

*Growing Our Own: Cultivating the Next  
Generation of Primary Care Physicians in  
Community Health Centers*

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## I. Introduction

In communities across the country, staggering unemployment rates and failing infrastructure go hand in hand with significant healthcare challenges. In particular, the medically underserved areas (MUAs) where community health centers (CHCs) operate<sup>1</sup> to serve medically underserved populations (MUPs) face dire healthcare access barriers, provider shortages, (particularly among primary care providers), and poor health outcomes. These geographies also contend with significant economic instability as evidenced through median incomes, business establishment growth, and poverty rates.<sup>i,ii</sup>

The implications of primary care shortages are especially significant. By some projections, the ratio of primary care providers to the population is expected to drop nearly 10 percent by 2020 – ratios that are especially low to begin with in rural and medically underserved areas.<sup>iii</sup> Despite workforce capacity challenges, the demand for primary care is significant and expected to rise due to the aging of the population<sup>iv</sup>. Additionally, the benefits of having an adequate primary care supply— reduced rates of cancer, heart disease, stroke, infant and adult mortality<sup>v</sup>—are numerous and extensively documented.

CHCs not only provide comprehensive primary care services to populations in need, but also deliver an economic boost to struggling communities. CHCs, which emerged formally in the 1960s, currently serve over 25 million patients at 1400 health centers across the country.<sup>vi</sup>

Recent expansions of the CHC program have demonstrated that with relatively modest investments, CHCs offer a return on investment in communities, through jobs to establish new health centers, jobs to run the health centers, and increased local consumption. As an example, a recent federal infusion of dollars into CHCs to support operations and construction/refurbishment of facilities showed that every dollar invested yielded a \$1.60 return in local economic activity.<sup>vii</sup>

While more work is needed to create an adequate supply of CHCs in the first place – by some estimates almost half of MUAs lack a health center<sup>viii</sup> – one direct path for maximizing the benefit of CHCs where they exist is to support their role as teaching environments, cultivating the next generation of primary care providers. This summary brief focuses on residency training for primary care physicians.

There are several benefits of supporting CHCs specifically as teaching environments. First, such efforts help policymakers address the urgent primary care shortage facing the United States. Examinations of primary care shortages reveal that primary care physician supply does not correlate with local access to care, in many cases because individuals trained in primary care end up working as hospitalists or within emergency rooms after residency.<sup>ix</sup> Expanding numbers of medical residents training in CHCs offers a fix to this problem, supplying an immediate capacity surge but also a longer-term pipeline. Studies of

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<sup>1</sup> Including health professional shortage areas (HPSAs), communities with Medically Underserved Populations (MUPs), Medically Underserved Areas (MUAs), and other markers of healthcare need

Family Medicine residents have demonstrated that individuals who train within CHCs (vs. traditional family medicine residencies) are much more likely to return to work in primary care and in underserved areas after training.<sup>x</sup>

Another key benefit to expanding CHCs as teaching centers is that CHCs offer a front-row seat to new modalities of care that drive down costs and improve health outcomes – approaches that are not necessarily used or as central in other healthcare settings. In particular, many CHCs employ team-based care models that leverage cost-efficient relationships among physicians, nurse practitioners, physician assistants, and other care team members to care for high cost, high need patients. In addition, CHCs provide longitudinal care and population-based strategies that augment effective acute medical management with efficient prevention and advanced chronic disease and care management. Many of these components align with Level 3 Patient Centered Medical Home standards, which a great number of CHCs have achieved. Studies have also suggested that CHC-based residencies offer an “imprinting” experience for medical residents and that those who train in safety-net settings tend to have lower practice costs in the future.<sup>xi</sup>

For these reasons, it is critical to advance policies and programs that help CHCs become Educational Health Centers (EHCs)<sup>2</sup> and “grow their own” primary care training opportunities. This paper explores several pathways for promoting CHCs as teaching environments - enhanced partnerships between Academic Medical Centers (AMCs) and CHCs (with either the AMC or the CHC as the sponsoring institution<sup>3</sup>), and CHCs participating in HRSA Teaching Health Center (THC) funding opportunities (with sponsorship either by the CHC alone or by a consortium body) - and posits a spectrum of options and costs associated with each of these pathways to train medical residents.

## **II. Considerations Before Becoming an Educational Health Center (EHC)**

Deciding to become an EHC and to begin training medical residents has many implications for a CHC. These include issues of vision and mission, operations, finance, facilities and the recognition that while training of this kind has many clear benefits for CHCs, there are also inherent tensions in these ventures that should be clearly assessed and addressed. As community-driven organizations, it is essential that the Board members support education as a core component of their health center’s mission and vision. This includes understanding the costs to having education as a core component. These costs may include valuing a “teaching hour” as equal to a “clinical hour”.

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<sup>2</sup> For the purposes of this paper, we will use the term “Educational Health Center” (EHC) to include all Health Centers that include a teaching or training component. “Teaching Health Centers” (THC) are a subset of EHCs that are funded through the HRSA Teaching Health Center GME (THCGME) program.

<sup>3</sup> The ACGME defines a Sponsoring Institution as, “The organization (or entity) that assumes the ultimate financial and academic responsibility for a program of GME. The sponsoring institution has the primary purpose of providing educational programs and/or health care services (e.g., a university, a medical school, a hospital, a school of public health, a health department, a public health agency, an organized health care delivery system, a medical examiner’s office, a consortium, an educational foundation).” ACGME Glossary of Terms, July 1, 2013; [https://www.acgme.org/Portals/0/PDFs/ab\\_ACGMEglossary.pdf](https://www.acgme.org/Portals/0/PDFs/ab_ACGMEglossary.pdf)

Health centers have a long-standing commitment to quality improvement through the collection of Uniform Data System (UDS) measures and other data needed to improve the health of the populations they serve. The community oriented primary care approach implemented by health centers also addresses the social determinants of health. This framework provides a cornerstone for the required scholarly activity of residents and faculty.

The mission of CHCs generally embodies providing excellent, culturally competent primary care to people, communities and populations, with access to all. Training medical residents may augment this mission, but may also challenge operational coordination, continuity of care and even quality of care as young physicians learn to master their craft. It is important for the CHC to recognize these potential tensions and address them, while consciously including education as part of their core values and mission.

### **III. Steps to Becoming an Educational Health Center (EHC)**

Once mission and core values are clarified, a CHC can embark on developing a medical residency program. As a first step, operational and financial feasibility analyses must be completed within the context of a full understanding of Program Requirements as defined by the Accreditation Council for Graduate Medical Education (ACGME). These requirements are numerous and detailed. They encompass everything from program size and faculty requirements to curriculum and facilities.

Simultaneously, the CHC must address decisions regarding medical residency program sponsorship. Its three options are to:

1. Become the standalone sponsor of the residency program
2. Partner with an existing sponsor (AMC or other); or
3. Create a consortium with an AMC to become the program sponsor

Once these decisions are made, if the CHC is not the sponsor, it will negotiate with the residency program sponsor to define respective educational and operational responsibilities, costs and financial support (see Tables 1&2, AMC Options 1-4).

Finally, the program sponsor will recruit and hire a Program Director who will lead the program creation and application process. Under the guidance of the Program Director, all aspects of the residency program will be developed (including curriculum, ambulatory practice site, faculty, administration, staffing, hospital and community partnerships, etc.). The Program Director will then complete and submit the Program Application to ACGME.

This is a complex and detailed process with which most CHCs are unfamiliar. The typical timeline for this is approximately two-three years and is well summarized in the “Education Health Center Toolkit,” created by the Education Health Center Initiative<sup>xii</sup>. Expert support and consultation are advised.

#### **IV. Teaching Health Center Models**

In 2011, the Health Resources and Services Administration (HRSA) created the Teaching Health Center Graduate Medical Education (THCGME) program to directly fund the training of primary care medical and dental residents in community-based organizations throughout the country. Presently, while most US residency programs are funded through CMS GME resources, there are 59 residency programs with almost 700 residents in 27 states<sup>xiii</sup> who receive THCGME funding directly through the HRSA THCGME program. Other CHC-based primary care residency programs receive funding from traditional CMS GME or other sources. THC Sponsoring Institutions can either be standalone community-based ambulatory patient care centers, (such as FQHCs, community mental health clinics and others), **or** a GME consortium of organizations that has come together in partnership to sponsor residency programs (see Tables 1&2, THC Option).

Standalone models, through which community health centers serve as the residency Sponsor, offer many potential benefits. This pathway provides the greatest autonomy for community health centers and may be more expeditious to establish than a consortium model, which involves creating a new organization with multiple CHC and non-CHC partners. However, based on interviews with experts, this approach involves notable challenges. Given the resources necessary in navigating the ACGME process, this option may only make sense for very large CHCs. Additionally, CHCs that pursue a standalone approach still need a willing academic medical center partner for inpatient rotations, exposure to simulation labs, and digital libraries. One organization interviewed for this piece pursued the standalone sponsorship model under the THC program, but had a pre-existing clinical affiliation with a local hospital that it leveraged to provide internal medicine and core hospital-based rotations. This organization stated that without that strong partnership, the standalone model may not have been a viable option.

The consortium model involves multiple organizations, including but not limited to CHCs, coming together in some cases to form new 501(c)(3)s or other legal entities to administer the residency program. These models may cover wide geographies. The Pennsylvania-based Wright Center's Osteopathic Family Medicine Program serves Arizona, New York, Ohio, Oregon, Washington, and Washington D.C. The Center has identified partner CHCs in each of those regions to provide training opportunities but runs centralized curricula, including virtual grand rounds, through the A.T. Still University School of Osteopathic Medicine in Arizona. This approach allows for centralized economies of scale, online learning, and diverse local training venues.

Another consortium-model residency interviewed for this piece created a new non-profit called the Montana Family Medicine Residency, which includes a single CHC, Riverstone Health, partnered with two local hospitals in Billings, Montana – Billings Clinic and St. Vincent Healthcare. The CHC itself is a division of a larger public health entity, the Yellowstone County Health Department. Staff of this consortium model noted that until very recently, it was the only residency program in Montana and that the consortium model was always the preferred approach because of a longstanding history of the CHC and the two hospitals working together.

Experts interviewed for this piece suggested that though the consortium model is more difficult to start up than a standalone approach, it may be the slightly preferred option because costs are spread, it entrenches community partnerships, and allows for funding streams – CMS GME and HRSA funding – to be intertwined in the operation of a program.

In either model, several individuals also commented that when CHCs assume a leadership role, it ensures that ACGME requirements are fulfilled in ways that maximize primary care training expertise and time. For example, per ACGME, residents in family medicine must have either a certain number of encounters or hours within a month dedicated to caring for adult hospitalized patients. If residency programs satisfy this requirement through encounter thresholds (vs. concentrated hours within a given month), this allows residents to fulfill the requirement over the course of a year and continue more, uninterrupted primary care training time. Likewise, to fulfill psychiatric requirements, CHC-led programs may be well positioned and inclined to partner with psychiatrists in the primary-care based collaborative care model for depression as a learning experience, as opposed to an inpatient approach.

### ***Key Recommendations***

Regardless of whether CHCs pursue a standalone or consortium approach, experts advance a number of key operational recommendations to support EHC expansion:

- 1. Create a National Technical Assistance Center for CHCs:** including tools for CEOs, executive leadership, and boards to learn about the accreditation and regulatory processes necessary to sponsor a medical residency program
- 2. Examine the ACGME Family Medicine track to determine modifications needed to reflect the unique CHC primary care training environment and competencies therein, such as integrated primary care/behavioral health models, team-based care, care management, etc.**
- 3. As a part of the above or separately, modify key ACGME requirements that can run counter to CHC expertise and mandate, namely:**
  - Ensure that some questions delivered during accreditation site visits are oriented directly toward assessing outpatient/ambulatory expertise (many of the standard questions focus on “in the hospital...”)
  - Address the fact that some requirements involve having only one main entrance identified as a family health center, when many CHCs provide other services off the main entrance – WIC, dental, etc.; current ACGME regulations find this problematic
- 4. Align THC or other future HRSA funding with the resident match cycle**
- 5. Explore changes in cost reporting that would capture the cost of teaching time, providing an incentive (an increase in the encounter rate) for those programs who are truly “training our own” to care for the populations served by health centers**

## **V. Enhanced Partnerships – Academic Medical Centers (AMCs) and CHCs**

There are a variety of potential models for partnerships between AMCs and CHCs. In a survey several years ago, there were more than 175 CHCs partnered with 35 academic medical centers across the country and that number has presumably grown since publication.<sup>xiv</sup> Collaborations between academic medical centers and CHCs can take on a variety of forms, from relatively light-touch partnerships through which CHCs serve as continuity clinics, to more intensive collaborations where CHCs run many major residency program functions. The following tables outline in greater detail a number of key residency operational components and propose a spectrum of how those components may manifest in partnerships between AMCs and CHCs.

While different geographic and economic circumstances will merit different approaches, we suggest that in order to reap the benefits of CHC-situated training programs discussed previously, it is important to support the development of partnership models that delegate most components to CHCs. Particularly key is the ability of CHCs to directly employ faculty and ensure their deep familiarity with the practice, and the ability to direct schedules in ways that minimize disruptions to the primary care training experience.

### ***Key Recommendations:***

We suggest that to realize some of the benefits of CHC-sponsored or consortium medical residency programs, it is important that AMC-CHC partnerships be structured in a way to maximize the time and focus of the residency on the CHC experience. To achieve that goal, we advise CHCs to incorporate certain principles into their relationships with AMCs, to engender greater oversight:

- 1. CHCs will not lose money in the transaction over an initial period of time**
- 2. CHCs will not bear costs associated with a “Dean’s tithe or tax”**
- 3. All payments must be tied to fair market value**
- 4. CHCs will secure community benefit grants under the auspices of FQHC safe harbor regulations**
- 5. AMCs will provide lines of credit for startup activities**

## **VI. Spectrum of Options and Costs**

Table 1 below outlines key components of medical residency programs and reviews those elements against the models discussed in the previous sections. (Within the HRSA THCGME option, there is significant variation in how CHCs operate as either standalone sponsors or in consortium models. However, because these two pathways are components of the THC, which has its own baseline guiding requirements, for the purposes of this table these two models have been represented as a single option. For the high-level operational components illustrated in this chart, these models operate roughly equivalently.)

**Table 1 – Spectrum of Options**

Components of Programs	Academic Medical Center Options (funded through CMS GME) (Left to Right = Increasing CHC Role)				HRSA THCGME: CHC as Standalone or Consortium Model
	AMC Option 1	AMC Option 2	AMC Option 3	AMC Option 4	THC Option
Sponsoring Institution	Academic Medical Center (AMC)	AMC	AMC	CHC	CHC/Consortium
GME committee/DIO	AMC runs GME committee/DIO	AMC	AMC	CHC	CHC/Consortium
Faculty Employment	AMC/hospital employs faculty	Mixed model – some employed by AMC/hospital, some by CHC	All faculty employed by CHC and AMC leases time back to support residency	All faculty employed by CHC and AMC leases time back to support residency	All faculty employed by CHC/Consortium and AMC leases time back to support residency
Resident Employment	AMC/hospital employs residents	AMC/hospital	AMC/hospital	CHC	CHC/Consortium
Curriculum design	AMC/hospital oversees curriculum design	AMC/hospital	AMC/hospital	CHC has major input into curriculum design	CHC/Consortium
Administration of Residency	AMC/hospital	AMC/hospital	AMC/hospital	CHC	CHC/Consortium
Resident Health Center Schedule	AMC/hospital sets schedule but contractually require hospital to provide schedule 3 months in advance	AMC/hospital sets schedule but contractually require hospital to provide schedule 3 months in advance	AMC/hospital sets schedule but contractually require hospital to provide schedule 3 months in advance. Collaborates closely with FQHC through employed faculty.	CHC	CHC/Consortium
Create Resident Yearlong Rotation Schedule	AMC/hospital	AMC/hospital	AMC/hospital. Collaborates closely with FQHC through employed faculty	CHC	CHC/Consortium
Recruitment	Managed by AMC/hospital	Managed by AMC/hospital	Managed by AMC/hospital	Managed by CHC	Managed by CHC/Consortium

***Costs Borne by CHCs Across Models***

The July 7, 2016 *New England Journal of Medicine* article, “The Cost of Residency Training in Teaching Health Centers,” noted that initially the Teaching Health Center program assumed an annual per resident cost of \$150,000 based upon expert opinion (informed at that time by experience with the CMS GME program). A subsequent analysis of actual expenses incurred through survey responses, data analysis, and on-site visits to many THC programs operational at the time of publication showed that the median per resident expense in academic year 2013-2014 to be nearly \$245,000 and that net cost was \$157,602 in fiscal year 2017, accounting for



revenue, program length of operation, and other geographic factors; these estimates included inputs from both standalone CHC-sponsored programs and consortium models.<sup>xv</sup>

For the purposes of this paper, we continue to rely upon the assumption that the net average annual per medical resident cost is \$157,602 for either CHC sponsor or consortium sponsor models. We have also taken a distribution of expenses outlined in that paper (cost category and percent of expense) to put forward concepts of how much those costs could conceivably be pro-rated under models where Academic Medical Centers and CHCs partner to run residency programs; we have assumed the same median cost and same average cost-offsets as the NEJM article. The rationale for this approach is to ensure that in instances where CHCs are not sponsors of residency programs, that payments between AMCs and CHCs are reasonable and fair.

Table 2 reflects pro-ration based on our knowledge of such arrangements, **but we also strongly encourage further study/surveying before external use of any such numbers.** Again, the costs below reflect per resident amounts and so should be considered accordingly.

**Table 2 – Spectrum of Costs**

Cost Category	Percent of Expense	Academic Medical Center Options (funded through CMS GME) (Left to Right = Increasing CHC Role)				HRSA THCGME: CHC as Standalone or Consortium Model
		AMC Option 1	AMC Option 2	AMC Option 3	AMC Option 4	THC Option
Faculty Compensation	30%	N/A	N/A	Roughly half of expenses borne by CHC	All borne by CHC	All
Resident Compensation	26%	N/A	N/A	N/A	All borne by CHC	All
Other Educational Costs	17%	N/A	N/A	N/A	N/A	All
In-Kind Costs	9%	N/A	N/A	N/A	N/A	All
Clinical service administration and operational costs	19%	Roughly half of expenses borne by CHC	Slightly larger share of expenses borne by CHC	Slightly larger share of expenses borne by CHC	Slightly larger share of expenses borne by CHC	All
<b>Percent of Expenses Borne by CHC</b>	100% of Expenses	10%	15%	30%	75%	100% of Expenses
<b>Per Resident Amount – (Based on Net Cost)</b>	\$157,602	\$15,760	\$23,640	\$47,280	\$118,201	\$157,602

## Endnotes

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