

COORDINATING AND INTEGRATING CARE FOR SAFETY NET PATIENTS: LESSONS FROM SIX COMMUNITIES

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Executive Summary

This report examines efforts to improve the coordination of health care among safety net providers in six communities (Austin, TX; Brooklyn, NY; Indianapolis, IN; Marshfield, WI; San Francisco, CA; and St. Louis, MO), based on case study site visits and a roundtable discussion. Across the communities, we identified three approaches to improving coordination: (1) collaboration of providers using a coordinating organization, (2) coordination facilitated by Medicaid managed care plans, and (3) development of highly integrated care systems. These represent models that could be used by different communities, based on their local circumstances. Successful development of coordination approaches involved shared commitment to a coordinated system and financing arrangements to support coordination. A key challenge was how to provide and support care, especially specialty care, for uninsured patients. A common trend across all the communities was the development of health information technology systems and movement toward patient-centered medical homes. At the time of this study, it was unclear whether the safety net providers in these communities would form accountable care organizations (ACOs), except for one which had already participated in a precursor to the ACO model.

Introduction

Poorly coordinated health care services can create problems for patients, providers and payors alike:

- frustration and potential risks for patients unable to navigate a complex health system;
- poor communication across clinicians, potentially resulting in errors, gaps or waste;
- an absence of overall quality improvement objectives and accountability; and
- higher costs, particularly if chronic diseases are not managed effectively and require more intensive specialty, emergency room or inpatient care.¹

These issues may be particularly acute for Medicaid or uninsured patients seeking care at safety net health care providers, such as Federally Qualified Health Centers (FQHCs) or public hospitals. Safety net patients may encounter barriers as they try to access primary care, specialty or inpatient services. If they receive primary care at a health center, they may still have difficulty getting appointments with specialists or, after receiving care at an emergency department, they may encounter problems locating primary care providers for ongoing care. Even if access problems are resolved, there may be problems with care coordination: a specialist may not have access to information about the patient's primary care history or medications, and a primary care physician might not learn what a specialist determined or prescribed, or even that the patient had a specialist or emergency department visit.

The Affordable Care Act (ACA) seeks to improve the coordination, quality and efficiency of health care providers. For example, the ACA establishes Accountable Care Organizations (ACOs) under Medicare. It also provides stronger incentives for the use of patient-centered medical homes (or health homes) in Medicaid. Both of these approaches are designed to encourage better coordinated care, rooted strongly in primary care. A dominant share of safety net patients are either enrolled in Medicaid or are uninsured, so Medicaid policies are particularly important to safety net providers. While there is great interest in improving coordination and integration of care for Medicaid patients, the role of ACOs in Medicaid remains uncertain.²

Federal or state policies and programs may create incentives for coordination (or establish barriers), but ultimately, the coordination and integration of care is a local issue, requiring the cooperation of health care providers at the community level. Individual providers must create and maintain relationships and develop operational protocols to align efforts. Different communities will have different opportunities for and barriers to coordination and integration and each must ultimately find its own path or paths.

NOTE: Four of the authors (Ku, Regenstein, Shin and Mead) are member of the faculty of the Department of Health Policy. The remaining three (Levy, Buchanan and Byrne) were on the staff of the Department when this work was conducted.

¹ Shih A, Davis K, Schoenbaum S, et al. *Organizing the U.S. Health Care Delivery System for High Performance*, New York: Commonwealth Fund, Aug. 2008.

² Ku L, Regenstein M, Shin P, Bruen B, Byrne, F. "Promoting the Integration and Coordination of Safety Net Health Providers under Health Reform: Key Issues," Oct. 11, 2011.

In this report, we examine six communities' efforts to create systems to coordinate or integrate care within the health care safety net, based on case study site visits and a roundtable discussion in 2011. They represent diverse approaches to safety net coordination, based on their local needs, capacities and initiatives. Together, they describe activities along a spectrum of integration to illustrate that different types of communities, with diverse structures, needs and challenges, are capable of advancing toward a more coordinated experience for patients who access care through the health care safety net. The appendix to this report provides brief case studies about each local project, while this report seeks to synthesize the lessons learned from these diverse efforts. We expect that communities across the nation will undertake different approaches (including some that might not fit any of the models we identified in this project) as their systems evolve to meet the demands of an ever-changing health system.

Study Methodology

We selected safety net systems in six communities across the country to showcase care coordination and integration efforts in the health care safety net and conducted site visits in early 2011. Our selections were guided in part by advice from representatives of the National Association of Community Health Centers (NACHC), the National Association of Public Hospitals and Health Systems (NAPH) and the Association of Community-Affiliated Plans (ACAP). The communities were selected to provide diversity of the initiatives undertaken as well as geographic diversity. A goal of the project was to describe different approaches to safety net coordination, so we purposefully chose sites that provided a range in terms of level of coordination or integration. Some communities have longstanding initiatives that provide a system of highly integrated care; others have begun coordination activities more recently and are not as far along on the spectrum of care coordination.

The following six sites were selected:

- ***Austin, Texas.*** Integrated Care Collaboration and ICare
- ***Brooklyn, New York.*** Lutheran Medical Center and Lutheran Family Health Centers
- ***Indianapolis, Indiana.*** MDwise Managed Care Plan
- ***Marshfield, Wisconsin.*** Marshfield Clinic and Family Health Center of Marshfield
- ***San Francisco.*** Healthy San Francisco and the San Francisco Health Plan
- ***St. Louis, Missouri.*** St. Louis Regional Health Commission and Integrated Health Network

All site visits were completed by two-person teams in early 2011. We conducted semi-structured interviews with administrators and medical staff at community health centers and safety net hospitals, managed care administrators, and other relevant stakeholders in each site. In June 2011, we convened a roundtable discussion in Washington, DC with representatives of each of the sites and other national stakeholders to discuss and review our findings. (A complete list of attendees is shown in the Acknowledgements section.)

Safety Net Systems in the Six Communities

The table below offers a brief description of key features of the sites. The appendix to this report contains more detailed summaries of each case study.

Highlights of Safety Net Systems in the Six Communities (see appendix for more detail)	
Austin, TX	The Integrated Care Collaboration includes more than 20 organizations, including FQHCs, hospitals, public health department and hospital district, foundations and other partners. One key initiative is creation of the ICare health information exchange and data repository.
Brooklyn, NY	Lutheran Medical Center and Lutheran Family Health Centers integrate numerous services and share clinicians. The FQHC is able to provide specialty care, as well as dental and behavioral care, and has extensive coordination activities.
Indianapolis, IN	MDwise is a nonprofit Medicaid managed care plan. It covers eight integrated delivery systems (hospitals and affiliated clinics) that essentially function like ACOs. Each system has coordination activities, such as provider networks, shared electronic health record systems and referral systems.
Marshfield, WI	The Family Health Center, which serves Medicaid and uninsured patients, is embedded within the Marshfield Clinic, a multispecialty clinic that also serves private and Medicare patients. Both uninsured and Medicaid patients are served seamlessly in a high quality, highly integrated care system.
San Francisco, CA	FQHCs, public clinics and San Francisco General Hospital have multiple coordination activities, catalyzed by the San Francisco Health Plan, a Medicaid managed care plan. The safety net providers also provide services for low-income uninsured adults under the local Healthy San Francisco program.
St. Louis, MO	The St. Louis Regional Health Commission was formed after a public hospital closed and uses funds from a Medicaid waiver to support services to integrate care for the uninsured and led to formation of an Integrated Health Network. They support a variety of coordination services as well as a specialty clinic for the uninsured.

Three Approaches to Coordination and Integration

Across the six communities, we observed three different approaches to safety net coordination that could be viewed as prototypes for alternative approaches for safety net coordination.

1. Collaboration of safety net providers using a coordinating organization.

In Austin and St. Louis, coalitions of safety net providers have established external organizations to coordinate activities in areas of shared interest. In both communities, an

important mission of the organization is to help share electronic clinical information through health information exchanges or data repositories. The external organizations also serve as mechanisms to support certain joint initiatives, such as reduction of unnecessary emergency department utilization.

2. Medicaid managed care as a lever for safety net coordination.

In Indianapolis and San Francisco, Medicaid managed care plans have spurred stronger coordination of safety net providers, including community health centers, other community clinics and safety net hospitals. The MDwise system in Indianapolis includes a number of vertically integrated systems under one managed care plan. In San Francisco, this extends beyond Medicaid and also includes a local health coverage program for low-income uninsured adults, Healthy San Francisco. In both communities, the managed care organizations have helped coordinate the providers' roles and developed or funded (directly or through performance-based incentives) initiatives designed to improve quality or efficiency.

3. Safety net providers that function as highly integrated delivery systems.

In Brooklyn and Marshfield, local health systems have become vertically integrated delivery systems under which community health centers can essentially provide specialty care to both Medicaid and uninsured patients, as well as coordinate with inpatient services. Both have also developed their own managed care plans. In Brooklyn, the health center and affiliated medical center both serve a low-income urban community. In Marshfield, the community health center is embedded within a broader multispecialty practice in a rural area.

These methods are not necessarily mutually exclusive. For example, as noted above, the Marshfield and Brooklyn systems were highly integrated, but also had managed care plans, while the MDwise plan in Indianapolis incorporated multiple vertically integrated systems under one managed care plan.

Lessons Learned

1. A shared commitment to form a coordinated safety net system, with clear relationships across the continuum of care, is essential.

Safety net providers have a commitment to serve low-income and vulnerable patients, even if they are uninsured. While non-safety net providers may serve some Medicaid or uninsured patients, they often restrict their access because of financial or other concerns. FQHCs are required to care for all patients regardless of their ability to pay as a condition of their Sec. 330 community health center grants. Many public and nonprofit hospitals (particularly religiously-affiliated hospitals) have missions or charters to serve the indigent that go beyond their requirements to provide community benefits as a function of nonprofit tax status.

A recurrent problem of many safety net providers is the divide between primary, specialty and inpatient care. FQHCs (and many similar safety net clinics) provide primary care, but usually do not provide specialty care and often have difficulty finding specialists who will serve their uninsured patients or even their Medicaid patients; they also sometimes have problems securing inpatient admissions for their patients. Many safety net hospitals first treat Medicaid or uninsured patients in their emergency departments, but have difficulties arranging for ongoing primary care afterward. Finding specialty care is often a particular problem, but in many cases is resolved by referring patients to the safety net hospital's specialty clinics.

A critical element in these communities is that safety net providers were willing – in varying degrees -- to form a *safety net system* or *network*, in which primary care clinics like FQHCs and hospitals and their specialists formed more substantive collaborations to coordinate care for patients, even if they are uninsured or on Medicaid. Once this initial relationship can be formed, it is in the shared interest of these providers to try to develop more detailed operational systems, so they can provide more efficient, better coordinated care to improve the quality of care and patient experience. These relationships require both institutional-level and clinician-level efforts to develop relationships across settings, so that patients can get better care no matter where they are in the patient care continuum, that is, whether they are receiving primary, specialty or inpatient care.

Establishing and assuring relationships across primary, specialty and inpatient care is essential to maintaining a strong and effective safety net system. While safety net providers are committed to caring for the uninsured, having health insurance helps improve patients' access to care because certain providers may be more willing to serve them,. Managed care networks can help knit together the coordination of providers, by providing both an organizational network in which they can cross-refer patients as well as financing mechanisms and other technical measures to improve care coordination. Most of the six communities also had developed arrangements for referring and coordinating care for uninsured patients.

In the two highly integrated sites (Marshfield and Brooklyn), the FQHCs have specialists within their systems who can provide specialty services for Medicaid and uninsured patients, making it much easier to coordinate primary and specialty care. The Family Health Center of Marshfield is completely integrated with and embedded within the larger multispecialty Marshfield Clinic. The FQHC is a “virtual” health center; its clinical staff and facilities are part of the Marshfield Clinic and the FQHC functions an accounting device for separate tracking and billing of Medicaid and uninsured patients. Marshfield Clinic takes pride in treating all patients with the same high standard of care, regardless of insurance status. On a given morning, a physician may see a Medicare patient, an uninsured patient, a privately insured patient and then a Medicaid patient and never know the insurance status of any of them. Thus, even uninsured FQHC primary care patients have access to the full range of specialists at the Clinic. While inpatient care is provided by St. Joseph's Hospital (operated by Ministry Health Systems), the hospital accepts Medicaid and uninsured patients and its physicians are all employed by the Marshfield Clinic, following the same protocols and using the same electronic health record.

The Lutheran system in Brooklyn, New York, also a highly integrated network, has established extremely close relationships across primary, specialty and inpatient services. At the

heart of Lutheran are two separate but highly integrated organizations that the community perceives as one health system. Lutheran Medical Center and Lutheran Family Health Centers together provide the full range of services to patients in their community and operate a number of programs to ensure that care is well coordinated across delivery sites. Unlike most FQHCs, Lutheran Family Health Centers provide specialty services as well as comprehensive primary care, plus dental and behavioral health services. Lutheran Medical Center patients have access to health center specialists, with care coordinators and case managers able to transition patients from hospital to home or nursing home according to their needs.

Like many communities, Indianapolis has a safety net system that includes a variety of ambulatory and inpatient providers. A unique Medicaid managed care organization, MDwise, serves as a vehicle to coordinate services provided to its Medicaid safety net patients. MDwise is a non-profit managed care organization that serves Indiana's Medicaid, CHIP and Healthy Indiana populations through eight delivery systems that effectively function like ACOs. Each of these vertically integrated delivery systems includes a hospital that serves as its hub and at least one primary care clinic, some of which are FQHCs. Medicaid and CHIP patients receiving primary care at the clinic are generally referred to specialists affiliated with the hub hospital. The hospital in each system takes lead responsibility for care coordination and patient management, which seems to be well-established and strong for primary and inpatient care. These arrangements exist for patients covered under the MDwise plan and the commitment to provide coordinated care within the vertically integrated systems is strong. The FQHCs are affiliated with private hospitals that in many cases have a long history and a shared mission of working together to provide care for vulnerable patients. The public hospital system, Wishard Health Services, has its own primary care clinics. Uninsured patients that obtain care at an FQHC are typically referred to Wishard for specialty or inpatient care because they offer the county-funded program for uninsured patients (Health Advantage), while the other systems do not. Wishard and the FQHCs are in different integrated systems, so their services are not as well coordinated.

San Francisco has a safety net system consisting of a core hospital (San Francisco General Hospital), the Department of Public Health clinics and a number of community health centers, collectively known as the Community Clinic Consortium. This system has been reinforced by a county-based Medicaid managed care plan, the San Francisco Health Plan, as well as other initiatives, including Healthy San Francisco, a local health coverage program for low-income uninsured adults. The Department of Public Health and the managed care plan have helped organize and fund coordination activities, including an electronic referral system and a shared electronic health record system, and other quality initiatives.

The coordination in St. Louis and Austin is less complete, although they have made strides to improve care across the continuum. A key group in St. Louis is the St. Louis Regional Health Commission. In that city, primary, specialty and inpatient care are provided by different sets of organizations with less explicit integration, although the Integrated Health Network has provided funding to FQHCs and other community clinics to strengthen patient-centered medical home capacity. St. Louis also created a publicly-funded multi-specialty clinic, known as ConnectCare, for uninsured patients, in part to replace the capacity lost when their public hospital closed years ago (and, in fact, the clinic is on the grounds of the old hospital). Two

coordinating organizations have developed initiatives to knit the services together through collaborations on projects designed to enhance referral arrangements, better linkages with primary care, and reduced use of hospital and emergency services. Similarly, in Austin, the relationships of primary care, specialty and inpatient care rest largely with each individual provider organization. Austin's Integrated Care Collaboration helps coordinate safety net services among many organizations, including safety net providers. The largest FQHC in the area, the Lone Star Circle of Care, is a National Committee for Quality Assurance (NCQA) Level 3 recognized Patient-Centered Medical Home that provides specialty services along with comprehensive primary care services. Most of the activities across safety net providers have been designed to link high use/high cost patients with appropriate primary care services, reduce emergency department utilization, and better manage patients with chronic conditions.

In Austin and St. Louis, the desire to reduce what was perceived as excessive and inappropriate use of the emergency department was the impetus for a series of initiatives to link uninsured and other underserved patients with a medical home and develop information resources to better manage patients across sites of care. In these communities, home-grown health information systems have been developed with the support and involvement of key safety net organizations, with the added benefit of creating a platform for identifying problems in access and quality and targeting resources to support efforts to provide better care.

2. Coordination of a safety net system requires special financing arrangements.

Supporting a coordinated safety net system requires more than a “fee for service” payment approach. At the very least, care for the uninsured means that there will be uncompensated care costs and standard insurance payments do not apply. Meeting these costs must, at least in part, be addressed through supplemental funding sources, such as Sec. 330 grants for FQHCs, Medicaid disproportionate share hospital (DSH) payments, or cost-shifting from other payors. In addition, an element of coordination and development of a “system” is the recognition that shared resources – such as health information exchanges or care coordinators – or shared protocols or approaches make working together more effective or efficient. These shared resources are difficult to finance in a fee-for-service system because these may not necessarily constitute services for which a fee is paid.

One of the challenges of coordination efforts is finding a sustainable funding source. One-time grants from the federal or state governments or from foundations can be important in establishing or improving coordination efforts, but it may be difficult to sustain the initiatives when the grants expire. In the 1990s, the federal government provided grants for community health coordination under the Community Access Program (later the Healthy Community Access Program), but sustaining these initiatives after the program ended was problematic. State governments, foundations and other funders have also provided support in some cases.

Capitated managed care or other systems, such as accountable care organizations, create a mechanism to share resources by creating a higher-order organization, the managed care plan or ACO, that receives funding and decides how to allocate those funds. A managed care plan can invest some of its capitation premiums or an ACO can invest some of its “shared savings” to support certain services or initiatives, independent of regular payments that it makes to

individual providers. In four of the six communities, safety-net-based managed care organizations have been formed: Brooklyn (HealthPlus), Indianapolis (MDwise), Marshfield (Security) and San Francisco (San Francisco Health Plan). For example, the San Francisco Health Plan helped provide funding to extend the eReferral system (discussed below) to its safety net system providers and to develop various quality improvement initiatives. MDwise uses performance-based incentives to encourage better quality among its contracted systems. The Marshfield Clinic participated in the Medicare Physician Group Practice Demonstration Project, a precursor to Medicare ACOs, and clinicians reported that it was easier to initiate certain projects if they could assure managers that the projects would save money and lead to higher “shared savings.” For example, development of an anticoagulation service clinic required an investment but helped reduce hospitalizations.

San Francisco used a novel funding source to support coverage for uninsured adults. In 2006, the City of San Francisco passed an ordinance requiring employers with more than 20 employees to spend a minimum level for health benefits for their workers; those that did not spend this much for insurance premiums or related benefits instead contributed funds to help fund the Healthy San Francisco Program, which provides health coverage to uninsured adult residents with incomes below 500 percent of the poverty line. There are sliding scale premiums (\$0 for those below the poverty line, up to \$450 for those above 400 percent of poverty) and \$10 copayments. Healthy San Francisco members may receive medical services at the designated safety net clinics and San Francisco General Hospital. The San Francisco Health Plan administers the provider network.

Both Lutheran in Brooklyn and Marshfield essentially include FQHCs as part of larger vertically integrated health systems, which creates other ways to share financial resources. A distinction here is that, under current federal rules, FQHCs must be independent nonprofit organizations which have a community-based board and the executive director must not be an employee of another organization. The FQHCs at Lutheran and Marshfield were founded quite early, before federal rules required FQHC independence, and both began as components of a larger system. The FQHCs had to attain some level of independence under current federal rules, but remain affiliated with the broader medical systems. For example, as mentioned above, Marshfield is effectively a “virtual” FQHC and all of its clinicians are employees of the Marshfield Clinic; there is only one official employee of the FQHC: the executive director and all FQHC services are provided contractually by employees of the Marshfield Clinic. It would be very difficult for other FQHCs to replicate this model, but there are other examples of systems that include FQHCs and hospitals, such as DenverHealth and some FQHCs affiliated with Boston Medical Center. Many public medical centers combine both hospitals and community primary care clinics as vertically integrated systems; while their clinics may not qualify as FQHCs, they may provide comparable services for needy populations.

In contrast, the providers in Austin and St. Louis did not have a common financing stream or organization. The external coordinating organizations (the Integrated Care Collaboration in Austin and St. Louis Regional Health Commission) had separate funding sources. The Integrated Care Collaboration used diverse funding sources through the years, including a Robert Wood Johnson Communities in Charge grant and a Healthy Communities

Access Project (HCAP) federal grant. Today, it is funded by contributions from the member organizations and by revenues generated from some of its projects.

Funding for the St. Louis Regional Health Commission derives from a Medicaid Sec. 1115 waiver and effectively provides about \$25 million per year that had previously flowed to the closed public hospital, St. Louis Regional Medical Center. Those funds are instead used to spur other efforts to strengthen and improve the safety net and are used to support diverse projects, including the Integrated Health Network (IHN), which helps support a number of community health centers in the region, and Connect Care, a multispecialty clinic. (IHN was also funded by a federal grant from the Health Resources and Services Administration.) The financing of the Commission is tied to the Medicaid waiver. The Centers for Medicare and Medicaid Services recently approved a modified renewal of the waiver, which will end the direct payment model to a health coverage model.

3. A stronger underlying insurance system helps support safety net systems.

As noted above, a large share of the patients receiving care at safety net facilities are on Medicaid or are uninsured. While providers are understandably concerned that Medicaid often underpays providers, Medicaid is nonetheless the financial mainstay upon which safety net providers rely. Safety net providers are willing to provide care for the uninsured, but uncompensated care is a financial drain and burden that limits their ability to provide care.

Comparisons of Medicaid Eligibility and Uninsurance Levels			
Community	State Medicaid or Related Program Income Limit for Parents as Percent of Poverty, 2011 (a)	Percent of County Under 65 Uninsured in 2007 (b)	Percent of State Population Uninsured, 2009 (c)
Austin, TX (Travis Co.)	26%	25.0%	25.6%
Brooklyn, NY (Kings Co.)	150%	17.0%	14.4%
Indianapolis, IN (Marion Co.)	200% (d)	13.1%	13.2%
Marshfield, WI (Wood Co.)	200%	8.2%	9.6%
San Francisco, CA (San Francisco)	106%	17.0%	19.3%
St. Louis, MO (St. Louis city)	25%	12.8%	14.0%
(a) Kaiser State Health Facts, Medicaid Eligibility for Adults (b) Census Bureau, Small Area Health Insurance Estimates (c) Census Bureau, Current Population Survey, March 2010 (d) Under Healthy Indiana program, which has limited benefits.			

In our June roundtable meeting of local representatives and national experts, a representative from St. Louis suggested that safety net providers in that city and in Austin may face larger challenges than in the other four communities because Medicaid (and related programs) income eligibility criteria are less generous than in California, Indiana, New York and Wisconsin. Thus, the gaps in insurance are larger, as seen in the table above, although corresponding uninsurance rates do not follow exactly the same pattern. By either standard,

Austin has larger gaps due to low Medicaid eligibility and high uninsurance rates, while Marshfield has fewer burdens.

The limits of Medicaid may have other effects on the scope of safety net services. The Family Health Center of Marshfield has been planning a major expansion of dental care and developing new dental clinics. However, if the state Medicaid program stopped covering adult dental care services (an optional service under Medicaid) because of budgetary concerns, it would be difficult to sustain this service.

It is likely that more generous insurance eligibility and lower levels of uninsurance reduce the relative burdens of uncompensated care within communities. If so, then the insurance expansions planned under the ACA should lead to a reduction in uncompensated care burdens in most communities in the nation and may make it easier for safety net providers to form systems to coordinate care, since adults with incomes below 133 percent of the poverty line should all become eligible for Medicaid (except for certain immigrants). On the other hand, because of current federal and state budget pressures, there may be reductions in support for safety net providers, whether through changes in Medicaid or grant programs, which could work in the opposite direction. In all the sites we visited, program administrators were worried about the impact of potential budget reductions. Thus, while they were hoping for gains in coverage after 2014, when the ACA insurance expansions are implemented, they were more worried about cuts that may occur in the next year or so.

4. Health information technology is an essential component of efforts to improve coordination.

All the communities were engaged in strengthening electronic data systems, particularly to help facilitate information sharing, both to share individual patients' data between clinicians, as well as for purposes like quality monitoring. Because of the passage of the HITECH Act in 2009 and the availability of Medicaid and Medicare incentives for meaningful use of electronic health records (EHRs), health care providers across the nation are investing in EHR systems and upgrades. A differentiating feature of initiatives in these communities is that they are part of a strategy to use common or shared systems across providers who serve uninsured and underserved community residents. In systems that lack electronic data sharing, providers must rely on older systems, such as faxing copies of patient records back and forth and telephone calls from one office to another, or they simply lack data about a patient's history or current treatment plan. The inability to efficiently share data can lead to poorly coordinated care, leading to a higher risk of gaps, redundancies or even conflicts in treatment plans. The ability to pool data also enables providers to analyze patterns of care for patients (e.g., using patient registries), for quality monitoring or to help determine ways to reduce unnecessary emergency department use.

Marshfield Clinic has been a pioneer in EHR systems; it began developing them about 30 years ago, and now uses its internally-developed EHR system, called Cattails, which has been certified by the Office of the National Coordinator. The EHR supports over 80 specialties and includes clinical and practice management tools designed by physicians with a dashboard user interface that is widely cited for its ease of use. Among its special features are the alerts for providers when their patients are overdue for recommended preventive or chronic disease care,

and a dental component that allows data to be used for both dental and medical care purposes. Since Marshfield Clinic physicians include primary and specialty care services, both ambulatory and inpatient, the same system is available across the continuum of care. A local hospital system (Ministry Health Care) has purchased Cattails to help ensure compatibility. Marshfield Clinic also has an extensive quality improvement and research effort – including bioinformatics -- and uses its data systems as a platform for quality improvement and research. Since it has been using EHRs for 30 years, it has built a unique longitudinal research data base for medical and population health research.

In Brooklyn, clinicians faced familiar challenges. The FQHC and hospital use two different EHR systems (eClinicalworks for the FQHC and Vista for the hospital). Yet other systems are used for dental and behavioral care. Nonetheless, clinicians can access both to check the information about their patients. The Brooklyn Health Information Exchange is an independent project that is developing a broader health information exchange in the New York area, which can further facilitate communications.

In Indianapolis, most of the integrated health systems that operate under MDwise have developed shared EHR systems that are used to facilitate communications between primary and inpatient services within each system. Wishard Health Services, the public hospital, has developed a new HIT system called Relay Health, which allows real-time communication between patients, ambulatory care providers, and hospital providers. The system alerts primary care providers of the status of their patients' emergency department, inpatient and outpatient visits. The system also allows providers to share referral reports, pharmacy and medication information, and lab reports. However, the FQHCs do not have access to this system because they are affiliated with different hospitals, so when they refer uninsured patients to Wishard they cannot access Relay Health. Providers rely on the Indiana Health Information Exchange (IHIE), a broader health information network, to obtain data on patients who may see providers outside of their system. IHIE translates electronic health records between health care systems and is critical to ensuring that when patients travel between system, so do their medical records. The major limitation of IHIE, however, is that it does not operate on a "real-time" basis. The delay in information transfer can mean that providers may not have the most-up-to date information on their patients' medical events. However, the system tries to overcome this limitation with frequent transmissions of data into the warehouse. The other limitation is that its network extends only as far as participating providers; medical records from unaffiliated providers are not included.

In San Francisco, an important accomplishment was the development of eReferral, an electronic referral system used by primary care providers (including the FQHCs and public clinics) with specialists in the San Francisco General Hospital. The system was developed by physicians at San Francisco General who realized that many of the patients referred to specialists could be handled at the primary care level, while others still needed further diagnostic testing before a specialty consult would be productive. The eReferral system permits a rapid, electronic consult between the primary care clinician and a specialist who can screen referrals to give basic advice to the primary care clinician about patient care or further testing, and to expedite appointments for those who need to see a specialist soon. This helped reduce the number of patients who needed referrals and reduced waiting times (although there may still be a lengthy

delay for some specialties). In addition, the Department of Public Health made sure that the hospital's electronic patient records can be accessed by safety net primary care clinics, although they are easier to access for clinicians in the public clinics than in the FQHCs. While access to the system is less convenient for FQHC clinicians, it is nonetheless accessible to them.

Austin's Integrated Care Collaboration operates the ICare system, which focuses on improving care coordination and decreasing high cost utilization of services among safety net populations. ICare is a clinical and demographic data repository of information about health care access and use by approximately one million uninsured and publicly insured residents of Central Texas. Patient records can be linked across more than 70 sites of care by medical record number, enabling analysts and users to create reports on patient utilization, diagnoses, use of medications, by coverage or funding program. So far, the data base has been used on a retrospective basis for data analysis; there is typically a lag of 12 to 18 months between the date of a patient's utilization and the time the data are accessed. However, ICare is planning efforts to transform the database to allow real-time patient information to support care coordination, patient management and efficient resource utilization.

The St. Louis Regional Health Commission has established an Integrated Health Network (IHN) to serve as a trusted broker for safety net ambulatory care providers, organizing its work around projects aimed at improved care coordination, service integration and sharing best practices. In turn, the IHN has worked with its safety net community partners to create the Network Master Patient Index, a health information exchange that includes patient information from five FQHCs, seven hospital emergency departments, a multi-specialty clinic that serves uninsured residents (ConnectCare), and the county Department of Health clinics. It will eventually enable members of the system to pull up patient records and will include a secure messaging system that lets clinicians know when lab results are ready or if their patient had an emergency department visit. This electronic data system is designed to reduce non-emergent use of the emergency department, eliminate redundant laboratory or other diagnostic tests and enhance real-time communication across providers.

All of these functions are also a key part of care coordination in the other communities profiled in this report. The activities in Austin and St. Louis are noteworthy in that they have been built on safety nets that are otherwise not highly integrated. They serve as examples of communities that have created data systems through third party organizations that use patient information from multiple providers to offer coordination tools and strategies to improve care for their populations.

Even with these advances, safety net providers face challenges ahead in meeting requirements associated with meaningful use under the HITECH Act and some of the current systems need to be revised to meet the new standards.

5. Patient-centered medical home approaches are widely used, but the prospects for the formation of accountable care organizations are less certain. A promising approach may be to strengthen coordination approaches within Medicaid managed care.

In all the communities, there is a strong emphasis on patient-centered medical homes. For example, in Marshfield, Brooklyn, San Francisco, and St. Louis, uninsured patients receiving care in their systems are being linked to a primary care provider for medical home purposes and the systems are actively promoting patient-centered medical home systems. MDwise in Indianapolis, similarly, ensures that its Medicaid members are assigned to a medical home where care is managed and coordinated. Some of the primary care providers, such as Lutheran Family Health Centers, Marshfield Clinic and Lone Star Circle of Care, have already attained Patient Centered Medical Home recognition from the National Committee for Quality Assurance, while others are seeking it.

In many of the communities, a related ongoing effort was to develop better integration of medical and behavioral health care. Providers in these communities recognized that a significant share of the safety net patient population has both medical and behavioral health problems and, for example, were trying to assure that medical and behavioral health clinicians were co-located in order to facilitate coordinated care.

As noted earlier, four of the six systems examined had formed Medicaid managed care organizations. As such, they already had developed formal, safety-net led organizations that were accountable for overall care of their patients and that had financial incentives to be more efficient. In this regard, they already had some of the structural elements that are associated with ACOs: overall responsibility and accountability for comprehensive patient care and financial incentives for efficiency. In fact, in Indianapolis, MDwise characterizes itself as an “ACO administrator” with several vertically integrated delivery systems.

The likelihood that these systems would develop Medicare ACOs appeared low. Our site visits occurred in early 2011, before the April issuance of the proposed Medicare ACO regulations or the November 2011 final rules. Some systems were interested in the potential of ACOs, but since they did not know what the ACO requirements would be, their actual plans could not be determined. By the time of our June meeting, the proposed rules had been released and it did not appear that any of the systems intended to form an ACO under those rules.

There were a couple of major impediments to the formation of safety net ACOs under the April regulations. First, FQHCs were effectively barred from being counted as primary care providers under the April proposal, cutting off a major base of potential primary care patients needed to meet the criteria of the regulations. Second, providers were concerned about the high level of investments they might need to make to upgrade services to meet the ACO standards, particularly since they could be at risk if projected costs ended up being higher than anticipated. On the other hand, some safety net systems, such as San Francisco, expressed interest in an alternative safety net ACO-type demonstration project with more flexible arrangements, under the auspices of the Centers for Medicare and Medicaid Services.

The Centers for Medicare and Medicaid Services substantially modified the rules, when it issued the final Medicare ACO regulations on November 2, 2011 and addressed many of the comments raised in the rulemaking process. The final rules permit FQHCs to form ACOs or to be included as primary care providers under broader ACOs. In addition, the final regulations relaxed some of the requirements for ACOs, which should make it less formidable to form

ACOs. Finally, the final rule permitted an option in which ACOs are not at risk for losses, at least in the first three years, which also mitigate some concerns. Even so, it is still not clear of the extent to which ACOs will be formed. Marshfield Clinic, which had participated in the Physician Group Practice (PGP) demonstration project that was a precursor to ACOs, elected to participate in a PGP Transition Demonstration Project in August.³

It may be expedient to consider new approaches to strengthening Medicaid managed care to try to achieve many of the same quality, coordination and efficiency goals of ACOs. Managed care organizations already exist, already have strong financial incentives to limit costs and include quality measurement and improvement such as the use of HEDIS standards. Even where it may be difficult to improve every component within a Medicaid managed care plan, it may be possible to foster improved performance within components of the plans and to create systems that will encourage many of the participating providers to improve coordination. As seen in examples like MDwise, it is possible to have ACO-like organizations within a capitated managed care structure.

Conclusions

In these six communities, as in many communities across the nation, there were efforts to improve the coordination and integration of services for safety net patients. The extent and approaches to coordination varied widely, although we identified three prototypes:

- Collaboration using coordinating organizations
- Use of Medicaid managed care as a lever for coordination
- Formation of highly integrated delivery systems

These approaches are not necessarily static; systems can evolve over time. Neither are they mutually exclusive: the two integrated delivery systems (Marshfield and Lutheran) also had formed their own managed care plans and one of the managed care plans (MDwise) included multiple integrated delivery systems under its umbrella.

For safety net providers, coordination of care includes an important dimension that is absent from discussions of care coordination for mainstream health care providers or for patients insured by Medicare or private health insurance: access to the continuum of care. Discussions of care coordination for Medicare and privately insured patients assume that they can readily access primary, specialty and inpatient care, but problems can occur if the transitions between care are not adequately coordinated or if care is inefficient as when health care concerns are not appropriately managed at the primary care level or the ambulatory specialist level and result in unnecessary emergency department or inpatient care. Care coordination assumes that there is care to be coordinated. If patients lack access, then issues of coordination may be moot.

Patients who are covered by Medicaid or who are uninsured often have difficulty accessing care because many providers are less willing to treat uninsured or Medicaid patients.

³ Press release. "Marshfield Clinic Chooses to Participate in CMS Project." Marshfield Clinic. Aug. 8, 2011.

There may be particular problems obtaining timely access to specialty care. While FQHCs and other community clinics may make primary care more accessible for low-income patients, they often lack specialty care. In many cases, the pool of specialists comes from specialists who are participants in Medicaid managed care plans or who are affiliated with safety net hospitals.

In some communities, there are already structures that can facilitate coordination and access across different levels of the care continuum. The most common among these are Medicaid managed care plans. In some of the communities, we identified nonprofit safety net health plans, typically organized by safety net providers. These sometimes included vertically integrated health delivery systems, with strong coordination of primary care clinics, specialists and hospitals for their Medicaid members. The managed care organizations provide a framework for coordination across providers and can also provide some financial resources to help fund coordination activities or to create incentives for better performance. In many cases, the existing delivery systems already function in ways that are conceptually similar to ACOs, although they do not follow the Medicare ACO model and operate within managed care systems. In other communities, external organizations were formed by coalitions of providers to help coordinate activities in areas of shared interest. This approach can encompass a larger array of organizations, but is generally not as strong a structure, since its abilities are limited by the scope of the shared interests of the members and the funding available to the organization.

The systems in all these communities were trying to develop or strengthen patient-centered medical homes, in some cases even for uninsured patients. The FQHCs and other community clinics served as the primary care base for patients, but also sought to coordinate care with other local providers and to monitor overall care for their patients. In some cases, the systems were also trying to expand the scope of care provided at the primary care level, seeking to integrate or at least co-locate behavioral health or dental care services in the primary care clinics, because of the level of need for these services among their patients.

However, it does not appear that any of these safety net systems are prepared to form Medicare ACOs at this time. Though there was often interest in the general concept of accountable care organizations and integrated delivery systems and in the feasibility of some type of safety net ACO demonstration project to be established by the Innovation Center at the Centers for Medicare and Medicaid Services, the extent to which safety net ACOs will be formed remains unclear. The Marshfield Clinic, which already participated in the ACO precursor, the Physician Group Practice demonstration project, is continuing in a special transition project just for those in that project. The status of safety net ACO demonstrations or of Medicaid ACOs remains unclear, although a number of states are discussing establishing ACO-like structures.

All these communities view health information technology as an essential tool for improving care coordination, but this requires sharing the same EHR systems or having an interoperable health information exchange system. The best approach occurred in situations in which the relevant providers all used the same EHR systems and could readily access each others' records. Some systems were able to attain high level performance that went beyond simply sharing medical records, sending messages to providers, for example, when their patients scheduled, completed or missed an appointment with an affiliated provider or if they did not pick up their prescription on a timely basis. In some cases this was not possible, but providers could

grant access to at least portions of their systems to other providers. While the records were not completely integrated and it was more difficult to log in to two separate systems, this option still provided a means of sharing data, even if it was not entirely convenient. Some communities were developing broader health information exchanges, where data from many providers' systems could be pooled into a consistent format. For now, these systems still acted as retrospective data warehouses, which could be used for analysis, but did not provide real-time access to multiple providers' records. Even so, these analyses were proving helpful in identifying patterns where care could be improved and monitoring progress over time. But these systems are trying to develop more of a real time capability, which may make them useful for ongoing care and information sharing about individual patients. In some cases, HIT services were improving coordination through mechanisms separate from EHR systems. For example, San Francisco's eReferral system was helping primary care clinicians and specialists communicate rapidly about patient referrals, expediting the referral process and helping primary care physicians provide more services in the primary care setting.

A final lesson is that it is important to distinguish between the financing systems that can facilitate coordination or integration and the operational aspects of coordination. Some health policy experts believe that establishing a new financing structure, such as ACOs or capitated managed care, will automatically lead to coordination, just as other systems, such as fee-for-service payments inherently make coordination impossible. Our perception was that financing arrangements, like capitation for managed care or shared saving for ACOs, can facilitate coordination, by creating better incentives for coordinated and efficient care and by creating a pool of funds (the capitation or the shared savings) that can be used to target resources to activities that promote coordination.

Financing systems do not, in and of themselves, lead to better coordination. While many care plans take active steps to improve coordination among their participating providers and to improve quality, there are also many that effectively operate as discounted fee-for-service systems and have been unable to significantly improve performance among their providers. Conversely, even when they operate in fee-for-service environments, a number of health care facilities take steps work with their other local counterparts to improve coordination, despite the lack of direct financial relationships. Financing systems can promote coordination, but are not sufficient by themselves.

Actual coordination of care requires detailed operational changes, the development of relationships across different providers, and continuing renewal and innovation. These changes can be made even in a fee-for-service system and even for uninsured patients for whom no payments are received. Key ingredients for these operational transformations are leadership from within the safety net systems and a commitment to work to improve services for patients. Similarly, federal or state policies can promote better coordination or create barriers, but actions ultimately require commitment and change at the local level, both from institutions and from clinicians within the facilities.

The implementation of the Affordable Care Act could make it easier for safety net providers to coordinate care and creates some additional incentives to do so. As Medicaid expands and the number of uninsured people falls, beginning in 2014, uncompensated care costs

ought to decline. In addition, to the extent that more people will be enrolled in Medicaid, this will increase the incentives for the creation of more Medicaid managed care plans and may create more opportunities for the formation of ACO-like structures. Even now, many states are planning major Medicaid expansions. Safety net providers will need to provide care to millions more newly insured patients and they will need to find better ways to provide efficient and coordinated care. Investments and initiatives to form better coordinated and integrated safety net systems could have significant payoffs in a few years.

Appendix: Case Studies

Case Study: Austin, Texas

Background

Texas' state capital and home of the University of Texas, Austin is part of Travis County and constitutes about 75 percent of the county's total population. With 966,000 residents in 2009, Travis County has experienced a 19 percent increase in population since 2000. One-third (32.4 percent) of the population is Hispanic or Latino, 8.4 percent are Black or African American and 5.3 percent are Asian. Austin's median household income (\$50,236) is similar to that of the nation as a whole, but its poverty rate (17.5 percent) is above the U.S. average (13.5 percent).⁴

Austin is home to a health information exchange (HIE) called the ICare system; its focus is on improving care coordination and decreasing high cost utilization of services among safety net populations. Planning for the HIE began in 1997 with the creation of the non-profit Indigent Care Collaboration (ICC) and the strong participation of a broad group of safety net providers and other interested groups in the community. Shortly thereafter, ICC received grant funding from the Robert Wood Johnson Foundation's Communities in Charge project.⁵ The work of the ICC has continued over the past decade through support from a HRSA Healthy Communities Access Program (CAP) grant⁶ and since 2005 through a membership dues model representing some of the largest safety net providers in the area. In 2010, the ICC officially changed its name to the Integrated Care Collaboration, reflecting its emphasis on integration of care and a desire to spread the work of the group more broadly beyond indigent patients in the Central Texas area.

The ICC currently includes more than 20 participating organizations, representing hospitals, Federally Qualified Health Centers (FQHCs), mental health providers, the county health department and health care district, medical society, community-based organizations, surrounding county safety net providers and municipal organizations, academic partners, and foundations. The goal of the group today is much as it was when it was first formed – to address access, financing, and other barriers to high-quality health care for the uninsured, underinsured and otherwise vulnerable residents of Central Texas.

Current Initiatives

The initiatives of the ICC, its HIE and related projects, have become more technologically sophisticated and targeted over the past several years, primarily reflecting the

⁴ US Census Bureau, Selected Characteristics in the United States: 2005-2009. American Community Survey. See: <http://factfinder.census.gov>.

⁵ Robert Wood Johnson Foundation, Communities in Charge Project. www.communitiesincharge.org. Grants could be used to create stakeholder groups with broad community participation that would design new delivery systems to manage care, provider prevention and early intervention, and integrate services across sites of care.

⁶ U.S. Health Resources and Services Administration. HRSA announces availability of \$40 million in CAP grants. Washington, D.C.; 2001 Feb 8.

mission and goals of the five governing, dues-paying members of the organization. The five governing members include: 1) Austin Travis County Integrated Care, a community-based mental health and disability service provider for adults and children in Travis County; 2) Central Health, a limited-purpose taxing district created by popular vote in 2004 to support the provision of health care for indigent residents of Travis County; 3) Lone Star Circle of Care, a large, multi-site FQHC serving several counties in Central Texas; 4) St. David's Foundation, a philanthropic organization that supports safety net activities in the region and is affiliated with St. David's HealthCare, a 7-hospital system with sites across Central Texas; and 5) Seton Family of Hospitals, which includes major medical centers, community and rural hospitals, primary care clinics for the uninsured, as well as many other critical services for the Central Texas area. In 1995, the local public hospital, University Medical Center Brackenridge, was leased by the City of Austin to Seton, which assumed management and direction of hospital-based safety net care in the community. [Note: In December 2011, HHS announced that Seton Health Alliance, which is related to the Seton Family of Hospitals, would be one of 32 Pioneer Accountable Care Organizations for Medicare, which will be early adopters of the ACO approach. However, it does not appear that this is particularly related to safety net functions.]

ICare

For more than 10 years, ICare has served as a clinical and demographic data repository of information about health care access and use by uninsured and publicly insured residents of Central Texas. ICare contains information on approximately 1 million individuals and includes data for over 6 million encounters at 70 or more different sites of care. Patient records can be linked across care sites by medical record numbers, enabling ICare analysts and users to create reports on patient utilization, diagnoses, use of medications, by coverage or funding program.

ICare makes possible a number of care management programs to improve the quality and efficiency of health services for safety net populations. These programs draw on information obtained from ICare coupled with enhanced patient management strategies to reduce emergency department (ED) use and better manage individuals with chronic conditions. For example, the ICC Asthma Network uses ICare to identify patients with a diagnosis of asthma who have had at least one related emergency department visit. Eligible patients receive a follow-up call and are offered intensive in-home services by respiratory therapists who are certified asthma educators. Home visits include patient asthma education, an asthma trigger assessment, an individual care plan, help applying for pharmaceutical assistance, placement with a primary care physician, and periodic follow-up. According to representatives of the program, the asthma management pilot program has resulted in a 27 percent increase in the number of patients reporting no asthma symptoms for 90 days post-enrollment in the program, a 37 percent decline in ED visits, and a 63 percent decrease in hospital admissions. Seton has piloted a similar diabetes management program that has shown equally strong results. The ICC makes the asthma program available to all participating organizations at no charge to the patient or organization.

Similarly, Seton operates a High Alert Program that identifies patients with extremely complex behavioral health needs (using information from ICare) and creates highly customized care plans for future patient encounters with the goal of enhancing patient and staff safety.

Among patients classified as part of this program are people who are outliers in terms of high utilization of ED services, such as individuals with dozens of ED visits each year.

ICC analyzes utilization of patients who are not classified in the high alert program, but who are nevertheless at risk for poor care and high ED and inpatient services. ICare identifies utilization patterns of vulnerable patients by age, gender, use of outpatient care, and neighborhood, allowing specific targeting of interventions to increase use of health homes and identify strategies to keep patients out of the hospital.

ICare is an underutilized resource, with only about 2.3 percent of encounter information accessed for care management or other purposes.⁷ ICare patient information is used by a variety of physicians, nurses, physician assistants, social workers, office staff and others primarily to determine patient prior use of health services. Like many earlier generation health information exchanges, ICare does not provide real-time data; rather, it reflects patient utilization up to approximately 12-18 months prior to the time the data is accessed. Not surprisingly, this has made use of the ICare data less timely and less useful. In practice, most physicians and other health professionals continue to rely on common routes of information transmission such as fax and email.

The ICC embarked on a major system redesign of ICare in 2010 to create an open source technology platform that could provide real-time patient information to support care coordination, patient management and efficient resource utilization. According to ICC leadership, the new system will enable users to achieve meaningful use standards. It should also lead to more widespread use of care coordination strategies.

Other ICC Products and Services

ICC members have developed a program to help patients obtain and properly use medications. The PharmCare Program makes available a clinical pharmacist who rotates among different organizations' clinics, providing much needed pharmacy services for patients whose health depends on effective medication adherence. ICC participating organizations can also access an application to assist with patient prescription medication assistance. ICC uses MedData Systems applications to access applications for pharmaceutical manufacturers' pharmacy assistance programs for over 900 medications marketed by more than 100 drug manufacturers. ICC estimates that since 2004, medication savings (that would accrue to the health care organization as well as the patient) totaled over \$34 million.

One of ICC's governing members, Seton Family of Hospitals, has created a centralized screening and referral point that is available to all ICC members. Patients and staff can call a single help line for eligibility screening for a variety of public programs, including Medicaid and the Children's Health Insurance Program (CHIP). The help line assists with enrollment and also facilitates scheduling for appointments with physicians and other health professionals.

⁷ Vest JR, Zhao HZ, Jasperson J, Gamm LD, Ohsfeldt RL. Factors motivating and affecting health information exchange usage. *J Am Med Inform Assoc* (2010). Doi:10.1136/jamia.2010.004812.

ICC has developed a screening tool known as Medicaider to facilitate eligibility determination and enrollment in Medicaid and other health-related programs. Medicaider is a web-based tool used by providers and payers alike to link uninsured individuals to programs and necessary health services. One of the benefits of the tool is that it screens for eligibility for multiple programs, thereby increasing patient access to a more comprehensive set of health and social services. The tool assists patients with the entire application process, helps collect required documentation to demonstrate eligibility for programs, and files the application with the correct agencies or agencies. According to ICC representatives, Medicaider has transformed the eligibility and application process, making it much more efficient, faster, less costly and consistent with current policies and procedures. The process also allows health care organizations to check coverage or eligibility in real-time, which can eliminate delays and constraints in obtaining services. It also eases the process used by safety net organizations to determine the patient's out-of-pocket payments required for cost-sharing.

Physician-Led Prevention Activities and Best Practices in Care Management

The ICC maintains an active focus on prevention activities through its Physician Advisory Board. Working in collaboration with county health departments, the Physician Advisory Board conducts chart audits on the ICC member to identify best practices. The advisory board focuses on diabetes and asthma prevention and management as well as tobacco cessation. Chart audits collect performance information related to asthma severity, compliance with protocols related to asthma management medications, and outcomes such as symptom-free days over the prior two weeks. Chart audits also look at five commonly used measures of diabetes quality and tobacco cessation measures such as tobacco use documentation over a 12-month period, cessation advice documentation within various populations. High performers are identified in diabetes and asthma care and prevention and smoking cessation and best practices and disseminated across safety net providers. The advisory board requests clinics that are identified as high performers to share best practices which other health care organizations.

Future Challenges

The Austin safety net has made great strides in the past several years to develop a platform to identify opportunities to coordinate care better for thousands of who are uninsured or covered by Medicaid. The principal vehicle used has been a health information exchange, although experience has shown that the current data capabilities are not serving the day-to-day needs of busy safety net professionals who need information in real-time to effectively manage their patients. Changes are underway to improve the timeliness of the information and to create tools and strategies to target high users of health services who could be better managed in a primary care medical home setting.

Still, the majority of safety net providers in the Austin area are not part of integrated care arrangements. Uninsured and Medicaid patients face challenges accessing the full range of services that they need and communication barriers across providers continue to challenge most corners of the safety net. Specialty care can be extremely difficult to access for some patients, especially if they are uninsured. Mental health services are available in some of the FQHCs, but

overall, mental health care is not well coordinated with other health services and too few uninsured and Medicaid patients have access to these important services.

Case Study: Brooklyn, New York

Background

Located in Kings County, New York, Brooklyn borough is one of the boroughs comprising New York City. The 2010 population of over 2.5 million is comprised of large racial and ethnic minorities (34.3 percent black or African American, 19.8 percent Hispanic, 10.5 percent Asian); only 42.8 percent of the population is classified as white (compared to 74.2 percent for the U.S.).⁸ Approximately 25 percent of the population speak English less than ‘very well (compared with 8.7 percent nationally).⁹ The 2010 median family income of \$46,671 was well under that of the U.S. (\$60,609) and the poverty rate (19.7 percent) was significantly higher than that of the U.S. (11.3 percent).¹⁰ These data describe a population with significant socio-economic challenges in accessing health care.

The Lutheran health care system in New York City is a uniquely-integrated safety net network of providers that consists of a large number of school-based clinics, several long term care or nursing home and rehab sites, over 20 homeless shelter-based clinics, other community-based programs that provide free support services for patients and the community including adult education, workforce redevelopment, child care services, and legal services for divorce or domestic violence situations, and Health Plus, a Medicaid managed care plan. The cornerstone of Lutheran is the Lutheran Medical Center (LMC) and Lutheran Family Health Centers (LFHC). Although the hospital’s outpatient services are independently run by LFHC, the LMC and LFHC are perceived as a single entity; the community perceives LFHC as “hospital clinics.” LFHC is a federally-qualified health center and operates numerous sites and programs largely in southwest and central Brooklyn, including the main site co-located at the Medical Center, providing both dental and specialty care, one of five bariatric clinics in the state, as well as other clinic sites for unique populations (e.g., homeless, Chinese population, school-based) as well as a behavioral health center. Although other FQHCs operate in Brooklyn, only LFHC provides access to behavioral, dental and other specialty care services to uninsured or low-income patients.

Summary of Network

In 1967 Lutheran hospital was awarded one of the first 10 federally-funded community health center grants in US. Although the hospital outpatient clinics continued to be recognized

⁸ US Census Bureau, Selected Characteristics in the United States:2010 Census.

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1&prodType=table

⁹ S Census Bureau, Selected Characteristics in the United States:2010 Census.

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_DP02&prodType=table

¹⁰ US Census Bureau, Selected Characteristics in the United States:2010 Census. See:

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_DP03&prodType=table

as FQHCs, Lutheran Family Health Center became a separate entity with its own board and staff in 2005.

Financially and structurally, the health centers and hospital provide highly integrated care but as separate entities. This arrangement provides both advantages and disadvantages: The LFHC is able to leverage grant funding to expand access to care and to hire a large number of specialists and build other services, the hospital serves as the primary admitting hospital for health center patients when they require more acute care or surgery on an inpatient basis, and both entities have an incentive to coordinate care, particularly in the emergency room and at point of discharge. To ensure seamless transition between varying levels of care, the hospital and LFHC clinical and administrative leadership meet regularly. However, some operational differences still exist; for example, each entity operates different electronic medical records that remain incompatible and requires providers to log into each other's system to access patient records.

Whereas most of the specialty care, dental, and behavioral health staff at LFHC are salaried staff, most providers at LMC are volunteers, meaning they see their patients in their private offices but also have admitting privileges at Lutheran. Although LMC patients can access LFHC specialists, some specialty care providers can also be accessed through the Professional Corporation (PC); this arrangement is especially useful for gaining access to high-salary specialists for a few hours/week when Lutheran cannot afford to add them to staff full time. In order to maintain high quality of care, PC physicians are required to provide services to all patients (regardless of ability to pay) and are evaluated on such measures as amount of time spent with patients and patient satisfaction rates. Some formal relationships with other (albeit few) local providers exist, including specialty care at Maimonides (for services like open-heart surgery) and at Children's Hospital (for several pediatric subspecialties).

Patient Mix and Care for Uninsured

The network sees approximately 110,000 patients network-wide in a neighborhood where more than 45 percent of the population is at or below 200 percent of the federal poverty level (FPL). The patient mix of the Lutheran system is approximately 55 percent Medicaid, 30 percent uninsured/ undocumented and about 10 percent Medicare. LFHC charges uninsured patients on a sliding fee scale which includes almost all specialty care services; for example, uninsured patients with low-income may pay as little as \$15 for specialty care. They have a high number of Latino patients, but also serve large Arab, Chinese, and other minority populations with limited English proficiencies. In 2009 NYC's unemployment rate hit 9.6, increasing the number of uninsured patients and uninsured care. At 1,652:1, the population to primary care physician ratio in Lutheran's target service area exceeds the national average of 1111:1 by almost 50 percent.

The mission-based care ensures that no patient is turned away from Lutheran; and access to all services is the same regardless of insurance status. Although the hospital revenue sources are limited, access to LFHC's providers helps to minimize certain costs, such as the need to hire specialists; at the same time, few specialists in the community are available or willing to serve low-income patients. Still, wait times for specialty care are only 4 weeks, which is consistent

with other practices nationwide (including those serving primarily privately insured individuals); and if urgent, patients can be seen immediately within the Lutheran system.

Current Initiatives

Funding or Financial Incentives

LFHC attained Patient-Centered Medical Home (PCMH) Level 3 recognition, which indicates a very high level of technical and clinical coordination, and earns the clinic bonus payments from Medicaid in New York. Under the Recovery Act (ARRA), LFHC received a total of \$3.5 million to expand services and they expect to receive additional monies under the Affordable Care Act (ACA) to strengthen access to care. Such funds and the enhanced Medicaid payments (both from their FQHC status and the PCMH certification) are an important piece of Lutheran's business plan and have enabled them to maintain services despite their high uninsured patient base.

LMC currently receives DSH payments, but these are expected to drop by 50 percent once the ACA is fully implemented. Because most of their uninsured patients are likely to remain uninsured or underinsured, Lutheran does not expect to recoup the losses from DSH; LMC currently relies heavily on LFHC resources to remain financially viable but remains at risk of closing or reducing services without additional resources to offset the DSH losses beginning in 2014. Recently, local hospital closures have substantially increased demand for LMC hospital and emergency care services; safety net hospitals Victory Memorial Hospital and St. Vincent's Hospital closed in 2008 and 2010, respectively. The integration of services and resources currently help to maintain LMC capacity, but these solutions may prove inadequate to meet the community's increasing hospital needs.

Role of HIT

The Lutheran system currently uses two electronic medical record systems—both of which were purchased at uniquely discounted rates. LFHC uses eClinical Works (eCW), which is certified by the Office of the National Coordinator (ONC), while LMC recently adopted Vista. Currently, hospital and health center clinicians must check into separate systems to access patient records. LFHC is currently in the process of moving from Dentrix, which is not ONC-certified, to a standardized dental module; LFHC is also beta testing a behavioral module for use nationwide. Additionally, the interviewees were hopeful that the Brooklyn Health Information Exchange (BHIX), which is intended to standardize information for sharing among local hospitals, health centers, and other Brooklyn providers, will further streamline communications between providers in the community.

Description of Coordination Activities

The Lutheran health system is itself highly coordinated from within. However, there is limited opportunity to better coordinate and provide continuous care for this population beyond the Lutheran system. Relatively few providers serve as critical access points for Medicaid patients; and the number of providers willing or able to see this population appears to be shrinking. For the uninsured, there are even fewer provider partners in these neighborhoods. One interviewee noted that: “private hospitals and systems don’t want to deal with Lutheran’s low-income patients, and other safety net providers are too weak financially to be attractive partners.”

Despite the lack of health care resources, Lutheran successfully provides and coordinates access to high quality care, particularly specialty, dental, behavioral, and home care. The following illustrate their ability to use the resources they have within their network to effectively coordinate care:

Coordination across settings:

- 75% of Lutheran nursing home patients started at LMC and have transitioned relatively seamlessly from primary care to needed hospital and specialty care, and long-term care services.
- Care coordinators and case managers ensure patients are engaged and are able to transition patients according to their needs: “If you have a stroke you go from ED to rehab in hospital, to rehab in nursing home, to outpatient care at LFHC.”
- Readmissions rates decreased by 40% due to immediate follow up appointment upon discharge with LFHC provider

Coordination within settings:

- Care managers and care coordinators are both used at Lutheran in varying capacities. Although the terms are used interchangeably (along with patient navigators), care managers are often associated with patients with more complex health and social issues and may include social workers and/or nurses who understand when and where patients may best transition to. Care coordinators are generally associated with ensuring patients have their pre-requisite labs and tests completed prior to follow-up appointments with the primary care physician.
- Care managers and care coordinators are wholly funded by operational funds.
- Previous grants and demo managed care projects have shown effectiveness of these coordinators, particularly for HIV, diabetes, and hypertension and Health Plus is currently considering covering the cost of these care coordinators.

Future Challenges

There are significant resource barriers in Southwest and central Brooklyn; one in five residents are undocumented and uninsurable, few specialists in the community are willing or available to serve Medicaid and uninsured patients, and remaining hospitals continue to be at financial risk. Unable to capture lost revenue and to meet rising costs over the past year, the LMC recently terminated some hospital staff. Efforts to better integrate have been largely driven

by the lack of resources and growing demand for care, and they do not yet consider the Accountable Care Organization (ACO) model to be a viable option, particularly with few partners in the community. Given the high proportion of high-risk patients and efforts to expand further into underserved communities, it is also unclear how an ACO arrangement can more effectively reduce costs and maximize revenues without sacrificing access and quality of care.

Further Plans: New Initiatives, Interest in ACOs, Medical Homes, etc.

Improvements in the interoperability of EMRs and greater abilities of BHIX are expected to improve the opportunities for coordination of care and quality improvements. Their efforts to attain the highest level of PCMH certification has helped push LFHC to improve coordination of care, which also benefits LMC. However, with few partners available, this community-wide effort for care coordination is likely to remain limited.

While ACOs generally represent another vehicle for integration, Lutheran is likely to find significant challenges in identifying more cost-saving ways to care for a transient, uninsurable, low-income population (e.g., homeless, migrant, students); and by their nature, FQHCs continuously seek to expand access points to high risk and potentially high-cost populations that are likely to offset any gains in cost-sharing.

Case Study: Indianapolis, Indiana

Background

The Indianapolis area was selected for inclusion in this project because of its unique market structure and the existence of a unique Medicaid managed care organization, MDwise, whose operations are analogous to an accountable care organization administrator (ACO), providing an example of how ACOs could work for underserved patients.

The Indianapolis Safety Net

Located in Marion County, Indianapolis is the largest city in Indiana with almost 900,000 people. Its population is fairly representative of the U.S. as a whole in terms of age and racial composition with the exception that its Hispanic population is relatively smaller, comprising only 7.8 percent of the total population (compared to 15.8 percent for the U.S. as a whole).¹¹ Its median household income is below that of the U.S. as a whole (\$43,823 compared to \$52,029) and its poverty rate higher (16.5 percent compared to 13.2 percent). The rate of uninsured in Marion County is only slightly higher than the U.S. rate (16 percent¹² compared to 13 percent¹³), and Medicaid enrollment is equivalent at approximately 19 percent.^{14, 15}

The metropolitan Indianapolis healthcare safety net consists of a diverse group of organizations including federally qualified health centers (FQHCs), community health centers (CHCs), community mental health centers, hospital emergency departments, and free clinics as some of the major provider types. Wishard Health Services (including a hospital and multiple CHCs) is the dominant safety net provider in the county and serves as one of MDwise's larger integrated delivery systems; although many other providers also serve the Medicaid population. HealthNet, a federally qualified health center, and the Gennesaret free clinics are also major providers of primary care to indigent patients in the county.

Indiana's Medicaid programs are considered among stakeholders to be generous. Hoosier Healthwise is available to pregnant women with household incomes up to 200 percent of federal poverty level (FPL), parents with incomes up to 36 percent FPL and children up to age five with household incomes up to 133 percent of FPL, and then up to 100 percent FPL for ages six through 19. Children with household incomes up to 150 percent of FPL are eligible for CHIP. In addition, Indiana received a Medicaid demonstration waiver to extend coverage to uninsured adults between 19-64 whose household income is between 22 percent and 200 percent

¹¹ US Census Bureau, Selected Characteristics in the United States: 2005-2009. American Community Survey. See: <http://factfinder.census.gov>.

¹² The Richard M. Fairbanks Foundation, Inc., Health and Hospital Corporation of Marion County. The healthcare safety net of metropolitan Indianapolis; 2008 Dec [cited 2011 Apr 15]. Available from: http://www.mchd.com/pdf/epi_safetynet_1208.pdf.

¹³ The Henry J. Kaiser Family Foundation. state health facts. [cited 2011 Apr 15]. Available from: <http://www.statehealthfacts.org/profileglance.jsp?rgn=16#>.

¹⁴ The Richard M. Fairbanks Foundation, Inc., Health and Hospital Corporation of Marion County, *op cit*.

¹⁵ Kaiser State Health Facts, *op cit*.

of FPL and are not otherwise eligible for Medicaid. In an effort to capture more of the working poor, the Health and Hospital Corporation of Marion County also funds a county-based program, the Health Advantage Program, a managed care program for low-income, uninsured residents not eligible for Medicaid who fall at or below 200 percent of the federal poverty level.

Current Initiatives

MDwise and the Integrated Delivery Systems

MDwise is a non-profit Medicaid managed care organization that serves Indiana's Hoosier Healthwise, Care Select, and Healthy Indiana populations. The MCO contracts with vertically integrated delivery systems¹⁶ from which members can choose. MDwise was founded in 1994 by Wishard Health Services and Clarian Health Partners (now part of Indiana University Health) in an effort to control how Medicaid dollars were spent within the hospitals. At its inception, MDwise had three delivery systems that evolved from commercial managed care products, but has expanded to now include 8 delivery systems.¹⁷ Each delivery system includes a hospital that serves as its hub and at least one physician group or FQHC¹⁸ from which patients receive primary care. MDwise is paid a capitation rate from the state and passes 95% of the capitation payment to the delivery system, thus passing the risk (and the responsibility for coordinating care) on to providers. The roots of this integrated delivery system approach go back to 1974 when Metro Health, one of the nation's first HMOs began operations in Indianapolis using a closed delivery system model.

There are three characteristics of MDwise's role in the integrated delivery system model that position the MCO to function similarly to an ACO administrator. First, the delivery system (and not MDwise) carries the risks associated with insuring the member. Second, each system has a hospital at its core that takes responsibility for ensuring care coordination and patient management; and finally, each delivery system is paid on a per member per month basis. One of the major advantages of the MDwise model is that until electronic health records (EHRs) become fully inter-operable between providers, the integrated system is the model most likely to achieve integrated care in a safety net consisting of multiple unaffiliated providers, and is the model most likely to induce effective care management.

In addition to promoting the integration of care for its Medicaid patients, MDwise uses several tools to promote high quality care. MDwise encourages communications among delivery systems to allow providers to learn from one another and share best practices. A monthly medical advisory board meeting facilitates shared knowledge, as well as MDwise-sponsored webinars and newsletters. The Indianapolis Patient Safety Committee facilitates uniform

¹⁶ Vertically integrated systems of care are networks of inpatient, specialty and primary care provider where care responsibilities reside at the top with a hospital radiate down to providers associated with that hospital)

¹⁷ The delivery systems include Wishard, Methodist, ProHealth, St. Vincent, Saint Margaret Mercy, Select Health Network, and Hoosier Alliance. St. Francis also had a delivery system but in January 2011, moved the system to Anthem (a different Medicaid insurer within the state).

¹⁸ FQHCs play a fairly small role in MDwise's delivery systems. Only one of the delivery systems includes an FQHC, Health Net, which was sponsored by Ministry Hospital and is part of the Ministry delivery system.

standards of care between hospitals in different delivery systems. Delivery systems are also required to meet National Committee for Quality Assurance (NCQA) standards in order that MDwise as a whole remain accredited.

Perhaps the most potent tool MDwise uses for promoting high-quality care is the withholding of a share of capitation payments (4 percent) that are later paid contingent upon the delivery system attaining its HEDIS measures (which primarily assess the adequacy of primary care provision). In addition to the payment withholds, when MDwise as a whole meets state-prescribed performance goals, it receives bonus payments, 50 percent of which must be passed through to the integrated delivery systems, providing an additional opportunity to incentivize high-quality care among participating providers. The data used to establish performance metrics is also compiled into provider-level and delivery system-level analyses that are used to improve care by individual providers and delivery systems.

IU Health Methodist Hospital and HealthNet

In partnership with HealthNet (an FQHC), Indiana University Health Methodist Hospital (Methodist) is one of MDwise's largest delivery systems. Methodist Hospital, a private, non-profit 1,465-bed hospital serves as the hub of this integrated delivery system. It is also a large disproportionate share hospital (DSH) and a significant Medicaid provider. The hospital is responsible for ensuring MDwise members receive necessary specialty and inpatient care. Methodist relies heavily on its partnership with HealthNet to provide primary care to its Medicaid patients. With five primary health care centers, three dental clinics, eight school-based health centers and an array of other clinical and wrap-around services, HealthNet is Indiana's largest FQHC. HealthNet has a long history and strong partnership with Methodist. The FQHC was founded over 40 years ago by a medical resident at the hospital and shares many administrative services with Methodist.

Because of this long-standing affiliation, referrals between inpatient care, specialty care and HealthNet are fairly straightforward, though still mostly secured through informal negotiations and physician goodwill. It is understood that Medicaid patients coming into the hospital without a primary care provider (generally through the emergency department) should be referred to a HealthNet clinic for follow-up care and HealthNet patients requiring specialty care services or inpatient care should be referred to Methodist. Wait times vary for specialties, with patients waiting only a "couple of weeks" for some appointments or as long as six months for others (e.g. psychiatry). HealthNet is working to formalize the referral process to make it more automatic and seamless. Although HealthNet and Methodist use different (and incompatible) electronic health records (EHRs), transfers of information are facilitated via the Indiana Health Information Exchange (see below).

Uninsured patients of HealthNet follow a slightly different path. If an uninsured patient requires inpatient or specialty care, the general procedure is to refer them to Wishard Health Services, where they can enroll in the county-funded program Health Advantage. The referral process is telephone-based and all information about the patient is transferred via paper records. Following the specialty or inpatient service, the expectation is that the patient will return to

HealthNet to receive primary care, however, many of these patients may become absorbed by the Wishard community health center network. Project Health, another safety net program supported by the Indianapolis Medical Society, helps arrange and coordinate specialty care for uninsured patients with incomes below 300 percent of the FPL. A number of hospitals and specialists donate funding and volunteer their time to participate in the program.

Wishard Health Services

In addition to being a co-owner of MDwise and one of its delivery systems, Wishard Health Services is considered to be the primary safety net provider in Marion County, providing much of the care for uninsured patients in the community. One interviewee noted about 40 percent of its payer mix is charity care (Health Advantage and self-pay patients). Because the county subsidizes charity care through the Health Advantage Program (often called Wishard Advantage), it is common practice among Indianapolis providers to refer the uninsured to Wishard. Operated by the county's Health and Hospital Corporation, the health system consists of a 300-bed public hospital, primary, dental and specialty care clinics located on the Wishard hospital campus, nine community health centers throughout Indianapolis and a myriad of other clinical and community services. Wishard also provides both inpatient and outpatient behavioral health care through its affiliation with Midtown Community Mental Health Center (MCHC).

Wishard provides integrated care for all its patients regardless of their ability to pay. Through a close partnership with Indiana University School of Medicine, the health system provides primary and specialty care to its patients through a fairly seamless referral process. According to interviewees, wait times for specialty care are on par with other safety net providers, ranging from two weeks to two months (sometimes longer) depending on the service needed. Wait times can be quite long for a few specialties like orthopedics where demand is high and providers are limited – particularly for uninsured patients with conditions requiring care outside the Wishard system. However, Wishard has developed partnerships with other hospitals and providers to provide these services for agreed-upon payments from Wishard.

Wishard is unveiling two new tools that will help support their efforts to better coordinate care: a new health information technology (HIT) system and a Transition of Care Department. The new system, Relay Health, allows real-time communication between patients, ambulatory care providers, and hospital providers; and alerts primary care providers of the status of their patients' ED, inpatient, and outpatient visits. The system also allows providers to share referral reports, pharmacy and medication information, and lab reports. The new Transition of Care Department, consisting of case managers, social workers, and administrative staff under the direction of a physician, will support providers' efforts to manage the care of chronically ill patients who are frequent users of the system. Providers in the hospital or any of the ambulatory settings can call the department for a consult and staff will be deployed to help patients transition between providers and settings.

Behavioral health care for Wishard patients is also well integrated in the system, with mental health care providers and case managers from Midtown Community Health Center (MCHC) collocated at Wishard's community health clinics. Care coordination for patients needing behavioral health care is provided primarily through MCHC case managers, who serve

as the liaison between patients' medical and mental health care. Referrals and scheduling are accomplished through the same appointment system, which helps reduce fragmentation, although the providers do not share an EHR system.

The Indiana Health Information Exchange (IHIE)

The Indiana Health Information Exchange (IHIE) is a critical component to the integration of care in the Indianapolis safety net. Each of the delivery systems within MDwise has its own system for managing patient records but because these systems are designed to meet the needs of the individual providers, they are not compatible with one another. Therefore, while providers at HealthNet can share information with each other (as can providers at Wishard), the Wishard system cannot read HealthNet records and vice versa. IHIE exists to translate electronic records between health care systems. In a setting such as MDwise with multiple integrated delivery systems, IHIE is critical to ensuring that when patients travel between systems, so do their medical records.

The key translation component of IHIE is the Indiana Network for Patient Care (INPC). Developed by researchers at the Regenstrief Institute, INPC was originally implemented in emergency departments (EDs) so that when a patient shows up in an ED, the medical records of that patient are available to the ED providers. INPC is expanding to encompass more types of providers, as well as increase its geographic coverage beyond the Indianapolis metropolitan area. As it expands, the INPC output that providers see becomes closer to a comprehensive medical record for patients. Because providers are familiar with its reports, it tends to be trusted, and one study found that it saved an average of \$25 per visit (largely through reduced radiology testing).

The major advantage of the IHIE's INPC is that it serves to translate electronic systems between providers that would otherwise be nontransferable. In a fragmented health care system a "translator" such as INPC is critical to achieving the goals of health information technology (HIT) and helps providers' EHRs meet the "meaningful use" criteria prescribed by Centers for Medicare & Medicaid Services in order to qualify for the Recovery Act (ARRA) HIT incentives. Because it is unrealistic to expect that unaffiliated and highly diverse provider groups within a geographic area will necessarily adopt the same EHRs, the INPC model is one that would improve the ability for providers to coordinate care in many locations. Unfortunately, IHIE's INPC is not real-time the way an EHR is – instead it requires a periodic transmission of all records from each provider into a data warehouse and medical events that have occurred since the last transmission will not be included in INPC output. Additionally, its comprehensiveness extends only as far as its participating providers; medical records from unaffiliated providers are not included in IHIE's INPC.

Future Challenges

The MDwise case study is a lesson in how vertically integrated physician-hospital systems can provide high quality, integrated care for underserved patients. In this section, we identify a number of advantages of this system, as well as some remaining challenges.

Adoption of accountable care organizations in Indianapolis would likely reinforce vertically integrated systems of care for the underserved. The market structure of health care in Marion County lends itself well to the concept of ACO integration envisioned in the Affordable Care Act (ACA). In fact, most of the safety net provider groups we spoke with in Indianapolis anticipated that they would register as ACOs, though this was prior to the release of the CMS regulations. Should more insurers adopt the ACO model, the MDwise delivery systems are likely to become reinforced as they register with additional payers. Given this unique landscape and market structure, however, this ACO model may not be easily replicable in other communities.

Indianapolis' delivery systems provide vertically integrated care, but also a series of silos of care. The MDwise delivery systems provide fairly well integrated care, as long as members stay within their system. Problems arise, however, when patients go to a hospital emergency room or provider of a different delivery system. Because reimbursement is tightly held within each delivery system, some health systems balk at having to pay for care of a patient that is not their member. This can sometimes lead to enmity between providers and individual physicians. In addition, Wishard carries the majority of the burden of care for the uninsured, both because of the delivery system structure and the Health Advantage program. As a result of these factors, the safety net in Indianapolis appears to operate effectively within these organizational silos, but can be fragmented when care crosses systems.

Coordinated care for underserved patients is facilitated by the delivery system's networks of care, but some obstacles still exist. Networks of care are clearly established within each delivery system for MDwise members, which alleviates some of the fragmentation of care that can occur for Medicaid patients. Similarly, Wishard serves as an integrated network for the uninsured. But even with these networks and affiliations, obtaining referrals and certain services is often dependent on physician relationships, both formal and informal. Nurses and, where available, case managers take on much of the yeoman's work to ensure care is coordinated. Other supplemental safety net programs such as Project Health also work to facilitate specialty referrals and better coordinated care.

EHRs are used effectively to support care coordination within certain delivery systems, but until all systems are interoperable their utility is limited. The Indiana Health Information Exchange is working to alleviate the information silos that exist because of the lack of interoperability across EHR. IHIE provides a health information network that transfers information from a patient's EHR into a central database where all participating providers can have access to it. This system allows physicians from unaffiliated systems or practices to see critical patient information, including medications and lab results. However, the system is not real-time and requires periodic transmission of data into the database. In addition, only patient EHR information from participating providers is available. Despite these limitations, IHIE is a useful example of the ability for technology to improve coordination of care in fragmented health care markets.

Case Study: Marshfield, Wisconsin

Background

Marshfield Clinic is located in Central Wisconsin, though the clinic operates facilities throughout the Central, Western, and Northern regions of the state. Marshfield itself is a small city with a population of about 20,000, but the service area is much broader and reaches a primarily rural territory that is roughly the size of West Virginia. Originally, a primary industry in the area was dairy farming, but the region has diversified since. In Marshfield itself, the primary industry is the clinic and the affiliated hospital, St. Joseph's.

Marshfield Clinic is a non-profit multispecialty group practice system serving residents in rural Wisconsin with 55 locations, 2 hospitals, 80 medical specialties, and about 800 physicians¹⁹. In addition to providing medical services, it has a substantial research endeavor and is affiliated with the University of Wisconsin School of Medicine and Public Health. In fiscal year 2009, Marshfield Clinic served about 375,000 patients over almost 4 million encounters. It serves all patients in its region, regardless of their ability to pay or insurance status. Marshfield Clinic also has developed an insurance plan, Security Health Plan, which serves private, Medicare, Medicaid, and BadgerCare (Wisconsin's CHIP program) patients. This plan has about 200,000 members and serves 32 counties in Wisconsin and includes about 4,100 physicians and other providers.

The clinic is nationally recognized for its quality focus, its electronic health record (EHR) system, and its use of telemedicine.²⁰ Within the health policy world, it has become known as one of the sites of the Medicare Physician Group Practice Demonstration, a project which is essentially the precursor to the new Medicare Accountable Care Organization (ACO) initiative. The clinic demonstrated that it could both meet rigorous quality benchmarks and reduce Medicare costs. Marshfield Clinic was selected for this project because of the way in which a federally qualified health center (FQHC), the Family Health Center of Marshfield, is integrated into a multispecialty group practice known for its quality and coordination of care. The FQHC essentially serves Medicaid, CHIP, and uninsured patients, while the other components of the Marshfield Clinic serve Medicare and privately insured patients (as well as some uninsured patients).

Current Initiatives

The Family Health Center

Marshfield Clinic includes an FQHC, the Family Health Center (FHC) of Marshfield, which is completely integrated into the broader system of care. Family Health Center currently

¹⁹ The information in this summary comes from interviews with Marshfield Clinic, Family Health Center, Security Health Plan, and Ministry Health Care. Interviews were conducted between March 7 and March 8, 2011.

²⁰ McCarthy D, Mueller K, Klein S. Marshfield Clinic: Health Information Technology Paves the Way for Population Health Management. Commonwealth Fund Case Study. Aug. 2009.

serves a little over 80,000 patients, providing around half a million visits per year in 25 different medical and dental sites.

The Family Health Center differs from many FQHCs in that it is not a separate location or medical practice. FHC is essentially a “virtual” health center, which provides care in partnership with Marshfield Clinic. The physicians, nurses and other personnel (except for the Executive Director) are employees of Marshfield Clinic. There are no separate facilities for FHC (except for dental clinics and a mail order pharmacy, discussed below). On a given morning, a physician at the clinic may see a privately insured patient, then an FHC patient who is on Medicaid or is uninsured, then a Medicare patient, etc. In most cases, the clinician is unaware which patient is which and what type of insurance he or she has. FHC is also unique in that it provides not only primary care services, but specialty care services to its patients. To a certain extent, being a patient of FHC, as compared to Marshfield Clinic, is an accounting issue of relatively little import to the patient or clinician. Marshfield clinicians say they treat all patients alike and that FQHC patients are seamlessly integrated with other patients.

FHC includes 18 medical and 7 dental sites that are considered part of the FQHC. FHC also operates a mail order pharmacy which obtains discounted medications under the Sec. 340B drug program and provides maintenance medications to FHC patients throughout the rural service area. The Clinic has a larger presence than FHC; however, in recent years FHC has expanded its partnership with Marshfield Clinic to new communities in Rice Lake and Minocqua. When uninsured patients come to Marshfield Clinic, they go to a patient assistance center, where it is determined whether they are eligible for Medicaid, BadgerCare (the state’s CHIP program), the FHC’s program for the uninsured (Family Health Program, described below), or other assistance programs.

In addition to serving Medicaid and BadgerCare patients, FHC serves patients covered under its Family Health Center Program, which provides health care services to people who would otherwise be uninsured. Uninsured people with incomes below 200 percent of the poverty line living in designated parts of Wisconsin may join the Family Health Center Program, which has monthly membership premiums based on income and family size. Membership provides members a broad range of benefits, including physician, dental, pharmaceutical, and mental health care at FHC and the Marshfield Clinic; it does not provide inpatient hospital coverage. Because of the limits of funding, there are a limited number of program slots, but qualified people can be added to the wait list and receive charity care at the Marshfield Clinic (they may be charged for care on a sliding fee-scale basis). Essentially, all uninsured residents can receive care at Marshfield Clinic, either through the Family Health Center Program or charity care at the Clinic.

Coordination of Care

Compared to most safety net arrangements, care is exceptionally well coordinated for low-income patients. Since FHC includes both primary care and a broad range of specialty care, Medicaid, CHIP, and uninsured patients can readily access both types of care. Marshfield Clinic takes pride in trying to schedule visits in a fashion that is convenient for patients. A remarkable feature of Marshfield Clinic is short wait times for appointments; generally patients have

diagnostic testing and see a specialist within 24 hours of receiving a referral and often on the same day. Since doctors have no knowledge of patients' insurance status or ability to pay, these short wait times apply to all patients and not only those with private insurance. One senior executive said this came from the tradition of serving rural dairy farmers who might need to travel a good distance to receive medical care at Marshfield but did not want to be away from the farm too long because the herd still needed to be milked and attended. Services are further coordinated by a relatively advanced certified EHR system (Cattails) developed by the Marshfield Clinic used by all the medical staff. On the main campus, physicians carried laptops which contained the EHR system; they could use the wireless network to access patients' records anywhere on the campus. The EHR system allows all providers to access lab results in less than two hours and ensures a seamless transmission of patient information between providers. The Clinic has also hired 45 high-end care coordinators to follow-up with complicated cases and check back with patients to ensure medication compliance.

Even though St. Joseph's, the hospital affiliated with the main Marshfield campus is separately owned by Ministry Health Care, a nonprofit Catholic healthcare system, there is very close coordination for hospital care with the clinic. The hospital is co-located with Marshfield Clinic (connected by a hallway), uses the Marshfield physicians as the hospital's medical staff, and has adopted the Marshfield EHR, allowing for an integrated system of care between inpatient and outpatient settings. (Nursing and other hospital staff are Ministry employees, while physicians are Marshfield employees.) St. Joseph's is a large (over 500 beds) teaching hospital and the only major rural referral medical center in Wisconsin. Similar to Marshfield Clinic, wait times are very short even in the emergency department.

One limit to the FHC coverage is that FHC patients have all of their health needs paid for while in Marshfield Clinic but this coverage does not extend to inpatient services provided at Ministry and other hospital locations. FHC will cover the provider fees but not the institutional fees and hospitals vary in their ability and willingness to take FHC patients on as charity care. Although hospitals will generally treat the patients, frequently they may bill the patients for institutional fees which patients cannot afford. Similarly, hospitals serving FHC patients in the emergency department may require the patients to pay copayments which they lack the means to pay. FHC estimates that 10-12 percent of their patients are adversely impacted by the lack of hospital coverage each year.

Electronic Health Record: Cattails

Cattails is the EHR developed and used by Marshfield Clinic. It has been certified by the Office of the National Coordinator. Supporting over 80 specialties, the suite includes clinical, data, and practice management tools designed by physicians with a dashboard user interface that is widely cited for its ease of use. The system is capable of care management and preventive services and alerts providers when their patients are overdue for recommended preventive or chronic disease care. Unlike many systems, Marshfield Clinic has also developed a dental component to its EHR system and the data can be used for both dental and medical care.

Insofar as it is the dominant medical practice in the area, most patients already have medical records in the Marshfield data base. Thus, for example, an emergency physician can

readily consult most presenting patients' medical records. In addition, Marshfield has been using electronic medical records for about 30 years, so it has 30 years of longitudinal data on the population of patients in the central Wisconsin area. This also provides a rich longitudinal data base for clinical or epidemiological research.

The Ministry Health System has decided to acquire Cattails and is currently in the process of implementing the technology. In the central Marshfield Clinic location, where the Ministry hospital (St. Joseph's) is staffed by Marshfield Clinic doctors, the hospital doctors have already been using Cattails, which allows for real-time transfers of patient records between inpatient and outpatient settings. However, in some of the other Marshfield Clinic locations, Ministry has had read-only access to patient medical records from Marshfield Clinic, resulting in lumpy transitions of information between the hospital and physician groups. Within the year, Ministry expects to have completed the implementation of technology, thus removing this obstacle to coordinated care. Providers at Marshfield Clinic note that the shared medical record definitely facilitates coordinating services for patients and reduces the need for duplicative visits and tests, particularly with respect to specialty visits.

Quality of Care and Effectiveness

Marshfield Clinic has a commitment to quality that is evident in both their organizational structure and in the outcomes of their patients. A prominent organizational goal is to provide the highest quality care to all patients regardless of their ability to pay or insurance status.

All doctors are salaried with payment enhancements based on patient volume irrespective of patient type or insurance status. Their compensation is built on a formula which includes productivity and, more recently, performance as measured by clinical data, as well as other factors. Thus far performance-based payment has been most fully implemented in the primary care system – in part because it is easier to identify standards and recommendations for routine care. For primary care physicians, 10-20% of physician compensation is based ease of access, patient satisfaction, and other quality measures.

In addition to using payment mechanisms to incentivize high-quality care, Marshfield Clinic has a quality center, the Quality, Innovation, and Patient Safety center. This group tracks and reports on clinical performance measures and evaluates mechanisms for improving care. Marshfield has a Quality Improvement Department that selects areas to focus on improving care and prescribes standards for all patients regardless of insurance status or ability to pay. While achieving success with several chronic conditions facing adults (such as anticoagulation, cholesterol care, and heart failure), the department, with support from FHC, has also focused on interventions for high-needs pediatric patients such as those who are in the clinic 100 or more days per year. Marshfield Clinic is part of the Wisconsin Collaborative for Healthcare Quality and as such reports their performance on the clinical measures used by all collaborative members. Measures cover chronic care, preventive care, and postpartum, and are both process-

and outcome-oriented.²¹ In addition to the collaborative measures, Marshfield Clinic and FHC both produce monthly dashboard reports on preventive care and chronic diseases that summarize compliance with quality of care recommendations and conduct weekly patient satisfaction surveys mailed to 3 patients per provider for all facilities.

The Clinic also developed a nurse hotline to help manage patient care and reduce emergency department use. Nurses have electronic access to medical records and can book appointments for primary care providers the next day if deemed medically appropriate. The clinic estimates that the nurse hotline receives 50,000 calls a year, of which only 7-8% result in an emergency department (ED) visit, thus reducing the use of expensive ED care. Given that many of their patients are rural and would have to travel distances to come for an appointment, this system can also spare time for patients and improve the patient experience.

One particular quality initiative that has garnered national recognition for Marshfield Clinic is its performance in the Medicare Physician Group Practice (PGP) Demonstration Project, which has served as a template for the new federal Medicare Accountable Care Organization system. This demonstration project required providers to report on 32 quality measures for enrolled patients and evaluated the costs of their care in comparison to a control group of non-enrolled patients. Serving 35,000 – 40,000 enrolled beneficiaries, Marshfield Clinic achieved an estimated savings of \$83 million in the first four years, about \$900 - \$1,000 per patient in the fourth year. Notably, of the 10 groups selected to participate in the demonstration project, Marshfield Clinic's savings have been far larger than any of the other groups comprising more than half of the total performance payments made while performing comparably to or better than other groups on the performance measures.²² Further, the Clinic elected to apply the standards of care for the Medicare beneficiaries to all patients regardless of insurance status. An interesting aspect of participation in Medicare at Marshfield is that FHC gave up reimbursement under the Medicare FQHC payment system and elected to be paid under the regular Medicare physician payment system. Since FHC also provides specialty care, they believed the regular FQHC primary care payment per encounter did not work as well for them; being in the regular Medicare payment system also let FHC patients participate under the Medicare PGP demonstration.

Clinic staff noted that Marshfield had focused on quality and efficiency even before the PGP demonstration, but that participation in the demonstration project helped encourage even greater efforts to improve quality or efficiency. For example, they reported that the Clinic's ability to back a share of savings made it easier to justify upfront investments that would be difficult to justify in a fee-for-service system, such as hiring high risk case managers.

²¹ For Marshfield Clinic's most recent performance on the collaborative measures, see: Marshfield Clinic. Quality in health care. [cited 2011 Apr 12]. Available from: http://www.marshfieldclinic.org/patients/default.aspx?page=about_qualityMeasures. For reports comparing all collaborative members' performance see, Wisconsin Collaborative for Healthcare Quality. View our reports. [cited 2011 Apr 12]. Available from: http://www.wchq.org/reporting/measures.php?topic_id=26.

²² Iglehart J. Assessing an ACO prototype – Medicare's physician group practice demonstration. The New England Journal of Medicine. 2011; 364(3): 198-200.

Future Challenges

Building on its foundation of quality care for all patients, Marshfield Clinic is pursuing several new initiatives related to trends in the healthcare field. Although its managed care plan, Security Health Plan, is National Committee for Quality Assurance (NCQA) accredited, the clinic is pursuing NCQA Patient Centered Medical Home (PCMH) recognition as well. Currently, three sites have attained PCMH Level 3 recognition and the remaining sites will apply by June 2011. The clinic was also planning to assess how to respond to the new proposed Medicare Accountable Care Organization (ACO) regulations, which had not been issued at the time of our visit. (Marshfield can be grandfathered in on the basis of their participation in the PGP demonstration program.) One of the challenges facing the organization is that as the PGP demonstration program ends, its funding also will, but given the success of the demonstration, stakeholders and providers alike are committed to continuing the initiative. After our visit, the Medicare ACO proposed regulations were issued. Marshfield Clinic, like the other sites under the PGP demonstration, has publicly stated that it does not want to participate under the terms of the proposed regulations. In August, the Clinic announced it would participate in an alternative ACO program, the PGP Transition Demonstration which is available to organizations that had earlier been part of the original PGP demonstration.²³

The Family Health Center also has several new initiatives underway. An important initiative relates to improving oral health care. FHC found that many low-income patients reporting having very limited access to dental care, so FHC has established 7 dental clinics that are designed to primarily serve low-income FHC patients (although other Marshfield patients can also receive care there). Unlike the medical care system, which is primarily administered by Marshfield Clinic, the dental clinics are an arm of FHC. FHC is also addressing the shortage of dentists in partnership with Marshfield Clinic with the creation of a new dental residency program and dental school. Funded with a \$10 million grant from the state and a matching \$10 million donation from Security Health Plan, the dental school will have the mission of training students from rural and underserved areas to provide dental services to rural and underserved areas.

FHC has also partnered with Ministry health in an application for a new access point serving Eastern Oneida and Vilas counties. Many patients from these counties currently travel 70 or more miles to access dental care and the new access point will provide oral, behavioral, medical, pharmacy, and enabling services to this population. The structure of this new site will differ from that of existing sites because Ministry will be providing medical and behavioral health services while FHC will provide the dental services.

Despite the new initiatives underway, concerns exist among Marshfield Clinic and FHC staff regarding potential Medicaid changes that its new governor, Scott Walker, has proposed and that will be implemented by the new health department director, Dennis Smith. Although the details of planned Medicaid cuts were not known during our visit, they are concerned that Medicaid cuts could impact their new access initiatives. For example, if the state eliminates adult Medicaid dental benefits, this will eliminate much of the financing for their dental clinics.

²³ Press release. "Marshfield Clinic Chooses to Participate in CMS Project." Marshfield Clinic. Aug. 8, 2011.

Other state Medicaid cuts could also reduce funding for FHC, which could eventually make it harder for the overall Marshfield Clinic to serve low-income and uninsured patients in the same way it does today.

Case Study: San Francisco, California

Background

The City and County of San Francisco is a major urban area in northern California with more than 800,000 residents. It has a highly diverse population. Census data indicate that 45 percent of the population is white non-Hispanic, 31 percent is Asian, 14 percent is Hispanic, and 7 percent is African American; about 37 percent of the residents are foreign-born. As of 2009, about 11 percent of the population had income below the poverty level, somewhat below the national average of 14 percent.²⁴ San Francisco also has a relatively large homeless population and high prevalence of HIV.

San Francisco has a well-developed safety net health care system that has been reinforced both by developments in Medicaid (or Medi-Cal as it is known in California) and by a unique city-based health coverage plan, known as Healthy San Francisco. Key components of San Francisco's safety net system include San Francisco General Hospital and Trauma Center (SFGH, which has primary care and specialty clinics, as well as inpatient care, and is part of the San Francisco Department of Public Health (DPH)), DPH Community Oriented Primary Care (COPC) clinics, and the San Francisco Community Clinic Consortium, which is a partnership of ten non-profit community clinics, including federally-qualified health centers (FQHCs). The Consortium and COPC clinics are the primary care base for the safety net, while SFGH provides primary, specialty, and inpatient care. While many other providers in San Francisco serve Medicaid patients, the systems listed above are the core providers of medical services for the uninsured and for many of those on Medicaid. In addition, these safety net providers are positioned to help provide other support to patients, including assistance in enrollment for Medicaid, Children's Health Insurance Program (CHIP), or Healthy San Francisco. Given the multicultural makeup of San Francisco, most safety net providers can provide multilingual language assistance.

Another key contributor to the system is the city/county-sponsored managed care plan, the San Francisco Health Plan. Begun as a publicly-sponsored local Medicaid managed care plan, the health plan has grown to serve other programs, including CHIP (known as Healthy Families in California) and Healthy San Francisco. California's Medicaid program has mandatory managed care for most of its non-elderly, non-disabled Medicaid participants (and is now planning to expand managed care to the disabled as well). A distinctive element of California's Medicaid managed care system is the "two-plan model" in which each county has a private managed care plan and a public managed care plan. In San Francisco, the San Francisco Health Plan is the public plan and Anthem (Blue Cross Blue Shield) is the private plan, and the San Francisco health plan is the dominant one. For Medicaid, the San Francisco Health Plan's network includes over 2,000 public and private providers and six hospitals, but the safety net clinics and hospital are core providers. The health plan has helped develop and fund a variety of coordination and quality improvement projects, including eReferral – described below – and a

²⁴ US Census Bureau, Selected Characteristics in the United States: 2005-2009. American Community Survey. See: <http://factfinder.census.gov>.

number of chronic care management initiatives. The San Francisco Health Plan has been a “catalyst for change” for coordination among safety net providers.²⁵

Current Initiatives

Healthy San Francisco: Coverage for the Uninsured

San Francisco has initiated a unique, locally-funded health coverage system for low-income uninsured resident adults, called Healthy San Francisco. Begun in 2007, the program is a “health coverage” network program, not a health insurance program.²⁶ Rather than providing insurance per se, it provides access to a selected network of health providers for participants. Participants principally receive primary care from DPH clinics or Consortium health centers and specialty and inpatient care from San Francisco General Hospital, although there are some exceptions.²⁷ The program was designed to emphasize coordinated care: every uninsured member selects or is assigned a clinic or health center as primary care home, as opposed to the jumble of care arrangements that are common for those without insurance. Uninsured adult city residents with incomes below 500 percent of the federal poverty level are eligible for medical and mental health benefits. When people apply for Healthy San Francisco, they can also be screened for eligibility in Medi-Cal or Healthy Families.

The program is partly supported by an employer spending requirement, based on a local ordinance passed in 2006: In 2010, employers with more than 20 employees had to spend at least \$1.96 per work-hour on health benefits. They could use these amounts to pay for health insurance premiums, create health savings accounts, pay health care claims or contribute toward employee participation in Healthy San Francisco. Uninsured people may join by paying an income-scaled quarterly fee that ranges from free for those with incomes below the poverty level to \$450 for those with incomes from 401 to 500 percent of poverty (these fees are discounted if the employer contributes to Healthy San Francisco). In addition, there are copayments, such as \$10 per visit, for those with incomes over the poverty line. (Note: Healthy San Francisco does not cover children, although Healthy Families covers children with incomes up to 250 percent of poverty.)

Care Coordination by the Bay

In certain respects, San Francisco’s safety net is typical of the systems found in many urban areas: there are a number of safety net primary care clinics, including public and non-profit

²⁵ Bindman A, Chen Am Fraser JS, Yee IH Jr, Ofman D. Healthcare reform with a safety net: lessons from San Francisco. *American Journal of Managed Care*. 2009;15(10): 747-50.

²⁶ Katz M, Brigham T. Transforming a traditional safety net into a coordinated care system: lessons from Healthy San Francisco. *Health Affairs*. 2011;30(2): 237-45.

²⁷ Primary care services are also available through Kaiser Permanente, the Chinese Community Health Care Association and a couple of private clinics. The University of California at San Francisco Hospital also provides certain diagnostic services. All San Francisco General Hospital physicians are affiliated with UCSF. Some private hospitals work with some of the Healthy San Francisco clinics, but do not receive funding from the program.

community clinics, which provide referrals to a major public hospital for specialty and inpatient care. Services are supported through a diverse combination of state and federal funding as well as local funding. Even before the advent of Healthy San Francisco, safety net providers had strong ongoing relationships and there were efforts to coordinate care across the system. More than most areas, however, there is relatively broad public support for health services for low-income populations, including the uninsured. Like any community with diverse health care providers, the system still has weaknesses: care is not optimally coordinated and there can still be delays getting primary care or substantial delays getting specialty care.

The San Francisco community has sought to address these issues on a comprehensive and coordinated basis, and the government provides funding to help support the safety net system which includes a public hospital, outpatient clinics, and community health centers. Perhaps the major achievement is the extent to which San Francisco has tried to develop a system in which safety net patients, whether covered by Medicaid/CHIP, enrolled in Healthy San Francisco, or completely uninsured, have a medical home where they can receive primary care and through which they are also able to access specialty care and diagnostic services.

Because of the contractual and financial arrangements for Medicaid and Healthy San Francisco, there is a clear recognition and assignment of roles as primary care medical homes and sources of specialty and hospital care which helps cement the relationships of community clinics with San Francisco General Hospital and develops a basis for improving the coordination of care, even for those who are uninsured. While the system helps ensure that there are specialists who will take referrals for uninsured or Medicaid patients from primary care, because there are a limited number of specialists at the public hospital, backlogs for specialty appointments can still occur.

Leveraging Health Information Technology

To ease the referral process and expedite the backlog, San Francisco General Hospital developed an electronic web-based specialty referral system, eReferral, to promote better communication and more effective referrals. Referring providers may use the system to request a referral to a relevant specialty (e.g., cardiology, gastroenterology, etc.) or diagnostic service (e.g. sleep study, ultrasound, etc). There is an assigned specialist clinician for each clinic or service who reviews the referral request. The specialist reviewer can triage patients for an expedited visit or have the patient scheduled for the next routinely available appointment. Alternately, the reviewer may engage with the referring provider through the program to clarify the consultative question, request additional information, suggest further testing, or provide guidance that allows the referring provider to care for the patient within the medical home. Evaluation of the system has shown improved communication between primary care providers and specialists as well as a reduction in the backlog of specialty appointments and unnecessary appointments.²⁸ A goal of the system is not only to increase the efficient use of scarce specialty care resources, but also to enhance services at the primary care level.

²⁸ Chen A, Yee H. Improving Primary care-specialty care communications. Archives of Internal Medicine 2011;171(1): 65-67.

After an initial development and pilot phase eReferral was disseminated (with support from the San Francisco Health Plan) throughout San Francisco's safety net system to manage referrals to San Francisco General. Unlike other electronic specialty referral systems, such as one used by safety net providers in Chicago, eReferral is not algorithm-based but relies on having specialists who are willing to devote a certain number of hours each week to review and respond to referral requests. It is difficult to support such a system under a fee-for-service system, since there is no explicit funding to support the referral system and it reduces the volume of specialty care, but it can save money for an integrated delivery system.

While eReferral is a useful tool to help improve coordination of primary and specialty care, it is not a panacea. It improves the flow of information from primary to specialty care, but does not assure better information flow back to primary care, such as letting primary care providers know if their patients completed their specialty visits. Primary care practitioners in the city and consortium clinics have access to San Francisco General's electronic medical record system, so they can review the specialists' notes. However, use of this system is more difficult for community health center clinicians, since they use different record systems and there are occasional connectivity problems. It is worth noting that electronic health record systems in many of these facilities are in transition since they were typically developed prior to the release of "meaningful use" criteria, so current systems will need to be upgraded to meet new requirements for federal subsidies.

The safety net providers all have access to a shared One-e-App software application for enrolling eligible San Francisco patients into the city's Healthy San Francisco program and determining patients' eligibility for health coverage, including Medi-Cal and Healthy Families. There is also a shared chronic care patient registry which consolidates diagnostic lab test results and supports targeted chronic disease interventions and access to the DPH patient master index, allowing consortium clinics to assign a DPH medical record number to previously unregistered patients.

Quality Improvement

The financial and administrative systems of DPH, the San Francisco Health Plan and the Community Clinics Consortium provide leverage and resources for system-wide efforts to improve the quality and coordination in the safety net. They have developed an array of initiatives, including efforts to measure and improve quality of care, reduce waiting times for care and increase meaningful use of electronic health records. For example, they have developed chronic care teams which focus on major chronic diseases like diabetes, asthma and chronic obstructive pulmonary disease; teams of specialists and nurse practitioners work in primary care clinics to help improve the quality of chronic care at the primary care level. The medical directors of the San Francisco Health Plan, Consortium, and DPH COPC clinics have collaborated to develop a 9 month training program for primary care clinic management teams across the safety net called Quality Culture Series, designed to increase the capacity of clinics to lead and manage change in the pursuit of quality care.

DPH is seeking to improve the coordination of behavioral and physical health care, including arranging for mental health providers to be located in each DPH clinic; some of the community consortium clinics are also doing so. Indeed, behavioral care is a major component of care provided in the safety net. DPH officials estimated that about one-sixth of Healthy San Francisco expenditures are for behavioral health services.²⁹

The San Francisco Health Plan has initiated a quality improvement initiative, Strength in Numbers, which includes development of quality improvement targets and performance-based incentives for primary care. It includes standards for diabetes and blood pressure management, colorectal cancer screening, documentation of smoking status, appointment no-show rates and scheduling, as well as a number of optional measures. The Community Clinic Consortium also has a continuous quality improvement initiative.

As a Medicaid managed care plan, the San Francisco Health Plan must be reviewed for quality, including HEDIS scores. San Francisco Health Plan won the California Department of Managed Health Care's Gold Award for HEDIS rates for three years running: 2008, 2009, and 2010. Including test measures, SFHP achieved the national Medicaid 90th percentile or better for 17 of 22 measures.³⁰

Future Challenges

Like many other states, California has a major budget deficit and budget cutbacks in Medicaid, CHIP or other state or local programs are possible and could create difficulties for these systems. Our case study trip occurred in February 2011, before the Medicare proposed regulations for Accountable Care Organizations had been issued. At the time of our interview, there was some interest in the formation of ACOs, but plans were not clear.

²⁹ Katz and Brigham, *op cit*.

³⁰ Gatewood H. San Francisco health plan: our journey to improve quality and the health of our population. San Francisco Health Plan; 2011 Mar [cited 2011 Aug 31]. Available from: http://www.sfhp.org/files/PDF/SFHP_Improvement_Journey_White_Paper.pdf.

Case Study: St. Louis, Missouri

Background

St. Louis is the second largest city in Missouri, with an estimated population of about 355,000 residents in 2009.³¹ Nearly one-quarter (24.4 percent) of the city's residents are poor; median family income, at \$41,349, is approximately one-third below the national average.³² Half (49.5 percent) of the city's residents are Black or African American,³³ 2.9 percent are Hispanic or Latino and 2.4 percent are Asian.

The St. Louis health care safety net consists of many different organizations that provide primary, specialty, inpatient, dental and mental health services to uninsured and underserved populations in both St. Louis City and St. Louis County.³⁴ About one-quarter of the city/county's 1.3 million residents are estimated to be uninsured or covered by Medicaid, thereby comprising the population that is likely to seek care from these safety net providers.

In 2009, more than 630,000 primary care encounters took place at 33 separate sites of care.³⁵ Four Federally Qualified Health Centers (each operating at multiple sites) provide the lion's share of primary care for uninsured and Medicaid-covered patients; these are Grace Hill, the Betty Jean Kerr People's Health Center, Myrtle Hilliard Davis, and Family Care. Additional urgent care services are delivered by St. Louis ConnectCare, an organization formed following the closure of Regional Medical Center, using Regional's facilities and operating on the same site where people had come for years to receive safety net services. St. Louis County health centers also provide significant primary care services for safety net patients. More limited services are available for safety net patients through hospital based primary care clinics, free-standing clinics and community primary care physicians.

ConnectCare also provides specialty care for uninsured patients in the St. Louis area. Uninsured patients are referred by primary care providers to ConnectCare, which provides specialty care on site and through vouchers for specialist or diagnostic/therapeutic services at hospitals or other community providers. In 2009, ConnectCare provided uninsured patients approximately 13,000 encounters with specialists. Washington University's adult medicine clinics provide a similar number of specialist services to uninsured patients; more limited numbers of specialty visits are offered by local hospitals including St. Louis University (SLU)

³¹ US Census Bureau, 2005-2009 American Community Survey. St. Louis, Missouri. Available at: http://factfinder.census.gov/home/saff/main.html?_lang=en.

³² The US median family income in 2009 inflation-adjusted dollars is \$62,363. See #1 citation.

³³ Refers to individuals who report race alone or in combination with one or more other races.

³⁴ St. Louis became an independent city in 1876 and is not part of any separate county structure. In terms of governance, St. Louis operates as a city and a county. St. Louis County is a separate governmental entity surrounding St. Louis City.

³⁵ St. Louis Regional Health Commission. *Progress toward Building a Healthier St. Louis: 2010 Access to Care Report*. Available at: <http://www.stlrhc.org/LinkClick.aspx?fileticket=Qi1NUJukLp8%3d&tabid=38>

Care, St. John's and BJC Hospitals.³⁶ In 2009, Medicaid and uninsured patients had more than 200,000 specialty visits across these providers.

A Troubled Past

The health care safety net in St. Louis has a precarious history.³⁷ St. Louis was once home to two public hospitals: Homer G. Phillips Hospital, which trained African American physicians and nurses and provided health services primarily to the city's African American patient populations; and St. Louis City Hospital, a site of care for many low-income white patients. This delicate equilibrium of "separate but equal"³⁸ health care began to collapse in the late 1970s, first with the closure of Homer G. Phillips Hospital in 1979 and then with St. Louis City Hospital shutting its doors in 1985. The response to the health care crisis created by these closures, by this time affecting both black and white residents, was the creation of St. Louis Regional Medical Center, a not-for-profit hospital with an explicit safety net mission. Despite some restructuring and a 10-year contract from the city and county health departments, Regional did not present a viable financial model for delivering care to uninsured and underinsured residents. In 1997, Regional closed its operations as well.

Remarkably, despite Regional's closure, some components of the St. Louis health care safety net have flourished over the past decade. In large measure, this is due to a set of strategic alliances that operate with a commitment to move the safety net beyond a contentious, fragmented history toward a more coordinated, higher-quality, better resourced future.

Current Initiatives

Repairing a Fragmented Safety Net

The closure of Regional Medical Center appears to have served as the catalyst for a spirit of collaboration and coordination in the St. Louis health care market. In 2001, the St. Louis Regional Health Commission was formed to ensure the financial stability of the safety net, develop an integrated health system for uninsured and vulnerable patients in the community, and implement a business plan to restructure the St. Louis safety net.³⁹ Working under the direction of a charismatic CEO, the Regional Health Commission (RHC) managed to engage the participation of key stakeholders across the safety net and the broader health care market.

³⁶ BJC Healthcare is a large health system that includes 13 hospitals in and around the St. Louis area. It includes teaching hospitals (Barnes Jewish and St. Louis Children's Hospital) as well as community hospitals and other delivery sites.

³⁷ Jordan, S. "RHC addresses diverse healthcare needs of St. Louis area". St. Louis American. July 22-28, 2010. Available at: http://www.zwire.com/site/dav.cfm?brd=3157&dept_id=694223&pag=1027&ssid=18561&vw=article.

³⁸ Personal communications with interview subjects, March 2011.

³⁹ St. Louis Regional Health Commission. *Building a Healthier St. Louis: 2003 Access to Care Report*. Available at: <http://www.stlrhc.org/InitialReport.aspx>

A 2002 amendment to Missouri's Medicaid 1115 waiver created a mechanism for the RHC to hold onto about \$25 million a year in much needed funding that had previously flowed to St. Louis Regional Medical Center.⁴⁰ The money is distributed to safety net providers, including FQHCs and ConnectCare, an outgrowth of Regional Medical Center that provides urgent care and specialty services to underinsured and underserved residents of the community. Other sources (including St. Louis City and direct service payments) provide additional safety net support. The RHC issues regular reports on trends in use and availability of safety net services and support efforts to expand access, streamline Medicaid enrollment, and create uniform policies and processes related to out-of-pocket payments at local FQHCs. The RHC reports a steady rise in the number of primary care and specialty visits provided over the past decade, while reducing wait times for specialty visits for the uninsured by 85 percent.⁴¹

In its October 2003 report, *Recommendations for Improving the Delivery of Safety Net Primary and Specialty Care Services*, the RHC recommended that current safety net providers form a permanent regional network to coordinate and integrate care to the medically underserved. This was followed by a federal grant from the Health Resources and Services Administration (HRSA) supporting the creation of such a network. In 2003, administrators from the area's largest outpatient safety net providers formed the St. Louis Integrated Health Network (IHN). The IHN serves as a trusted broker for safety net ambulatory care providers, organizing its work around projects aimed at improved care coordination and service integration and sharing of clinical best practices across the community.⁴² Much of the work around care coordination is planned and implemented through the IHN's Primary Care Home Initiative, which seeks to link Medicaid and uninsured patients with a primary care home, reduce non-emergent ED use, and enhance coordination, quality and efficiency of care through the secure electronic exchange of patient health information. Two such programs, funded through a combination of CMS waiver dollars, a targeted CMS grant and in-kind safety net provider support, are especially noteworthy.

The Community Referral Coordinator Program (CRC) is a joint undertaking between community health centers and hospitals, with the IHN serving as the "boots on the ground" to facilitate linkages between emergency department patients and primary care homes. IHN hired, trained and placed Community Referral Coordinators in hospital emergency departments to 1) flag patients without a usual source of care; 2) talk with patients at the bedside in the ED to determine whether the patient has an interest in a follow up appointment at a conveniently located community health center and schedule an appointment for the patient. The CRC provides brochure materials and information about the importance of effective primary care to patients who demonstrate any interest in the service. If patients have prior relationships with community health centers that they wish to continue, the CRC will follow up with the specific site. If the patient is in need of establishing a primary care home, the CRC will work with the patient to select one and schedule an appointment. The CRC follows up with the patient to explain the importance of the appointment, provides the physician's name and location of the health center

⁴⁰ Safety net hospitals in the community agreed to forgo claim to these dollars, which come from the Medicaid Disproportionate Share Hospital Payment program to support hospital-based care for Medicaid and low-income patients.

⁴¹ Saint Louis Regional Health Commission. *Progress toward a Healthier St. Louis*. Report to the Community 2002-2007. Page 3.

⁴² Saint Louis Regional Health Commission. *Progress toward a Healthier St. Louis*. Report to the Community 2002-2007. Page 10.

(plus directions if requested), and answers any other questions the patient may have. The CRC also sends an appointment reminder postcard or provides a reminder phone call 24 to 48 hours prior to the appointment. The IHN follows up with community health centers to collect data including show rates and reports out to the community and additional stakeholders for feedback.

The program works best when the hospital ED has an electronic medical record that provides real-time information about potential CRC patients. The EMR in the ED at Barnes Jewish Hospital, for example, includes an icon next to the patient's name indicating that the patient does not have a primary care home. Referral coordinators can view current patients at terminals in the ED and check to see which patients to offer primary care follow up. If a patient is interested in a primary care appointment, the referral coordinator immediately calls the community health center to schedule an appointment. Community Health Centers have made special arrangements, including a direct scheduling line, to support easy and quick access to scheduling requests coming from CRCs. This allows the patient to walk out of the emergency room with an appointment in hand which facilitates a greater likelihood of connection with the primary care home.

The CRC program has seen some immediate successes. Since June 2007, over 40,000 patient encounters have taken place as part of the CRC program.⁴³ Initially about one-quarter of these encounters resulted in a scheduled appointment; however, currently 56 percent of encounters result in a scheduled appointment. Patient "show" rates at follow-up primary care appointments have increased after implementation of the program, with some community health centers seeing more than 50 percent of patients referred from the ED keeping their appointments. This compares favorably to anecdotal reports of rates in the 20 percent range prior to the CRC program. The program has also enhanced communication across hospitals and community health centers, allowing for greater collaboration in future activities. CRCs are currently stationed in seven hospitals. There are also plans to integrate the CRC model with inpatient care in an effort to reduce low acuity readmission rates. One local hospital has begun funding a CRC for inpatient care coordination.

A major planned initiative of the St. Louis Integrated Health Network (IHN) has been the *Network Master Patient Index (NMPI)*, a health information exchange for major safety net providers in the St. Louis area. The NMPI includes patient information from five FQHC and seven hospital emergency departments, as well as ConnectCare and the St. Louis County Department of Health's health centers. Use of the NMPI is designed to reduce non-emergent ED use, cut waste (for example, redundant lab tests), enhance real-time communication across providers, and most importantly improve care for patients. The health information exchange is specifically for care coordination of all patients including the uninsured and Medicaid populations. Plans for the NMPI have been placed on hold, given new activities related to the development of a state health information exchange, spurred by the federal American Recovery and Reinvestment Act efforts to spur health information technology, to see how such efforts can be integrated with broader plans in the state.

⁴³ St. Louis Integrated Health Network. Community Referral Coordinator Program Update, October 1st – December 31st 2010.

The first generation of NMPI data will include ED summaries and patient demographics; over time, information on allergies, medications, laboratory values and other diagnostic and treatment information will be added to the patient record. Participating providers will be able to see information exclusively about their own patients. Information will be placed in separate “vaults,” with patient information made available at the provider level by a patient matching function to assemble all relevant patient information. When a patient presents for care at one of the FQHCs, for example, the health professional caring for that patient will be able to pull up the patient record and see where the patient has received treatment prior to the encounter. Notes on ED visits, inpatient stays, or care from other clinics within the safety net would be available for review. NMPI also includes a secure messaging function for physicians and other health professionals, signaling that laboratory results are ready, or that the patient has had an ED visit.

The strength of the IHN is in its ability to foster collaborative problem solving through a system of cross organizational work groups that provide oversight to and recommendations for improvement at both an organizational and systemic level. The IHN has a Reform Ready Steering Committee that consists of all health center Chief Operating Officers that is focusing on developing uniform best practices across health centers and sharing resources to best prepare for the implementation of healthcare reform in 2014. The NMPI is overseen by a steering committee and multiple smaller planning groups to ensure that implementation meet all legal, ethical, and patient concerns and comply with local, state, and federal guidelines. The Community Referral Coordination Task Force consists of both health center and hospital leadership to provide oversight to the CRC program and implement recommendations to streamline access to primary care and improve the transition of care from hospitals to health centers.

Integration of Behavioral Health and Primary Care

The St. Louis Regional Health Commission is also working to address the severe fragmentation of behavioral health services in the area. Over the past several years, a series of working groups and task forces have identified a vision and set of recommendations to create a more responsive, coordinated and accessible adult behavioral health care system in the St. Louis region.⁴⁴ The success of the safety net work and the Integrated Health Network served as a model to focus attention on issues related to behavioral health. As part of its response, the Regional Health Commission created the Behavioral Health Network as a separate entity to elevate the issue of mental health and substance abuse, encourage “ownership” of the process on the part of behavioral health providers, and allow the complex issues associated with mental health and substance abuse treatment to percolate and develop with the behavioral health community.

In a step toward integration, in 2007, the Crider Health Center – a community mental health center – received FQHC status and transformed itself from a community mental health provider to a full-service community health center, offering a comprehensive set of primary,

⁴⁴ St. Louis Regional Health Commission. *Pathways to Progress: Transforming the Behavioral Health System: 2006-2010*.

dental, mental health and other services to residents in the western part of St. Louis. The success of the Crider integration of mental health and primary care services spurred a similar merger in the eastern region of the St. Louis area. In 2010, the Betty Jean Kerr People's Health Center merged with a Hopewell Center, a major mental health safety net provider in the community. Since these mergers, other community health centers have pursued efforts to co-locate primary care and mental health services and facilitate ease of access to a full range of behavioral and physical health care.

Future Challenges

In its first decade, the St. Louis Regional Health Commission has preserved more than \$200 million in safety net funding through extensions of the Medicaid 1115 waiver. However, extending the waiver for an additional time period seemed uncertain as the latest waiver period was nearing an end without a clear strategy toward a sustainable financial model moving forward.

In July 2010, the St. Louis Regional Health Commission received an extension of the waiver, called the Gateway to Better Health Demonstration Project. The Gateway project requires that the Regional Health Commission transition from a direct payment model to a coverage model. Plans for movement toward a coverage model were due to CMS in July 2011 with implementation scheduled for one year later. These steps are meant to create a bridge to maintain the capacity and quality of the health care safety net until a sustainable financial model becomes feasible with the full implementation of health reform. While specifics about the interim coverage model are yet to be decided, the Regional Health Commission will retain approximately \$25 million annually through 2013.