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Integrating Community Health Centers Into Organized Delivery Systems Can Improve Access To Subspecialty Care

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ABSTRACT The Affordable Care Act is funding the expansion of community health centers to increase access to primary care, but this approach will not ensure effective access to subspecialty services. To address this issue, we interviewed directors of twenty community health centers. Our analysis of their responses led us to identify six unique models of how community health centers access subspecialty care, which we called Tin Cup, Hospital Partnership, Buy Your Own Subspecialists, Telehealth, Teaching Community, and Integrated System. We determined that the Integrated System model appears to provide the most comprehensive and cohesive access to subspecialty care. Because Medicaid accountable care organizations encourage integrated delivery of care, they offer a promising policy solution to improve the integration of community health centers into “medical neighborhoods.”

Community health centers are the cornerstones of medical care for many underserved communities and currently deliver care to nearly twenty million people.¹ Serving a patient population of which 37.5 percent is uninsured and 38.5 percent is on Medicaid, community health centers are critical to the primary care safety net.² Over the past decade, the federal government invested heavily in the expansion of community health centers.³ The Affordable Care Act provides an additional \$11 billion to community health centers from 2011 to 2015 to help them meet the rise in demand for primary care created by the law's broadening of health insurance coverage. However, recent federal budget cuts may limit the growth of community health centers.⁴

This expansion of the number and capacity of community health centers presents major opportunities and challenges for community health centers. The centers' expansion has focused on increasing access to primary care medical homes.⁵ However, although necessary, medi-

cal homes are not sufficient to provide high-quality health care. In addition to primary care, patients require a “medical neighborhood”—a full constellation of coordinated services, including subspecialty and diagnostic services—to meet their comprehensive health care needs.⁶

Community health centers face substantial problems in ensuring that their patients receive subspecialty care.^{7,8} A Commonwealth Fund survey found that 91 percent of community health centers reported difficulty obtaining off-site subspecialty care for uninsured patients.⁹ Access was only slightly easier for patients enrolled in state and federal insurance programs; 71 percent of community health centers had difficulty connecting Medicaid patients with subspecialty care, and 49 percent had trouble obtaining subspecialty care for Medicare patients.⁹

These difficulties affect many patients because approximately 25 percent of visits to community health centers require referrals for subspecialty care and diagnostic services not available at the center.¹⁰ The challenge of obtaining subspecialty care in these settings will become even greater in

2014, when millions of Americans newly eligible for Medicaid are expected to seek care at community health centers.⁴

Just such an increase in demand for community health centers was observed after the expansion of insurance coverage in Massachusetts.¹¹ As community health centers across the nation see more patients, the need for access to subspecialty care is likely to increase, too.

Although studies^{9,10} have documented the challenges that community health centers face in accessing subspecialty care for their patients, little is known about how they succeed in doing so. We conducted a study to explore how community health centers arrange access to subspecialty care and build medical neighborhoods that support their medical homes.

Study Data And Methods

DATA COLLECTION We conducted semistructured interviews with the executive director or medical director at twenty community health centers in sixteen states and the District of Columbia from September to October 2010. First, directors representing six community health centers who participated in a data tool training session were invited to participate in the study. These initial interviews were conducted in person at the National Association of Community Health Centers Community Health Institute, in Dallas, Texas.

To identify subjects for the second stage of interviews, we used snowball sampling, in which our initial six subjects recommended some of their colleagues. Staff members at the National Association of Community Health Centers also helped identify centers with innovative models of obtaining subspecialty care.

Based on these recommendations, we contacted an additional twenty-five community health centers by e-mail. Fourteen of these centers agreed to participate and identified their medical director or executive director. These fourteen subjects were interviewed by phone.

The interviews included open-ended questions about how the community health centers accessed subspecialty care for their patients (see Appendix Exhibit 1 for a list of questions).¹² Each participant was asked to rank his or her level of satisfaction with the center's ability to obtain subspecialty care for patients. We used a five-point Likert scale to quantify the respondent's subjective level of satisfaction, from very dissatisfied to very satisfied.

ANALYSIS We discontinued the interviews when saturation was reached for identified themes. After twenty interviews, we decided that additional interviews would not provide any further insight into how community health centers

access subspecialty care.

To generate new theory, we used a modified grounded theory method, which is an approach for looking systematically at qualitative data of the sort we had collected in our interview transcripts. Two researchers generated consensus codes for each model by identifying codes that they mutually agreed on. An iterative process was used that allowed new models and themes to arise inductively from the data.

The consensus codes were triangulated among three of the authors to reach consensus on final models and themes. In rare cases of disagreement regarding models or themes, the fourth author was invited to reconcile such disagreements.

The study was approved by the University of California, San Francisco, Committee on Human Research.

LIMITATIONS Our study had several limitations. Because it relied on qualitative interviews with a snowball sample of health center directors, it was exploratory and not necessarily representative of all community health centers. We attempted to capture potential regional and geographic differences by including community health centers from diverse regions and representing a balance of urban and rural settings. Still, our findings are likely to be most valid for community health centers that are similar to the centers that participated in our study.

We also attempted to include the most innovative models by asking the National Association of Community Health Centers, the national professional association for community health centers, to recommend community health centers that they recognized as leaders in implementing innovative models of specialty care access. Therefore, the twenty centers in our study may not represent the full range of models of subspecialty care access.

This is not meant to be an exhaustive or generalizable study of how all community health centers obtain subspecialty care for their patients. Rather, it is a starting point for creating a typology of the models employed by community health centers. It should also help inform policy considerations in this area.

Study Results

The community health centers in our study varied greatly in size, with the number of service sites ranging from two to forty-six. The mean number of sites per health center was 17.5 (Exhibit 1). The number of patients annually receiving care at the community health centers ranged from just under 3,000 to more than 113,000. The mean number of patients was more

EXHIBIT 1

Characteristics Of Twenty Community Health Centers In The Subspecialty Care Access Study, 2010

Characteristic	Mean number/percent
Service delivery sites ^a	17.5
Unduplicated patients served in 2009	45,724
MEAN PATIENT RACE/ETHNICITY^b	
American Indian	1.5%
Asian	3.3
Black	15.5
Hispanic/Latino ^c	35.5
More than one race	1.1
Pacific Islander	2.2
Unreported/refused to answer	11.8
White	29.0
MEAN PATIENT INSURANCE CHARACTERISTICS	
Medicaid	42.7%
Medicare	6.9
Private insurance	13.7
Other public insurance (non-CHIP)	5.5
Other public insurance (CHIP)	1.6
Uninsured	29.6
LOCATION	
Rural	40.0%
Urban	60.0
GEOGRAPHIC REGION	
Midwest	10.0%
Northeast	35.0
South/southeast	15.0
West	40.0
SERVICES AVAILABLE ON SITE	
Behavioral health	90.0%
Diagnostic laboratory	65.0
Diagnostic radiology	50.0
Oral health	95.0
Pharmacy	65.0

SOURCE Analysis by the Robert Graham Center for Policy Studies in Family Medicine and Primary Care of service area data from the Health Resources and Services Administration Bureau of Primary Health Care Uniform Data System, 2009. **NOTE** CHIP is the Children's Health Insurance Program. ^aService delivery sites include dental and school-based clinics as well as primary care clinics. ^bAverages for patient racial characteristics are reported by each health center to the Health Resources and Services Administration. ^cPatients who reported Hispanic/Latino ethnicity were counted in the Hispanic/Latino category regardless of whether they also specified a race (such as white or black), to avoid double counting.

than 45,000. On average, 42.7 percent of each center's patients were Medicaid beneficiaries and 29.6 percent were uninsured. Many of the centers provided on-site services.

Obtaining Subspecialty Care: Six Models

We identified six unique models of how the community health centers in our study obtained subspecialty care. We developed our models based on how the centers dealt with referrals to adult medical and surgical subspecialists because these were the most common referrals discussed

in our interviews.

MODEL 1: TIN CUP This model, in which health center providers rely on personal relationships to solicit care from an informal network of subspecialists, was the most prevalent one.¹³ The community health centers depend on the goodwill of subspecialists to provide charity care to uninsured patients. We refer to this as the Tin Cup model because the solicitations that take place can be viewed as a form of begging.

The El Rio Community Health Center in Tucson, Arizona, increased the Tin Cup model's viability by ensuring that referrals of uninsured patients were evenly distributed.¹⁴ Each month, El Rio sent all physicians in its referral network reports that summarized how many patients were seen by each subspecialist. By presenting evidence that everyone in the community of subspecialists was contributing equally, El Rio strengthened the altruism on which the Tin Cup model depends.

MODEL 2: HOSPITAL PARTNERSHIP In this model, the community health center negotiates a contract with a community hospital to provide subspecialty care. Community health centers affiliated with hospitals usually have better access to subspecialty care than those without hospital affiliations.^{9,10} However, many community hospitals have limited numbers of subspecialists on staff. As a result, community health centers must stitch together a patchwork referral system combining hospital-based subspecialty care with other community-based subspecialists.

Building formal partnerships with community hospitals creates opportunities for innovation. At the time of our study, Thundermist Health Center in Rhode Island was introducing a health information exchange with three community hospitals in order to allow interoperability among their electronic health record systems.¹⁴ Hospital affiliations would enable Thundermist to implement its new system across a full spectrum of hospital-based subspecialists.

MODEL 3: BUY YOUR OWN SUBSPECIALISTS In this model, the health center hires its own subspecialists to provide care at a designated specialty hub. Community health centers typically pay subspecialists an hourly rate and receive higher cost-based Medicaid and Medicare prospective payment rates for subspecialty care delivered on site. However, procedurally oriented subspecialists working in community health centers may not have the necessary facilities, equipment, and support staff to perform procedures.

One of the community health centers implementing this model, Unity Health Care in Washington, D.C., had an extensive cadre of employed subspecialists.¹⁴ Unity's thirteen sites referred patients to a multispecialty hub. Unity had

two financial advantages: contracts with two Medicaid managed care organizations and a partnership with the DC HealthCare Alliance, a District of Columbia program that paid for primary and subspecialty care for uninsured residents. These funding streams covered the full spectrum of care for Medicaid and uninsured patients and allowed Unity to hire a variety of subspecialists.

MODEL 4: TELEHEALTH This model uses telecommunications equipment to create real-time interactive communication between patients and subspecialists. At the time of our study, Open Door Community Health Center was pioneering the use of telemedicine in rural northern California.¹⁵ Open Door paid subspecialists an hourly rate to work one or two sessions per week at its Telehealth and Visiting Specialist Center. The subspecialists provided telemedicine consultations to patients at Open Door's seven primary care sites. Most of these subspecialists also committed to providing indicated procedures in other settings if those procedures could not be performed at the health center.

Urban safety-net programs have also been adopting novel telehealth strategies. The innovative "eReferral" system developed by San Francisco General Hospital and community clinics enables two-way electronic communication between primary care providers and subspecialists. The program has significantly decreased wait times for subspecialty consultations.¹⁶

MODEL 5: TEACHING COMMUNITY This model features teaching community health centers that train primary care resident physicians.¹⁷ These centers rely on the collaborative dynamic created when subspecialists are integrated into a health center as teaching faculty.

At the time of our study, the Family Health Center of Worcester, Massachusetts, attributed its strong referral network to its role as a teaching health center that trained University of Massachusetts family medicine residents.¹⁸ Volunteer subspecialists offered podiatry, obstetrics or gynecology, and otolaryngology services at the health center.

The Family Health Center referred patients to subspecialists at the University of Massachusetts Memorial Medical Center, where residents had inpatient rotations. The Family Health Center's teaching connection with the hospital strengthened the relationships that are integral to obtaining subspecialty care.

MODEL 6: INTEGRATED SYSTEM This model features community health centers that are completely integrated with a local government health system or a safety-net hospital that has a comprehensive network of subspecialists.

One of the organizations implementing this

model, Denver Health, in Colorado, has been called a model integrated system.¹⁹ Denver Health's network of community health centers (called Denver Community Health Services) included eight federally funded community health centers that delivered primary care under an umbrella of organizations governed by the Denver Health and Hospital Authority. The community health centers were integrated with the Denver Health public hospital, and the centers' patients had access to all subspecialists at the hospital. The centers and the hospital shared a single electronic health record system and web-based referral platform.

Satisfaction With Subspecialty Access

Community health centers that used different models had differing perceptions of ease of access to subspecialty care, with the Tin Cup and Integrated System models at opposite ends of the spectrum. The eight community health centers in this study that used the Tin Cup model struggled the most, with four reporting that they were dissatisfied and three reporting they were neutral regarding their ability to access subspecialty care. All three community health centers using the Integrated System model were very satisfied with their ability to access subspecialty care for their patients.

The other four models fell between the Tin Cup and Integrated System models on the five-point scale. The Hospital Partnership and Buy Your Own Specialist models were employed by three community health centers each, and in each set of three, only one health center was satisfied with its access to subspecialty care using that model. The one health center using the Telehealth model was satisfied with its subspecialty care access. Of the two community health centers using the Teaching Community model, one was neutral and the other was very satisfied.

Discussion

Although the Tin Cup model has been previously described, our study identified five other unique models that community health centers use to arrange subspecialty care. Fitzhugh Mullan has characterized the Tin Cup model as the "perpetual, frustrating, quixotic, creative, and demeaning process of begging for services from others for our patients."²⁰ More community health centers in our study used this inferior model of obtaining subspecialty care than any other model.

The Integrated System model appears to be the most successful approach to constructing a well-functioning medical neighborhood for commu-

nity health centers. All three community health centers using this model gave access to subspecialty care the highest rating—a far better evaluation than any other model.

Beyond access to care, directors of community health centers using the Integrated System model reported improved communication, increased coordination of care, and seamless care transitions. Shared electronic health records enabled primary care providers to communicate clearly with subspecialists and avoid duplication of diagnostic testing. Patients were rarely lost to follow-up and experienced improved care transitions between the health center and the hospital.

Our findings suggest that community health centers using any of the other models should transition to the Integrated System model, wherever possible. This model may not be attainable for every health center, however, given the facilitators and barriers present in their communities (see Appendix Exhibit 2 for the key elements, facilitators, and barriers for each model).¹² Community health centers that are not ready to develop or to become part of an integrated system could investigate the other models that exist along the continuum between the fragmented Tin Cup model and the comprehensive Integrated System model.

Policy Implications

Policy makers should use payment reform to support community health center initiatives to move toward or become a part of integrated systems. Investments in integrated systems have the potential to generate considerable returns for federal and state governments, because community health centers will have to absorb much of the increased demand for care as a result of Medicaid expansion under health care reform.

Accountable care organizations hold great potential as instruments for promoting a more integrated model of subspecialty care for community health centers. The Centers for Medicare and Medicaid Services has launched several different types of Medicare accountable care organization initiatives and will allow community health centers to lead Medicare accountable care organizations.²¹ However, community health centers have a greater incentive to participate in Medicaid accountable care organizations than Medicare accountable care organizations because 38.5 percent of the centers' patients are enrolled in Medicaid, whereas only 7.5 percent are Medicare beneficiaries.²

In the absence of any federal Medicaid accountable care organization initiatives to date, various states are moving forward with legisla-

tion to support Medicaid accountable care organizations. Community health centers are participating in a Medicaid accountable care organization in Camden, New Jersey, supported by state legislation.²² Community health centers in Chicago are equal partners in an innovative Medicaid pilot project called the Medical Home Network,²³ and two different integrated care initiatives in Los Angeles are positioned to become Medicaid accountable care organizations.²⁴

Because Medicaid is a federal-state partnership, federal policy must be clearly articulated so that states can develop the shared savings payment model integral to Medicaid accountable care organizations. The Center for Medicare and Medicaid Innovation should support promising state and community accountable care organization initiatives by developing a Medicaid accountable care organization pilot program.

The Medicaid accountable care organization, offering as it does the possibility of shared savings, is a promising financial model for supporting health center initiatives to achieve integrated delivery systems. Shared savings could reward community health centers for the downstream savings from decreased hospitalizations and emergency department visits. However, the accountable care organization model will need to be adapted if the community health centers that are leading Medicaid accountable care organizations are to overcome barriers. Obstacles such as scarce access to start-up seed capital, inadequate infrastructure, limited financial reserves, slow payment cycles, and lack of experience with taking on financial risk may prevent centers from launching such organizations because they are concerned about their financial viability.

First, the Center for Medicare and Medicaid Innovation should provide seed capital funding and technical advisers to help community health centers build the infrastructure for Medicaid accountable care organizations. This support is essential because most centers do not have adequate chronic care management, information technology, or the related infrastructure required for well-functioning accountable care organizations.

Second, the Centers for Medicare and Medicaid Services and state Medicaid agencies should share savings on a first-dollar basis with community health centers, take a lower percentage of the shared savings in the first few years, and offer a five-year initial contract to Medicaid accountable care organizations. Because Medicaid patients on average use fewer health care services than Medicare patients, Medicaid accountable care organizations will realize a smaller amount of shared savings over a longer time period. To

achieve meaningful savings, Medicaid accountable care organizations should implement intensive care-management and care-transition programs that target the highest-cost Medicaid patients. Improved care coordination could decrease costs for these patients by reducing preventable emergency department visits and hospitalizations.

Third, Medicaid accountable care organizations should cover the entire population of Medicaid patients in a defined geographical area. This will require the Medicaid accountable care organization to include all of the safety-net hospitals as well as a critical mass of community health centers in that area. Basing patient assignment on geographical location recognizes that many vulnerable patients move between several different safety-net providers in a community.

Fourth, the Innovation Center should consider a special track for teaching community health centers that partner with academic medical centers. Richard Rieselbach and Arthur Kellermann proposed a different model, called Community Health Center and Academic Medical Partnerships, that would enable teaching community health centers to access subspecialists at academic medical centers while anchoring the accountable care organizations in the teaching community health centers' comprehensive approach to primary care.²⁵

Finally, the Innovation Center should structure Medicaid accountable care organizations so that community health centers and other providers have no downside financial risk for the initial five years, similar to the savings-only track offered to Medicare accountable care organizations. Community health centers are unlikely to consider a dramatically different payment model unless they are protected from financial losses initially. If the centers achieve meaningful savings under a one-sided savings-only model, they could be transitioned to a two-sided financial risk model with shared savings or losses over time. Policy makers may reconsider the cost-based Medicaid and Medicare prospective payment rates to community health centers if the centers are able to increase revenues under these types of risk-sharing models.

Medicaid accountable care organizations can help community health centers overcome the serious financial obstacles to developing integrated delivery systems without incurring much financial risk themselves. The only risk is that of losing the initial investment in chronic care managers or information technology systems if shared savings are not generated. However, the seed capital would cover much of these initial costs. Even if a Medicaid accountable care

organization were to generate excess costs over its initial benchmark, the health center would be held harmless under the savings-only model.

Some community health centers have already shown that they can succeed after taking on more extensive risk under capitation models. Unity Health Care, in Washington, D.C., managed risk by being both the service provider and the insurer under its Medicaid managed care contract. Lawndale Christian Health Center, in Chicago, receives capitated payments for all ambulatory services—including primary care, pharmaceutical benefits, subspecialty services, and emergency care—for much of its Medicaid, Medicare, and commercially insured populations (Arthur Jones, former chief executive officer of Lawndale Christian Health Center, personal communication, March 2, 2012). These community health centers have demonstrated that they can handle much greater risk than would be required to lead an accountable care organization.

Although the Integrated System model, which could be supported by Medicaid accountable care organizations, appears to be the most successful approach, it is also the most challenging to build. For community health centers that cannot yet make the leap to integrated systems, policy makers should support the adoption of the Buy Your Own Subspecialist or Telehealth model. The Health Resources and Services Administration should create a fast-track process to approve applications by community health centers to expand their scope of practice to include subspecialty care. Congress should modify Medicaid and Medicare payment policies to create adequate reimbursement for telemedicine visits and to provide sustainable funding for telehealth programs.

Conclusion

The rapid expansion of community health centers under the Affordable Care Act presents major challenges and unique opportunities for the integration of primary and subspecialty care. Increasing the number of community health centers so that more low-income patients can access primary care necessitates a commensurate increase in access to subspecialty care. Only in this way will the full benefit of safety-net services be realized. Full integration of health services has the potential to turn medical homes into successful medical neighborhoods.

We identified six unique models of how community health centers access subspecialty care and assessed the level of satisfaction with these models among health center directors. We determined that the Integrated System model appears to provide the most comprehensive and cohesive

access to subspecialty care. Based on our findings, we proposed policies and related incentives that could promote health systems integration and create medical neighborhoods in the safety

net. These policies should be implemented rapidly to prepare community health centers to provide integrated care to the millions of newly insured patients under health care reform. ■

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In this month's *Health Affairs*, Katherine Neuhausen and coauthors report on interviews they conducted with directors of twenty community health centers to determine how they accessed subspecialty care on behalf of patients. The authors identified six different models that these centers pursued and determined that those centers that become an actual or de facto part of an integrated system appeared to provide the most comprehensive and cohesive subspecialty access. The authors suggest that Medicaid accountable care organizations offer a promising policy solution to improve the integration of community health centers into "medical neighborhoods."

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Neuhausen's research interests include the financing of safety-net health systems, new payment models that support delivery system reform for Medicaid

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Grumbach is also a member of the *Annals of Family Medicine* editorial board and the Institute of Medicine. In 2012 he was awarded the UCSF Chancellor's Public Service Award and the Society of Teachers of Family Medicine's Advocacy Award. He received a medical degree from UCSF and completed his residency training in family medicine at San Francisco General Hospital.



Andrew Bazemore is the medical director of policy research at the Robert Graham Center for Policy Studies in Primary Care.

Andrew Bazemore is the medical director of policy research at the Robert Graham Center for Policy Studies in Primary Care. The center's goal is to improve individual and population health by enhancing the delivery of primary care. Bazemore directs research and projects related to access to care for underserved populations, the health workforce, spatial analysis and health, and other topics. He is an associate professor in the University of Cincinnati's Department of Family Medicine and serves on the faculty of the Department of Family Medicine at Georgetown University and in the Department of Health Policy at the George Washington University School of Public Health.

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Robert L. Phillips is director of the Robert Graham Center for Policy Studies in Primary Care.

Robert Phillips is director of the Robert Graham Center for Policy Studies in Primary Care. He is

currently principal investigator on a study of graduate medical education accountability measures that will inform issues of stewardship related to \$13 billion spent on these programs annually. Phillips also serves on a number of boards. He is a board member of

the North American Primary Care Research Group and a member of the Institute of Medicine's Integration of Public Health and Primary Care Study Committee.

Phillips is a member of the Institute of Medicine and a Fulbright Specialist, serving at the

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