and the National Association of Community Health Centers, *Primary Care Payoff*, 2007. [http://www.nachc.com/client/documents/issues-advocacy/policy-library/research-data/research-reports/Access\\_Granted\\_FULL\\_REPORT.pdf](http://www.nachc.com/client/documents/issues-advocacy/policy-library/research-data/research-reports/Access_Granted_FULL_REPORT.pdf)

<sup>61</sup> American Hospital Association. Uncompensated Hospital Care Cost Fact Sheet, October 2007.

<sup>62</sup> Florida Hospital Association, Financial Health of Florida's Hospitals-Overview: 2000-2006. 2008.

<sup>63</sup> Ibid.

<sup>64</sup> Agency for Health Care Administration, Emergency Department Utilization Report for Calendar Year 2005, Document Abstract February 2008.

<sup>65</sup> Ibid.

<sup>66</sup> Starfield B, Shi L, Macinko, J., Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly*. 2005. 83(3): 457-502.

<sup>67</sup> Agency for Health Care Administration, 2005 Florida Emergency Department Use. <http://ahca.myflorida.com/Publications/forms/EmergencyDepartment.pdf>

<sup>68</sup> Smith-Campbell B. Emergency Department and Community Health Center Visits and costs in an Uninsured Population. *Journal of Nursing Scholarship*, 2005; 37(1):80-86.

<sup>69</sup> Centers for Medicare and Medicaid Services. [www.cms.hhs.gov/NationalHealthExpendData/downloads/tables.pdf](http://www.cms.hhs.gov/NationalHealthExpendData/downloads/tables.pdf) (Table 8)

<sup>70</sup> 2006 HRSA UDS data

<sup>71</sup> National Association of Community Health Centers, Underserved and Medically Disenfranchised Populations by U.S. County, 2005. <http://www.nachc.com/client/documents/All%20US%20counties%20and%20MD%20populations%202005.pdf>

<sup>72</sup> Shin, P., Finnegan, B., Sharac, J., and Rosenbaum, S. *Health Centers: An Overview and Analysis of Their Experience with Private Health Insurance*. Kaiser Family Foundation; <http://www.kff.org/uninsured/upload/7738.pdf>

<sup>73</sup> Shi L, Stevens G and Politzer R. "Access to Care for U.S. Health Center Patients and Patients Nationally - How Do the Most Vulnerable Populations Fare?" March 2007 *Medical Care* (45)3: 206-213.

<sup>74</sup> Shin, P., Finnegan, B., Sharac, J., and Rosenbaum, S. *Health Centers: An Overview and Analysis of Their Experience with Private Health Insurance*. Kaiser Family Foundation. February 2008.

<sup>75</sup> 1996-2006 UDS data, HRSA and U.S. Census Bureau 1996-2006 Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC)

<sup>76</sup> Shin, P., Finnegan, B., Sharac, J., and Rosenbaum, S. *Health Centers: An Overview and Analysis of Their Experience with Private Health Insurance*. Kaiser Family Foundation. February 2008.

<sup>77</sup> The Robert Graham Center and the National Association of Community Health Centers, *Access Denied*, 2007. [http://www.nachc.com/client/documents/issues-advocacy/policy-library/research-data/research-reports/Access\\_Denied42407.pdf](http://www.nachc.com/client/documents/issues-advocacy/policy-library/research-data/research-reports/Access_Denied42407.pdf)

<sup>78</sup> Center for Budget and Policy Priorities, New George and Florida Health Plans Unlikely to Reduce Ranks of Uninsured, 2008. <http://www.cbpp.org/7-1-08health.htm>

<sup>79</sup> Agency for Health Care Administration. Florida Medicaid Reform Application for 1115 Research and Demonstration Waiver. [http://ahca.myflorida.com/Medicaid/medicaid\\_reform/waiver/index.shtml](http://ahca.myflorida.com/Medicaid/medicaid_reform/waiver/index.shtml)

<sup>80</sup> Florida. Agency for Healthcare Administration. Florida Medicaid Reform: Implementation Plan. [http://ahca.myflorida.com/Medicaid/medicaid\\_reform/implementationplan/index.shtml](http://ahca.myflorida.com/Medicaid/medicaid_reform/implementationplan/index.shtml)

---

<sup>81</sup> Georgetown University Health Policy Institute, "Medicaid pilots at one year: How is the new Medicaid marketplace faring?" Jessie Ball DuPont Fund, December 2007.  
<http://ihcrp.georgetown.edu/floridamedicaid/pdfs/briefing4.pdf>

<sup>82</sup> Alker, Joan, and Jack Hoadley. Waving Cautionary Flags: Initial Reactions From Doctors and Patients to Florida's Medicaid Changes. Health Policy Institute, Georgetown University. Jesse Ball DuPont Fund, 2007. 1-4.

<sup>83</sup> Smith V, et al., As tough time wanes, States act to improve Medicaid coverage and quality: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2007 and 2008. Kaiser Family Foundation, October 2007.

<sup>84</sup> Keen, Linda. Florida. Office of the Inspector General. Agency for Healthcare Administration. Program Review of the Medicaid Reform Pilot Project. 2007.

<sup>85</sup> Smith V, et al., As tough time wane, States act to improve Medicaid coverage and quality: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2007 and 2008. Kaiser Family Foundation, October 2007.

