Greater Cincinnati
Adult Primary Care
Capacity Study

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Tyler Fry; and Kristen Jones.

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This study assesses the community’s ability to meet the primary care demand of its residents,
including the incremental demand expected to result from the full implementation of the Patient
Protection and Affordable Care Act

Commissioned by the Executive Stakeholders’ Council¹

¹ The Executive Stakeholders’ Council (ESC) was formed in 2010 to guide the planning and implementation of a
community-wide, multi-stakeholder health care strategy. The Health Collaborative is continuing the work of the ESC.
The study itself was guided by an ad hoc task force whose members are listed on page 31, and was funded in part
by the Greater Cincinnati-Northern Kentucky Healthcare Foundation, also known as the Doctors Foundation.
# Table of Contents

Executive Summary ....................................................................................................................... 3  
Introduction .................................................................................................................................... 4  
Methodology .................................................................................................................................. 4  
  Definition of Primary Care Physician ...................................................................................... 4  
  Defining the Need .................................................................................................................... 4  
  Geography ................................................................................................................................ 5  
  Data Collection ........................................................................................................................ 5  
  Limitations ............................................................................................................................... 5  
  Maps ......................................................................................................................................... 6  
Greater Cincinnati’s Primary Care Story ....................................................................................... 6  
  PCP Supply .............................................................................................................................. 6  
  Deficits Vary by County .......................................................................................................... 8  
  Federally Qualified Health Centers and Charitable Clinics ................................................... 13  
Impact of National Trends and the Affordable Care Act on the Supply of and Need for PCPs. .. 15  
  Payment System ..................................................................................................................... 15  
  PCP vs. Specialist Utilization ................................................................................................ 16  
  Other Factors .......................................................................................................................... 16  
  ACA Will Expand Coverage .................................................................................................. 16  
  Training .................................................................................................................................. 17  
  Financial Incentives ............................................................................................................... 19  
  Accountable Care Organizations (ACOs) .............................................................................. 19  
  Community Health Centers (CHCs) ...................................................................................... 19  
  Prevention .............................................................................................................................. 20  
Implications for Greater Cincinnati ............................................................................................. 20  
Recommendations ........................................................................................................................ 25  
References .................................................................................................................................... 28  
About the Authors ........................................................................................................................ 30  
Acknowledgments ........................................................................................................................ 30  
Primary Care Capacity Study Task Force Members .................................................................... 31
Executive Summary

Full implementation of the Patient Protection and Affordable Care Act (ACA) in 2014 will provide health insurance coverage for an estimated 32 million more Americans over the next 10 years\(^1\), including 124,000 more adults in the nine-county region analyzed in this report. Providing primary care for this newly insured population represents an incredible challenge for the health care system locally and nationally. Among those newly covered, there will be a pent-up demand for primary care physicians (PCPs).

Although there already was a perceived shortage of PCPs in Greater Cincinnati, there had been no accurate, complete database of PCPs locally on which to base that view. Under the direction of the Executive Stakeholders’ Council, our goals were: a) to determine the number of primary care physicians practicing in a nine-county area of Greater Cincinnati; b) evaluate the potential need for PCPs currently and in five years; and c) make recommendations for the region to meet any needs that were identified.

Our study found that Greater Cincinnati currently has a shortage of primary care physicians, and that, if no action is taken, the shortage will grow by 2017.

While multiple benchmarks exist for the number of PCPs a community needs, the most conservative estimates show the current shortage in Greater Cincinnati is nearly 200 physicians, increasing to 250 by 2017. Other estimates are significantly higher.

Given the increased demand for primary care as a result of the ACA, and national trends that show fewer physicians entering the PCP ranks, decisive action will be needed to ensure that adequate primary care resources are available to our community in the coming years.

Our community must also address the barriers to care that could prevent newly covered individuals from accessing existing PCP resources, including factors such as geographic distribution of physicians and patients, a disproportionately smaller number of minority physicians, inadequate transportation to health care, and a lack of providers who accept Medicaid.

Greater Cincinnati has unique resources and relevant, existing collaborations among providers, employers, insurers, and public and private community health organizations to bring to bear on this issue. These resources and collaborations are essential in realizing the recommended strategies for addressing and resolving our community’s need for an adequate supply of primary care physicians.

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**Introduction**

Many consider primary care as the cornerstone of efficient health care delivery. The primary care office is the most appropriate place for preventive care delivery and chronic disease management. Primary care can deliver timely urgent medical care, allowing the limited resources of emergency departments to focus on true emergencies. It also allows the resources of specialist care to be reserved for the most complicated cases.

In spite of the unquestionable benefits of primary care, primary care physicians are at the bottom of the medical reimbursement scale.¹ This, along with other factors described in this report, has resulted in a shift in the choices of medical students toward higher paying specialties,² especially as the average medical student graduates with $150,000 of debt.³

The migration of medical students toward higher salaried specialties, the increasingly early retirement of practicing physicians due to burnout,⁴ and the increased number of residents with health coverage under the ACA leave us with a growing deficit of primary care physicians.

This report assesses the existing primary care capacity in nine counties of Greater Cincinnati and forecasts the level of need for primary care practitioners currently and in 2017 after the ACA has been fully implemented. It offers initial recommendations to identify potential solutions.

**Methodology**

**Definition of Primary Care Physicians**

Primary care physicians, for the purposes of this report, are defined as family medicine physicians, internal medicine physicians and general practice physicians (who have no specialty training beyond internship) serving the adult population.

Though our researchers collected information on pediatricians, pediatric providers are not included in the discussion, and children under age 18 were not included in population figures. This is because children are covered by the State Children’s Health Insurance Program (SCHIP) and thus are a stable group of insured. Our opinion is that the demand for pediatric health care services will not be significantly changed by the ACA. Unless otherwise noted, statistics cited in this document exclude pediatricians and children.

**Defining the Need**

A number of nationally recognized benchmarks exist for defining a desired ratio of primary care physicians to adult population. For purposes of this document, we reviewed two benchmarks – one developed by the federal government, the other by a private sector group:

• Projections developed in 2006 by the Department of Health & Human Services, Health Resources and Services Administration, Bureau of Health Professions, provided physician supply and demand projections through 2020.1 These projections assumed that the need was 89 PCPs per 100,000 adult population in 2012, and will be 91 per 100,000 in 2017. According to this benchmark, there is currently a shortage of 471 primary care physicians in Greater Cincinnati, increasing to 532 by 2017.

• The Hospital Executive’s Guide to Physician Staffing2 by Dr. Hugo J. Finarelli recommends a ratio of 71 PCPs per 100,000 adult population, increasing to 73 by 2017. Using these guidelines, currently there is a shortage 195 physicians in our study area, which will increase to 250 physicians by 2017. Dr. Finarelli points out that “while the ratios from the book are appropriate for current need, the demand for adult primary care physicians could increase 10 to 15 percent in the next five years if practice patterns change in response to health care reform initiatives and other trends. On the other hand, the supply of primary care physicians won’t increase 10 to 15 percent in the next five years, so some or most of the increased demand will be met by greater reliance on non-physician clinicians in the interim.”3

The actual shortage is likely somewhere between these two numbers. We also reviewed the PCP ratio in Massachusetts, where a law similar to the ACA has existed for several years. It is referenced later in this report. By any benchmark, the Greater Cincinnati area has a PCP shortage and an inequity in how physicians are distributed throughout the region that must be addressed.

Geography

The Greater Cincinnati region covered for purposes of this study includes Adams, Brown, Butler, Clermont, Hamilton and Warren counties in Ohio, and Boone, Campbell and Kenton counties in Kentucky. In some cases, data will reference the 20-county Tristate area, broader than the study region. That will be so noted.

Data Collection

The database of primary care physicians was compiled by Timothy Burns, Bradley Burton, Tyler Fry and Kristen Jones of the Xavier University Master of Health Services Administration program, supervised by Thomas Ruthemeyer, Clinical Professor. Physician addresses were verified by contacting each of the health systems and hospitals, Mercy Medical Associates, St. Elizabeth Physicians, The Christ Hospital Physicians, TriHealth Physician Partners, UC Physicians, local and national physician organizations, The Academy of Medicine of Cincinnati, American Medical Association, Cincinnati Business Courier, Medical Group Management Association, the Ohio and Kentucky State Medical Associations, the State Medical Board of Ohio and Kentucky Board of Medical Licensure, as well as by direct contact with physician practices.

3 Per email message, June 24, 2013
The physician database is current as of February 2013.

**Limitations**

Physicians over age 70 were removed from the database, as they were less likely to be able to contribute to the increase in need for capacity. Specialists, hospitalists and physicians who devote the majority of their time to emergency/urgent care also were excluded. As mentioned earlier, pediatricians were also excluded.

The database also does not include advanced practice professionals (physician assistants and nurse practitioners) or physicians who have moved or retired. We had no method for identifying providers with full patient panels or to confirm that current Medicaid providers were accepting new patients or would even remain Medicaid providers. We also had no methodology for determining which providers are working full time and which are not. For purposes of this study, we assume that all PCPs are full time, knowing that is likely not the case.

**Maps**

Maps were generated by HealthLandscape with the goal of defining locations of primary care physicians and areas of particular need and deficit. Predictive modeling was provided by James Plichta, courtesy of TriHealth, Inc., using Truven Health Analytics data. The maps use the HSS PCP shortage ratios for calculation. However, the maps reflect the greatest areas of shortage under any scenario.

**Greater Cincinnati’s Primary Care Story**

This section overviews the current primary care physician supply in the nine-county study region, projects the need for PCPs currently and five years from now, and discusses Federally Qualified Health Centers (FQHCS) in Greater Cincinnati. FQHCs serve as a safety net and are an important provider of primary care to those who are covered by public health insurance and to the uninsured.

**PCP Supply**

The nine-county region in this study is below both the HHS desired ratio of primary care physicians to adults of 89 per 100,000 and the *Hospital Executive’s Guide* recommended ratio to

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3. A federally qualified health center (FQHC) is a type of provider defined by the Medicare and Medicaid statutes. FQHCs include all organizations receiving grants under Section 330 of the Public Health Service Act, certain tribal organizations and FQHC Look-Alikes. Requirements for Indian Health Service funded FQHCs may differ from the requirements for FQHCs receiving Section 330 grants and for FQHC Look-Alikes. (Definition from [http://www.raconline.org/topics/clinics/fqhcfaq.php](http://www.raconline.org/topics/clinics/fqhcfaq.php), retrieved Dec.11, 2012)

4. Health care safety net clinics are community-based providers who offer health services to low-income people, including those without insurance. (Definition retrieved from [http://www.coalitionclinics.org/safety-net.html](http://www.coalitionclinics.org/safety-net.html), June 5, 2013.)
adults of 71 per 100,000. Only Hamilton County is close to the HHS ratio and exceeds the Hospital Executive Guide’s ratio. Across the nine-county study region, the current PCPs/100,000 adults ratio ranges from a low of 25.1/100,000 in Clermont County to a high of 79.5/100,000 in Hamilton County, with an average of 58.4/100,000 (See Table 1).

Table 2 provides additional details on nurse practitioners and physician assistants (we do not have a reliable source of local data for these, though we acknowledge they are an important part of the primary care delivery system).

| Table 1: Primary Care Physician Ratios & Deficits (Adult Population) |
|--------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                               | Adams          | Brown          | Butler         | Clermont       | Hamilton       | Warren         | Boone          | Campbell       |
| Adult population 2012         | 24,326         | 30,364         | 276,273        | 155,679        | 616,458        | 148,815        | 92,272         | 70,166         |
| Estimated adult population 2017 | 24,869        | 31,221         | 285,174        | 162,139        | 603,012        | 163,988        | 102,713        | 72,178         |
| PCPs                          | 10             | 12             | 123            | 39             | 490            | 78             | 44             | 32             |
| PCPs/100,000 residents        | 41.1           | 39.5           | 44.5           | 25.1           | 79.5           | 52.4           | 47.7           | 45.6           |
| Estimated PCP deficit         |                |                |                |                |                |                |                |                |
| 2012 – HHS Benchmark          | 12             | 15             | 123            | 100            | 59             | 54             | 38             | 30             | 40             |
| Projected PCP deficit         |                |                |                |                |                |                |                |                |
| 2017-HHS Benchmark            | 13             | 16             | 137            | 109            | 59             | 71             | 49             | 34             | 45             |
| Estimated PCP deficit         |                |                |                |                |                |                |                |                |
| 2012 – Hospital Executive’s  | 7              | 10             | 73             | 72             | -52            | 28             | 22             | 18             | 19             | 195            |
| Guide Benchmark               |                |                |                |                |                |                |                |                |                |                |
| Projected PCP deficit         |                |                |                |                |                |                |                |                |
| 2017 – Hospital Executive’s  | 8              | 11             | 85             | 79             | -50            | 42             | 31             | 21             | 23             | 532            |
| Guide Benchmark               |                |                |                |                |                |                |                |                |                |                |

| Table 2: National Supply of Primary Care Professionals3 |
|--------------------------------|----------------|----------------|----------------|----------------|
| Number of primary care         | Number of      | Number of      | Average annual |
| professionals                  | professionals  | professionals  | percentage change per |
| Base year                      | Recent year    | per 100,000    | capita          |
| Primary care physicians        | 208,187        | 264,086        | 80             | 90             | 1.17           |
| Physician assistants*          | 12,819         | 23,325         | 5              | 8              | 3.89           |
| Nurse practitioners**          | 44,200         | 82,622         | 16             | 28             | 9.44           |
| Dentists                       | 118,816        | 138,754        | 46             | 47             | 0.12           |

* Ohio law states that physician assistants must practice in direct collaboration with their supervising physician. They may not practice independently.

** Nurse practitioners, also known as Advanced Practice Nurses, are licensed by the State Board of Nursing. In Ohio, they must be supervised by a physician with a valid Ohio license, but may practice independently. In Kentucky, all prescriptive authority by APNs requires a collaborative agreement with a physician.

1  Source: Truven Health Analytics Population Estimates
2  Source: Health Collaborative/Greater Cincinnati Health Council customer relationship management (CRM) database, February 2013
In 2017, assuming the number of primary care physicians remains the same, the nine-county area will face an even greater shortage of PCPs as well as a continued disparity in physician distribution. That deficit is expected to be anywhere from 250 to 532 physicians for the region. We recognize this estimate does not account for physician attrition, estimated at a rate of 10 to 12 percent per year.\textsuperscript{1} Attrition could push the anticipated shortage to even higher levels.

**Deficits Vary By County**

While **Hamilton County** does not have a deficit of physicians by the most conservative estimates, the distribution of physicians is uneven. In Hamilton County, neighborhoods of greatest primary care physician deficit are Mt. Healthy; Roselawn; Delhi/Western Hills; Anderson and Colerain Township. There is a very large need in the City of Cincinnati, which has a high poverty rate and where 1 in 5 adults lack health insurance.\textsuperscript{2}

In **Adams County**, half of the county’s PCP deficit is in Peebles, which has no PCPs.

**Brown County** has a ratio of PCPs of 39.5/100,000 population, with physicians needed throughout the county.

**Butler County** must significantly increase its number of PCPs to have an adequate supply. The biggest deficits projected in 2017 are in the cities of Hamilton and Middletown.

**Clermont County** also has a serious deficit. The biggest deficits are in Milford; Amelia; Batavia and Loveland (note that Loveland crosses 3 counties – Clermont, Warren and Hamilton).

**Warren County** has a ratio of 52.4 PCPs/100,000, with its biggest deficits of PCPs in Lebanon and Maineville.

In **Northern Kentucky**, **Boone County** has a ratio of 47.7 physicians per 100,000, with its biggest deficits in Florence and Union. **Campbell County** has its biggest shortage in Ft. Thomas. In **Kenton County**, the ratio is slightly better, with 55.4 physicians per 100,000. The biggest PCP deficits are in Erlanger, Independence and Latonia.

With growing population in most counties, and no increase in PCPs, the PCP deficit is expected to worsen throughout the region by 2017. (See Figures 1 and 2. Note: These maps show the deficit based on the HHS study referenced earlier. While the numbers differ from the *Hospital Executives Guide* study, the relative ratios of PCP deficits are the same by either account.)

\textsuperscript{1} Ohio Department of Health. Healthy Ohio Community Profiles. Office of Healthy Ohio, Columbus, Ohio. December 2008.

Figures 3-6 show the expanded number of Medicaid recipients expected in Hamilton County and throughout the study area in the next five years as a result of changes brought about by the ACA. These data assume that Ohio and Kentucky participate in the Medicaid expansion. At the time we went to press, Ohio’s participation in the Medicaid expansion was still being debated in the legislature. Kentucky’s governor has decided that Kentucky will participate.¹

Our estimates show that, if Medicaid expansion occurs in both states, **Medicaid recipients will increase by 25 percent throughout the nine-county study area**, with more than 67,000 more individuals covered, bringing the total covered by Medicaid to nearly 350,000 individuals or approximately 16.5 percent of the population, compared to 13.5 percent of the population today. The opportunity for providers to now be reimbursed for care that they were providing but writing off as a loss may contribute to a stronger bottom line and increased physician satisfaction. Both will strengthen the recruiting environment for new primary care physicians.

Medicaid recipients as a percentage of the population range from a low of 6.7 percent in Warren County to a high of 27.9 percent in Adams County. The total number of Medicaid recipients is highest in Hamilton County at nearly 127,000 individuals.

In 2017, it is estimated that 160,000 Hamilton County residents will be covered by Medicaid. It is estimated that the percentage of Medicaid recipients will continue to be highest in Adams County, with more than 1 in 3 residents covered by Medicaid.²

Not only more primary care physicians, but also more PCPs who accept Medicaid will be needed to meet this growth in persons covered by Medicaid. FQHCs will clearly need to be part of this solution, as they are major providers of care to those covered by Medicaid.

*Note: While Figures 3 and 5 seem to indicate that Butler County will have the highest number of Medicaid recipients, that is not the case. Butler County’s ZIP codes are geographically larger and have a greater population than other ZIP codes in the region, so their numbers of Medicaid recipients are large by ZIP code, but not by the county. Also, it should be noted that the size of the legend categories is statistically determined by natural statistical plateaus, so each division is not numerically equal.*

² Estimates from Truven Health Analytics.
Figure 5: Projected Medicaid Recipients 2017

Legend
Medicaid Recipients, 2017
- 1 - 922
- 923 - 2,048
- 2,049 - 3,602
- 3,603 - 6,570
- 6,571 - 12,130

Source: Truven Health Analytics

Figure 6: Projected Medicaid Recipients, Hamilton County 2017

Legend
Medicaid Recipients, 2017
- 1 - 922
- 923 - 2,048
- 2,049 - 3,602
- 3,603 - 6,570
- 6,571 - 12,130

Source: Truven Health Analytics
Federally Qualified Health Centers (FQHCs) and Charitable Clinics

Throughout the nine-county region, there are 79 FQHCs (Figure 7), approximately half of which are located in Hamilton County. These FQHCs, which serve as safety net providers, provide primary care for the most vulnerable populations in Greater Cincinnati.

There are no FQHCs in Warren County, where it is estimated that 8 percent of the population (approximately 17,500 individuals) will be covered by Medicaid in 2017. Talbert House received an FQHC planning grant from the Health Resources and Services Administration of the Department of Health and Human Services in 2011. In March 2013, Talbert House Health Center, Inc. formally applied to open a FQHC in the Franklin area of Warren County. Awards will be made in September 2013. If approved, the center would open within six months of that date.\(^2\)

Butler and Boone counties currently have the highest ratios of Medicaid recipients to FQHCs in the region, and that ratio will increase in 2017 for every county in the nine-county area.

There are 39 Federally Qualified Health Centers (FQHCs) located in Hamilton County, including six community health centers operated by the City of Cincinnati. Cincinnati is among the few municipalities in the country that supports its own community primary care health network. The City’s FQHCs are distributed throughout the city limits (Figure 8), and many have dental services co-located with them.

Another part of the rapidly changing health landscape is charitable clinics, often sponsored by health systems, which also provide services to Medicaid patients. Examples are Good Samaritan Free Health Center in Price Hill, which is operated by TriHealth, and Mercy Health’s clinics at St. John in Findlay Market and St. Raphael in Butler County.

\(^1\) A federally qualified health center (FQHC) is a type of provider defined by the Medicare and Medicaid statutes. FQHCs include all organizations receiving grants under Section 330 of the Public Health Service Act, certain tribal organizations and FQHC Look-Alikes. Requirements for Indian Health Service funded FQHCs may differ from the requirements for FQHCs receiving Section 330 grants and for FQHC Look-Alikes. (Definition from http://www.raconline.org/topics/clinics/fqhcfaq.php, retrieved Dec. 11, 2012)

\(^2\) Email message from Neil Tilow, June 8, 2013.
Impact of National Trends and the Affordable Care Act on the Supply of and Need for PCPs

National trends show an aging PCP population and a decrease in physicians in training to replace them, partially as a result of misaligned incentives. According to the National Association of Community Health Centers, access to affordable primary health care “has posed one of the most persistent challenges to our health care system.” In 2009, it reported that 60 million Americans – nearly 1 in 5 – lack access to adequate primary care.¹

As the ACA expands insurance coverage, it also attempts to create incentives for growth in the PCP supply, in FQHCs, and in advanced practice professionals to supplement primary care physicians. The Greater Cincinnati region faces issues similar to those in other communities, and must take advantage of available incentives to increase its PCP supply before the shortage becomes even more critical. A summary of those issues follows.

Payment System

According to KaiserEDU, “The current shortage of primary care physicians is fostered by the payment system. The current fee-for-service compensation system pays physicians based on the volume of care they deliver. Counseling, diagnosis or dispensing prescriptions, all of which are core primary care services, are difficult to reimburse as opposed to specialty care, which includes more procedures.”²

Wide income disparities exist between family physicians and specialists. Family physicians earn an estimated $173,000 annually. By comparison, oncologists on average earn $335,000 annually; radiologists average $391,000.³ Studies indicate that graduating medical students perceive the lifestyle associated with primary care physicians as unfavorable, requiring more hours and less predictability than specialties.⁴ In addition, the average medical student in the U.S. graduates with more than $150,000 of debt,⁵ increasing the attractiveness of a better-paying specialty. Graduates of the University of Cincinnati College of Medicine have a slightly higher average debt at graduation.⁶

As a result, fewer new physicians are choosing primary care, and some already in primary care practice are under such stress that they are looking for an exit strategy.

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PCP vs. Specialist Utilization

More than half of patient visits in America are with primary care physicians, but only 37 percent of physicians practice primary care medicine. About 20 to 25 percent of students have chosen primary care in the past 10 years, down from about 50 percent in the early 1990s.

A good relationship with a primary care doctor is associated with better care, more appropriate care, better health and much lower health care costs. Many experts believe that the decline in the attractiveness of a career in primary care has contributed to overspecialization of care, fragmentation and inefficiency in the health system.

Local providers report that specialists are fulfilling the needs of chronically ill patients who could be managed more appropriately in a primary care setting. This creates a backlog in accessing timely specialty care.

Other Factors

Many new physicians indicate a desire not to practice in rural and central city areas, which contributes to an unequal geographic distribution of physicians.

There also is a lack of racial and ethnic diversity among physicians. While African-Americans are 14 percent of the country's total population, they are only 4 percent of the nation's physicians. Similarly, Hispanics are 16 percent of the population, but only 5 percent of the doctors.

According to the U. S. Commission on Civil Rights’ briefing report on health care disparities, minority physicians are more likely to practice in medically underserved areas and care for patients regardless of their ability to pay.

Finally, the current primary care physician population is aging. According to the AMA’s Physician Characteristics and Distribution in the U.S., 35 percent of physicians nationwide are over the age of 55. Most will likely retire within the next five to 10 years.

ACA Will Expand Coverage

The 2010 Patient Protection and Affordable Care Act (ACA) is estimated to extend coverage to 32 million more people during the next 10 years, including 124,000 more adults in our study region. Many provisions in the legislation are designed to improve access to primary care, and to provide incentives to providers who take on newly covered patients. The possibility of Medicaid

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1 Centers for Disease Control, National Ambulatory Medical Care Survey: 2009 Summary Tables
2 Colin P. West, MD, PhD; Denise M. Dupras, MD, PHD, JAMA. 2012; 308(21):2241-2247.
8 American College of Physicians 2006.
expansion could add coverage for additional persons in the uninsured population more quickly. Major ACA initiatives are centered around training, reimbursement and new models for primary care services, including payment reform for preventive care.1

One of those new models for primary care services is the Patient-Centered Medical Home (PCMH), which both public and private health providers are widely adopting. According to the Agency for Healthcare Research and Quality (AHRQ), “The medical home model holds promise as a way to improve health care in America by transforming how primary care is organized and delivered. Building on the work of a large and growing community, the AHRQ defines a medical home not simply as a place but as a model of the organization of primary care that delivers the core functions of primary health care.”2 We believe that in addition to adoption of the PCMH model, prevention must be part of a comprehensive approach community health, including the use of community health workers, better transportation options and use of advanced care practitioners.

Massachusetts, which has had a health care law similar to the ACA since 2006, can serve as an example for PCP needs under the ACA. Massachusetts now has 107.8 active primary care physicians per 100,000 residents.3 This is compared to 90/100,000 nationally, 87.9/100,000 in Hamilton County, and 30.5/100,000 in Clermont County, which has the lowest ratio in the study region.

Training
The ACA’s incentives are expected to add 15,000 new providers to the national PCP workforce by 2015.4 The 2009 Economic Stimulus package included $300 million for the National Health Service Corps, which recruits the primary care workforce in underserved areas. Filling these slots has been a challenge. An additional $230 million in award grants will go to “teaching health centers” to start primary care residency programs. Locally, University of Cincinnati was named an Academic Administrative Unit in Primary Care Grantee ($158,296), and Cincinnati Children’s Hospital Medical Center was named a Faculty Development in Primary Care Grantee ($164,566)5 as part of this program.

The U.S. Health Resources and Services Administration has awarded The Wright Center for Graduate Medical Education in Scranton, Pennsylvania more than $4 million to launch a national family-medicine residency program in partnership with A.T. Still University of Health Sciences’ School of Osteopathic Medicine in Arizona. The multi-state, centrally run medical residency program will place up to 29 medical school graduates per year over three years in community health centers around the country as part of a residency program in family medicine.

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2 For a more complete definition of the Patient-Centered Medical Home, go to http://pcmh.ahrq.gov/portal/server.pt/community/pcmh_home/1483/what_is_pcmh_.
HealthSource of Ohio in Milford is one of the participants in this program\(^1\) and has partnered with A.T. Still to train medical students since 2008.

### Table 3: Number of Physicians in Residency Programs, by USMDs, IMGs\(^2\), and DOs\(^3\), 1995 and 2006\(^4\)

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th></th>
<th></th>
<th>2006</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>USMDs</td>
<td>IMGs</td>
<td>DOs</td>
<td>USMDs</td>
<td>IMGs</td>
<td>DOs</td>
</tr>
<tr>
<td>Primary care residents</td>
<td>23,801</td>
<td>13,025</td>
<td>1,748</td>
<td>22,146</td>
<td>15,565</td>
<td>3,163</td>
</tr>
<tr>
<td>Specialty care residents</td>
<td>45,300</td>
<td>11,957</td>
<td>1,585</td>
<td>47,575</td>
<td>12,611</td>
<td>3,466</td>
</tr>
<tr>
<td>All physician residents</td>
<td>69,101</td>
<td>24,982</td>
<td>3,333</td>
<td>69,721</td>
<td>28,176</td>
<td>6,629</td>
</tr>
<tr>
<td>Total (USMDs + IMGs + DOs)</td>
<td>97,416</td>
<td></td>
<td></td>
<td>104,526</td>
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<td></td>
</tr>
</tbody>
</table>

In addition, the Prevention and Public Health Fund (created by the ACA) is designed to help increase the number of primary care physicians nationally via the following provisions\(^5\) that will:

- Create 500 new primary care training slots
- Support the development of 600 new physician assistants (PAs). PAs practice medicine as part of a team led by their supervising physician, and can be trained in a shorter period of time compared to physicians. (See Table 4.)
- Increase the number of nurse practitioners by 600, including the provision of incentives for part-time students to become full-time and complete their education sooner for entry into the workplace (See Table 4.)
- Establish 10 new nurse practitioner-managed health clinics in medically underserved communities
- Encourage states to plan for and develop innovative strategies to expand their primary care workforce by 10 to 25 percent over 10 years to help meet the increased demand for primary care services.

### Table 4: Training Cycle Times\(^6\)

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate</th>
<th>Graduate</th>
<th>Post-Graduate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>Physician</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>4</td>
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<td>6-7</td>
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<td>4</td>
<td>2-4</td>
<td>0</td>
<td>6-8</td>
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\(^2\) International Medical Graduate

\(^3\) Doctor of Osteopathy


Financial Incentives

Primary care providers now receive a 10 percent bonus under the Medicare fee schedule; this started in 2011. Primary care service reimbursements will increase at the state level from Medicaid rates to Medicare rates by 2014.¹

Accountable Care Organizations (ACOs)

Accountable Care Organizations (ACOs) are health care providers who give coordinated care and chronic disease management, thereby improving the quality of care patients receive. An ACO’s payment is tied to achieving health care quality goals and outcomes that result in cost savings.² ACOs include central “medical homes” that provide medical care and coordinate specialist care. The ACO’s patient-focused approach uses established outcomes criteria and provides financial incentives for multi-specialty providers to collaborate and coordinate patient care.³ Though they are not part of our recommendations, ACOs are one option for health systems and are an alternative payment model that we believe will likely evolve into newer models. Mercy Health has been approved to participate in the federal government’s accountable care organization program. Mercy Health Select, the managed care component of Mercy Health, was one of 89 new ACO designees approved in 2012.

Other health systems that are not ACOs are voluntarily adopting the Patient-Centered Medical Home (PCMH) model for primary care practices. Locally, The Health Collaborative has led an initiative to assist practices in achieving certification as a PCMH through the National Committee for Quality Assurance.

Community Health Centers (CHCs)

The ACA increases the number of community health centers (CHCs). In our area, most community health centers are FQHCs (See the discussion on page 12). CHCs provide safety net health care services in many communities, primarily to underserved populations, and have been associated with many positive health outcomes.⁴ With the projected Medicaid population increase (Figures 3 and 4), community health centers will be a key resource in serving newly insured patients in Greater Cincinnati.

School-based health centers (SBHCs) are also a growing part of the Greater Cincinnati landscape. There are 26 SBHCs throughout the region; 16 within Cincinnati Public Schools. SBHCs offer care where students are – with the goal of removing barriers to health care access. They are particularly important in communities that lack primary care providers or have a large

² www.healthcare.gov/glossary/a/accountable.html.
number of low income, uninsured or underinsured children or adolescents. More information and maps of school-based health centers in greater Cincinnati are available at [www.healthfoundation.org/upl/SBHCs_in_Greater_Cincinnati_with_Map_030813.pdf](http://www.healthfoundation.org/upl/SBHCs_in_Greater_Cincinnati_with_Map_030813.pdf). People who are uninsured, low-income, members of racial and ethnic minorities, or living in rural or inner city areas, are disproportionally likely to lack a usual source of primary care other than hospital emergency departments.1 As coverage expands under the ACA, it will be important to ensure that there is sufficient primary care capacity, both private and public, to meet the demand from those who are newly insured by both Medicaid and private insurance obtained through the state exchanges.

**Prevention**

The ACA requires that recommended preventive care be included in the “essential benefit package” of all health plans with no co-payments or deductibles. For this reason, preventive services will be sought more regularly from primary care physicians, thus increasing demand on their time.

**Implications for Greater Cincinnati**

Implementation of the Affordable Care Act will have a significant impact on Greater Cincinnati. The increased demand for services will require greater collaboration among providers, deeper engagement of consumers in their overall health, removal of barriers to accessing care, and an increased supply of providers.

- **Demand for primary care among formerly uninsured adults will dramatically increase.** Under the ACA, nationally about 32 million (54 percent) of the 56 million Americans currently uninsured will have public or private insurance coverage within the next 10 years. Recent data for the nine-county study region2 indicate that 15 percent of residents (230,000 of 1.5 million adults) are uninsured. If 54 percent of them are newly covered with health insurance under the ACA, the region will need to plan for 124,000 more adults seeking regular access to primary care providers.

- **PCP shortage already exists; will increase.** Assuming a goal of 89 physicians per 100,000 adult residents today and 91 in 2017, and assuming that the region’s adult population is estimated to be stable over that period, the nine-county study region currently needs 471 additional PCPs and by 2017 will need 532 more primary care physicians than it has currently. Even the most conservative estimates suggest the region needs nearly 200 PCPs today and 250 PCPs in 2017.

- **A decrease in those uninsured will increase the need for physicians.** Figures 9 and 10 show a significant decrease in the numbers of uninsured throughout the region. Figures 11

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2 Truven Health Analytics.
and 12 give a closer look at Hamilton County, clearly demonstrating the decrease in uninsured residents.

- **Walls that currently exist between public and private health care must be removed.** There is a lack of coordination across the continuum of care that must be addressed. It is essential to build a single approach that has all providers reaching for the same goals.

- **Consumers must participate at a higher level in health improvement strategies.** As a community, we will need to engage all health care consumers to improve their overall health. According to a widely cited study by the New England Healthcare Institute, about 50 percent of health status is determined by diet, exercise, smoking, stress and safety—or lifestyle choices and available options; 20 percent by exposure to environmental toxins; 20 percent by genetic predisposition; and just 10 percent by access to health care.¹ In addition, the emergency room, too often, may become the primary care provider for the uninsured. While this option gives some access, it is very expensive and offers no follow-up care or opportunity for preventive interventions. According to the Medical Expenditure Panel Survey (MEPS), the national median cost for an emergency department visit in 2008 was $406 (mean cost was $922); compared to the median cost for a physician office visit of $89 (mean cost of $199).²

- **Coverage does not equal access.** It is very important to understand the difference between health insurance coverage and access. Coverage gives a patient a way to reimburse a provider at some level for health care provided. Access provides a patient with the ability to actually receive care from a provider.

Even with addition of 32 million Americans to the rolls of the insured, there will be another 24-26 million who remain uninsured and will continue to lack coverage.

For those with insurance, barriers to access still may exist in terms of the availability of providers who accept certain kinds of insurance (e.g., the limits on the number of Medicaid patients accepted by private physicians is well documented) and in terms of adequate transportation options. For example:

- Everybody Rides Metro³ reports in its 2008 study that 68 percent of 501 respondents missed a medical appointment due to lack of transportation. Of those who kept appointments at community health centers, 43 percent used the Metro bus to get there.⁴

- Figure 13, provided by Everybody Rides Metro, shows bus routes and the concentration of households with income less than $20,000 along with the location of health centers in Hamilton County. Clearly demonstrating the decrease in uninsured residents.

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³ Everybody Rides Metro is a not-for-profit 501(c)(3) founded and administered by the Metro public transportation system of Cincinnati. In early 2009, ERM received an Access 100 planning grant from The Health Foundation of Greater Cincinnati to determine how the free ride program could improve health care in Cincinnati. This project was also accepted as a Leadership Cincinnati Class 32 team project.

Hamilton County. As the map indicates, the highest concentrations of low-income households are primarily in Over the Rhine, Corryville, the West End and Avondale. Bus routes to health care are not always convenient to these individuals, who are most likely to need public transportation.

- Many areas of the region lack public transportation, which compounds the access issue. People may choose to select a physician based on where they work rather than where they live.
Recommendations

The shortage of primary care physicians in our study region is not unlike that seen in other communities across our country. However, we have an opportunity for a unique solution to our primary care shortage.

This solution leverages the increasing collaboration between community leaders, employers, hospital systems, community health centers, community learning centers and schools, and physicians. These efforts often have been convened through the Greater Cincinnati Health Council, the Health Collaborative, HealthBridge and (formerly) the Executive Stakeholders’ Council.

These entities are responsible for developing an infrastructure that has resulted in our region receiving multiple national and federal programs including the Robert Wood Johnson Foundation’s Aligning Forces for Quality grant, the Greater Cincinnati Beacon Collaborative grant, SW Ohio Community-Based Care Transitions and, most recently, Comprehensive Primary Care, which was facilitated through an initial, multi-million dollar grant from Bethesda, Inc., to seed PCMH practices within TriHealth primary care physician practices.
This existing infrastructure can be built upon to not only support a new approach to the delivery of health care in Greater Cincinnati, but also to expand our primary care capacity and access that will meet the region’s needs.

The Greater Cincinnati plan to address the primary care shortage will require efforts on several fronts. Here are practical recommendations from the Executive Stakeholders’ task force that guided this study:

1. Strengthen the current primary care base
   - Reinforce and expand existing community health centers (both the private FQHCs and City of Cincinnati health centers)
     - Expand hours of operation
     - Expand use of advanced-practice professionals (APPs)
     - Qualify all Cincinnati clinics as FQHCs or FQHC “look-alikes” (to enable increased levels of reimbursement)
     - Quantify the geographic origin of patients in Cincinnati clinics; many are from out of the city or even out of the state.
   - Incorporate retail clinics and urgent care centers into the continuum of care
   - Evaluate the extent to which Hamilton County residents use City of Cincinnati clinics and make recommendations for access and funding
   - Assess the extent to which private physicians in the region are accepting new Medicaid beneficiaries and make recommendations to accommodate the upcoming increase in Medicaid patients
   - Provide loan repayment options for primary care providers (physicians, nurse practitioners and physician assistants)
   - Work with University of Cincinnati College of Medicine and area teaching hospitals to encourage students to enter the primary care field.
   - Encourage/support Ohio medical schools to develop a strategic plan to increase the enrollment of students from underserved racial and ethnic communities.

2. Promote community-wide adoption of the Patient-Centered Medical Home (PCMH) concept
   - Analyze practice provisions in other states and determine the level of advanced practice provider practice that will best address the anticipated shortage of primary care providers in Greater Cincinnati
   - Promote payment reform for PCMH practices.
   - Promote partnerships between hospitals and community health centers to enhance and expand primary care to the uninsured and newly insured through the Affordable Care Act.
   - Develop/support partnerships that can assist residents in navigating community-based preventive, primary care and treatment systems so that residents are positioned and responsible for positively managing their care.
3. Redouble our collective efforts to recruit new primary care physicians and advanced-practice professionals to the region.
   - Build a fund to offer loan reimbursement, relocation assistance and loan repayment, especially to providers who practice in underserved locations, as identified in this study.
   - Strengthen the partnership between the Chambers of Commerce and The Health Collaborative’s Cincinnati MD Jobs program to promote the region as a great place to be a primary care provider.
   - Recognize that models of care are changing, such as increases in PCMHs and use of advanced practice professionals. This will support further growth in primary care providers as part of the solution to the primary care shortage.

4. Continue to expand use of Electronic Health Information
   - Ensure that all primary care providers (including retail clinics, pharmacies and urgent care centers):
     - Use electronic medical record systems and appropriately share patient information with other providers of care
     - Publicly report quality measures, e.g., contribute data to The Health Collaborative’s Your Health Matters website
     - Connect via HealthBridge to submit and receive population-based registry data and to submit reportable disease data to public health officials
   - Encourage the development and use of smart phone and tablet apps by both providers and patients to improve patient care

5. Encourage the establishment of collective impact metrics, so progress can be measured over time.
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For further information about The Health Collaborative or this study, please contact Laura Randall, Director of Communications at 513-979-0051 or lrandall@gchc.org.
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