Case Studies of 6 Safety Net Organizations That Integrate Oral and Mental/Behavioral Health With Primary Care Services

OHWRC
Oral Health Workforce Research Center

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February 2019

PREFACE

The Oral Health Workforce Research Center (OHWRC) at the Center for Health Workforce Studies (CHWS) at the University at Albany's School of Public Health completed a study to describe efforts in federally qualified health centers in the United States to integrate oral health and mental/behavioral health service delivery with primary care. The project used a qualitative methodology and included case studies of 6 organizations across the US that were successfully integrating health services for patients.

The mission of OHWRC is to provide accurate and policy-relevant research on the impact of the oral health workforce on oral health outcomes. The research conducted by OHWRC informs strategies designed to increase access to oral health services for vulnerable populations. OHWRC is based at CHWS at the School of Public Health, University at Albany, State University of New York (SUNY), and is the only research center uniquely focused on the oral health workforce.

The views expressed in this report are those of OHWRC and do not necessarily represent positions or policies of the School of Public Health, University at Albany, or SUNY.

February 2019

ACKNOWLEDGMENTS

Suggested Citation:

Langelier M, Surdu S, Goodwin N. *Case Studies of 6 Safety Net Organizations That Integrate Oral and Mental/Behavioral Health With Primary Care Services.* Rensselaer, NY: Center for Health Workforce Studies, School of Public Health, SUNY Albany; February 2019.

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BACKGROUND

Description and Policy Relevance

At a time when access to high-quality, low-cost health services is a concern among policymakers, clinicians, and patients, many studies have focused on identifying barriers and facilitators to availability and affordability of services for currently underserved populations or those at risk for diminished access. One strategy recognized as a probable facilitator to access is integrating service delivery for patients in a comprehensive health home.

The systemic linkages between oral, physical, and mental health are also receiving special attention in the peer-reviewed literature discussing the importance of and necessity for service integration. Several recent studies catalog the interplay of mental and behavioral health disorders with oral and physical health status. Oral health affects the social and psychological spheres, which in turn may influence mental health.

Recent research confirms a link between poor oral health and poor mental health, partly due to lifestyle choices among those with severe mental illness.[1] People with mental health challenges including cognitive decline and dementias find day-to-day oral self-care more difficult. Those with severe depression or schizophrenia may find basic oral care nearly impossible. Furthermore, many medications used to treat mental health problems cause xerostomia (dry mouth), which tends to exacerbate oral conditions.

A systematic review and meta-analysis found that those with severe mental illness were nearly 3 times more likely to have lost all their teeth and were more likely to have a greater number of decayed or missing teeth relative to the general population.[2] Another study found a negative relationship between the number of teeth lost or removed and cognitive functioning.[3]

Many of those with persistent mental illness or substance use disorders are served through safety net provider systems, especially federally qualified health centers (FQHCs). Mental illness and substance use disorders may result in difficulty maintaining employment and losing health insurance coverage. Consequently, some with these diagnoses become uninsured or insured through Medicaid, suggesting a greater likelihood of receiving services in the health care safety net than some other population groups.

Many FQHCs, rural health centers, and community health centers provide co-located primary care, oral health, mental and behavioral health, and pharmacy services for patients with chronic illnesses and comorbid mental illnesses or substance use disorders. While co-location does not equate to integration, it is an enabler to interdisciplinary coordinated care and to referrals for service across disciplines.[4]

This study sought to identify critical components for integration of multiple health services within FQHCs in order to help other providers in their efforts at integration. This project is important from a policy perspective. A comprehensive/inclusive health home with access to behavioral, oral, and primary health care services is likely predictive of better health management and improved health outcomes over the long term, especially for those with mental illness or other chronic diseases. Identifying critical components for integration of services is helpful to other provider organizations in their efforts to effect referrals and warm handoffs among a variety of oral health, mental health, and primary care providers.

Hypotheses

The main hypothesis for this study was that integration of primary care, oral health, and mental behavioral health services in a comprehensive health home promotes positive health outcomes for populations with medical comorbidities, mental health conditions, addiction disorders, and poor oral health status. A secondary hypothesis is that integration of services is enabled in health care settings where services are co-located and in clinics with organizational missions that encourage integration.

This study was qualitative, employing a selective case study methodology to conduct interviews with executive leadership, administrative management, and clinical professionals in FQHCs across the US. The goal of the project was to understand the structures and processes that enable service integration for patients. The study sought to identify:

- The systemic components of integration and referral in already-integrated organizations

- The organizational strategies used by safety net providers to successfully integrate oral and behavioral health services with primary care

- The impact of co-location of services and clinical providers from different disciplines on integration of oral and behavioral health services with primary care

- The importance of other factors, including electronic health record (EHR) systems and efforts at care coordination, in the effectiveness of integration

METHODS AND STUDY DESIGN

In the spring and early summer of 2018, project staff from OHWRC conducted case studies of 6 FQHCs providing integrated primary care, dental/oral health, and mental/behavioral health services across the US. The organizations that participated in the study were:

- *Albuquerque Health Care for the Homeless*, headquartered in Albuquerque, New Mexico

- *HELP/Project Samaritan Services (PSI)/Brightpoint Health,* headquartered in New York, New York

- *Colorado Coalition for the Homeless,* headquartered in Denver, Colorado

- *Compass Health Network,* headquartered in Clinton, Missouri

- *Health Partners of Western Ohio,* headquartered in Lima, Ohio

- *Whitman-Walker Health,* headquartered in Washington, DC

Participant organizations were selected systematically using the 2016 Uniform Data System (UDS) maintained by the US Health Resources and Services Administration (HRSA) to describe grantee organizations.[5] OHWRC staff analyzed the UDS data to determine the proportion of the patient population in each FQHC in the US that received primary medicine, dental, or behavioral health services. Staff queried the database to find FQHCs that were providing all services at a minimum threshold of 20% of FQHC patients. The rationale for the selection criteria was that organizations providing appreciable levels of all 3 services to patients would likely be moving towards service integration. The query of more than 1400 FQHCs resulted in a list of approximately 30 FQHCs in the US who met minimum criteria in each service area. FQHCs from a range of states were selected. All participating organizations exceeded the minimum thresholds for patient care.

OHWRC solicited the participation of these organizations in the case studies through email invitations to executive leadership and clinical directors at each of the selected FQHCs. Once consent was received for inclusion in the study group, FQHC leadership selected a convenient date for the site visit. All case studies were conducted in person at one of the health center's sites. At least 2 staff from OHWRC traveled to each location. Interviews were conducted with multiple participants, including executive and administrative staff, clinical professionals, and behavioral health providers, in individual or group sessions in each health center.

A formal protocol of questions was developed after a review of peer-reviewed literature describing the importance of service integration, outcomes from efforts at service integration, and critical elements of process and program characteristics that facilitated integration.

The interviews were, however, mainly unstructured to permit case study participants to provide individual insights about the process and progress of integration in the health center. The protocol was used to ensure that all substantive areas of interest to study staff were addressed. This study was reviewed and overseen by the Institutional Review Board of the New York State Department of Health.

FINDINGS

The case studies were conducted throughout the US in FQHCs that differed in substantial ways from many of their organizational counterparts. The FQHCs that participated in this project were remarkable in that, collectively, they served marginalized populations in greater quantity and with more specific focus than many other health centers with more heterogeneous patient populations.

One likely reason for this difference was their various geneses. Most of these FQHCs were founded to serve the medical or mental/behavioral health and/or social needs of a specific target population, adopting full primary care provision later in their growth processes than typical FQHCs, which often begin as primary health care providers and expand to provide other health services. Several of the FQHCs in the case studies developed from community-based behavioral health provider organizations; coalitions/advocacy groups for the homeless or lesbian, gay, bisexual, transgender, and queer (LGBTQ) communities; and/or organizations that provided support services, including some medical, for the HIV diagnosed.

For this and other reasons, including the often-complex medical and social needs of their patients, these organizations have focused on integration of health services through coordinated care since their beginnings and in successive years as FQHCs. This was evident in the structural characteristics and features of these health centers, in the formal and informal care processes that have developed, and in the obvious commitment of organizational leadership, clinical professionals, and affiliated staff to the mission of these groups. The many commonalities among the case study organizations related to services offered, complexity of patient caseload, and training of staff in specialized approaches to care delivery are summarized in the discussion of common themes in the technical report for this study.

Critical components of successful integration in these organizations included the following:

- Inclusion of service integration as a primary organizational goal

- Leadership and provider engagement with the goal of integration

- Employees who identify with the organizational mission

- Opportunities for training in specialized approaches to care delivery to gain an understanding of the characteristics of the patient population, of mental illness, etc.

- Formal communication processes that enable referral and information sharing

- An environment that encourages innovation and frequent, informal communication

- Organizational engagement with a community of internal and external providers to improve collective impact on patients

Models of Integrated Care

Although the literature review for this project did not yield any published framework describing the characteristics of health care organizations that deliver integrated oral health, behavioral/mental health, and primary care services, it did yield 2 frameworks that are useful descriptors in the context of this work.

The Valentijn et al. Framework

The first is a framework developed by Valentijn and colleagues based on the integrative functions of primary care.[6] The authors discuss the centrality of primary care to implementing and achieving integrated service delivery. Primary care is identified as the usual first point of contact for many patients and the pathway to continuous, comprehensive, and coordinated care. The research by Valentijn et al. included an extensive literature search on the dimensions of integration. This review and analysis subsequently resulted in the formulation of a conceptual framework for integration, joining the functions of primary care with the aspects of integrated care. The framework assumes that person-centered and population-based health are principal drivers of integration.[6]

The structural framework is organized at 3 levels[6]:

- The **Micro** level, at which clinical integration occurs

    - *Clinical integration* **(C):** The extent to which care services are coordinated

- The **Meso** level, which includes professional and organizational integration

    - *Professional integration* **(P):** The extent to which professionals coordinate services across various disciplines

    - *Organizational integration* **(O):** The extent to which organizations coordinate services across different organizations (in the context of primary care)

- The **Macro** level, which includes system integration

    - *System integration* **(S):** The extent to which rules and policies are aligned within a system of care that is population based and person focused

- The 3 levels are connected by functional and normative integration

  - *Functional integration* **(F):** The extent to which back-office and support functions are coordinated

  - *Normative integration* **(N):** The extent to which mission, work values, etc. are shared within a system

  - *Vertical integration* **(V):** Strategies that link different levels of specialized care services

  - *Horizontal integration* **(H):** Strategies that link providers at similar levels of care

Case study organizations exhibited many of the characteristics described in this framework in their structural aspects, their processes, and their workforce initiatives. These characteristics are enumerated by organization in a detailed table in the technical report for this study. Some examples of particular organizational characteristics that matched with the Valentijn framework include:

Structural characteristics:

- Co-location *(functional, horizontal, organizational, and vertical integration)*

- Integrated clinical service pods *(functional, horizontal, and organizational integration)*

- Open office space/not discipline specific *(functional, horizontal, organizational, and vertical integration)*

- Dental operatory located in primary care clinic *(functional, horizontal, organizational, and vertical integration)*

- Multiple clinic locations *(functional, horizontal, organizational, vertical, and system integration)*

Process characteristics:

- Clinical activities linked to integration efforts *(clinical and horizontal integration)*

- Patient history form contains questions about last dental visit and/or behavioral health *(clinical, functional, and organizational integration)*

- Fully or partially integrated electronic health record system *(functional and horizontal integration)*

- Patient registries to alert to specific medical needs *(clinical and functional integration)*

- Regular review of patient medical, dental, and social history by all clinical providers *(clinical, functional, and organizational integration)*
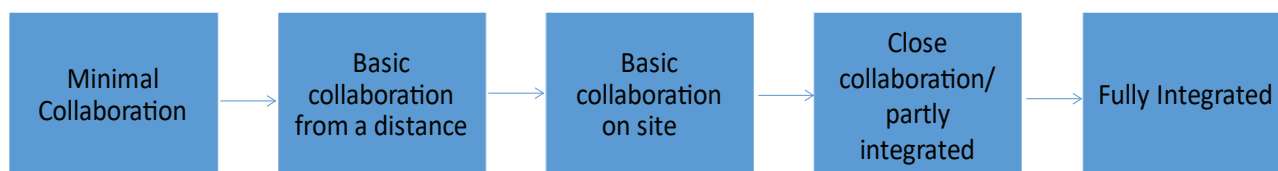
- Engagement with hospitals in post-discharge treatment planning *(clinical, system, and vertical integration)*

- Orientation training that includes training about all services at the FQHC *(normative and organizational integration)*

- Strategic scheduling *(clinical and functional integration)*

- Resources to address social determinants of health *(normative, organizational, and professional integration)*

Initiatives related to workforce:

- Leadership involvement in integration activities *(normative, organizational, and professional integration)*

- Behavioral health specialist embedded on clinical team *(clinical, horizontal, and professional integration)*

- Oral health assessment by primary care clinician *(clinical, horizontal, organizational, and professional integration)*

- Primary care providers managing medication-assisted treatment programs *(clinical, horizontal, organizational, and professional integration)*

The SAMHSA-HRSA Framework

The second framework for integrating behavioral health and primary care, designed conjointly by the US Substance Abuse and Mental Health Services Administration (SAMHSA) and HRSA, is especially useful to describe the qualitative findings from this project. In 2013, the SAMHSA-HRSA Center for Integrative Health Solutions published a hypothetical standard framework for levels of integrated health care to categorize aspects of organizations as they move along a continuum from collaboration to integration.[7] This framework expands upon a framework originally developed by Doherty, McDaniel, and Baird, which included 5 levels or stages of primary care–behavioral health collaboration and integration.[8] The continuum of integration described by Doherty et al is as follows:

Minimal Collaboration	→	Basic collaboration from a distance	→	Basic collaboration on site	→	Close collaboration/ partly integrated	→	Fully Integrated

The SAMHSA-HRSA Center builds upon this model and enlarges upon the source document to achieve an elaborated framework. The resulting framework groups organizations into 3 progressive categories, beginning with

> (1) Coordinated care, progressing to
>
> (2) Colocated care, and culminating in
>
> (3) Integrated care.[7]

Each of the 3 "overarching" categories includes 2 subcategories, resulting in a framework that describes 6 levels of progressive integration. The 3 categories and their corresponding sublevels are defined by a characteristic element, which increases in frequency along the advancing scale. So for instance, the first category, coordinated care, contains level 1, which is described as minimal collaboration and level 2, which is basic collaboration at a distance; at these levels, communication is key. The categories and levels include:

COORDINATED KEY ELEMENT: COMMUNICATION		CO-LOCATED KEY ELEMENT: PHYSICAL PROXIMITY		INTEGRATED KEY ELEMENT: PRACTICE CHANGE	
LEVEL 1 Minimal Collaboration	LEVEL 2 Basic Collaboration at a Distance	LEVEL 3 Basic Collaboration Onsite	LEVEL 4 Close Collaboration Onsite With Some System Integration	LEVEL 5 Close Collaboration Approaching an Integrated Practice	LEVEL 6 Full Collaboration in a Transformed/ Merged Integrated Practice

The framework also describes specific characteristics of the organization at each point along the continuum. These detailed traits were used to show how the common characteristics or themes from the case studies describing steps taken by case study organizations to become integrated fit within the framework.

Common Themes

The common themes developed during these case studies are listed below along with the level and particular trait from the SAMHSA-HRSA framework describing notable organizational characteristics in the progression to full integration.[7] Since all of the organizations in these case studies provided physically proximate/co-located services and all were using an integrated service delivery paradigm, these case study organizations would each be classified as falling within either Level 5 or Level 6 of the SAMHSA-HRSA framework, in which practice change is occurring or has occurred and service delivery is transformed.

It is difficult to place an organization at an exact point on the progressive scale. As one case study informant observed, an organization—especially a large, complex one—may be at different stages in the growth process toward full integration in various areas of practice, making it difficult to classify the organization at a single level. While some in the case studies would indicate that efforts at integration are ongoing and never complete, most would agree that these organizations are integrating patient care at appreciable levels.

An elaborated discussion of these themes including descriptive comments is available in the technical report for this research.

The Common Themes from these case studies are as follows:

1) The philosophy of integrated service delivery is reflected in the physical design of these health centers, in the institutionalized patient management and administrative processes, and in the formal and informal interactions among organizational staff.

   - Traits of Integrated organizations in the SAMSHA-HRSA Framework:

     ○ Level 5: In same space within the same facility (some shared space)

     ○ Level 6: In same space within the same facility (sharing all practice space)

2) An integrated EHR is an essential formal communication tool to ensure that clinicians have access to the necessary information to provide comprehensive patient care and to communicate with other members of the care team about patient needs.

   - Traits of Integrated organizations in the SAMSHA-HRSA Framework:

     ○ Level 4: Collaborate, driven by need for consultation and coordinated plans for difficult patients

     ○ Level 6: Communicate consistently at the system, team, and individual levels

3) The "language of integration" is evolving. The primacy of informal communication between providers from various disciplines is emerging as a key feature of successful efforts at integration.

   - Traits of Integrated organizations in the SAMSHA-HRSA Framework:

     ○ Level 4: Communicate in person as needed

     ○ Level 4: Have regular face-to-face interactions about some patients

     ○ Level 4: Communicate frequently in person

4) Integration of health services requires evolving processes and programs that are responsive to individual patient needs.

- Traits of Integrated organizations in the SAMSHA-HRSA Framework:

  ○ Level 5: Actively seek system solutions together or develop work-arounds

  ○ Level 6: Have resolved most or all system issues, functioning as one integrated system

5) The characteristics of the patient population sometimes require staff training in specialized approaches to care delivery.

- Traits of Integrated organizations in the SAMSHA-HRSA Framework:

  ○ Level 5: Have an in-depth understanding of roles and culture

  ○ Level 6: Shared knowledge base of providers increases and allows each professional to respond more broadly and adequately to any issue

6) Service delivery must be team based; teams must utilize the full competencies of all members, and team members must be open to new learning.

- Traits of Integrated organizations in the SAMSHA-HRSA Framework:

  ○ Level 5: Nearly all providers engaged in an integrated model. Buy-in may not include change in practice strategy for individual providers

  ○ Level 5: Care is responsive to identified patient needs by a team of providers as needed, which feels like a one-stop shop

  ○ Level 5: High level of collaboration leads to more responsive patient care, increasing engagement, and adherence to treatment plans

  ○ Level 6: Integrated care and all components embraced by all providers and active involvement in practice change

7) Meeting the complex needs of patients in these FQHCs requires the engagement of skilled staff, including medical and dental clinicians, social service and behavioral health providers, and other support professionals.

- Traits of Integrated organizations in the SAMSHA-HRSA Framework:

  ○ Level 5: Patient needs are treated as a team for shared patients

  ○ Level 6: Collaborate, driven by shared concept of team care

  ○ Level 6: Have roles and cultures that blur or blend

8) Providers encounter various degrees of difficulty in integrating health services; difficulty increases when there are embedded structural barriers to bridge.

- Traits of Integrated organizations in the SAMSHA-HRSA Framework:

    ○ Level 6: Patients experience a seamless response to all health care needs as they present, in a unified practice

    ○ Level 5: Provider flexibility increases as system issues and barriers are resolved

9) Engagement with other community-based organizations and inpatient or specialty health care providers to meet the needs of their patients increases the collective impact of an integrated organization.

- Traits of Integrated organizations in the SAMSHA-HRSA Framework:

    ○ Level 6: Opportunity to truly treat the whole person

    ○ Level 6: All patient needs addressed as they occur

10) Public programs and funding streams have encouraged comprehensive services for particular populations, revealing the value of integrated, coordinated service delivery.

- Traits of Integrated organizations in the SAMSHA-HRSA Framework:

    ○ Level 5: Blended funding based on contracts, grants, or agreements

    ○ Level 5: Variety of ways to structure the sharing of all expenses

    ○ Level 5: Billing function combined or agreed upon process

    ○ Level 6: Integrated funding, based on multiple sources of revenue

    ○ Level 6: Resources shared and allocated across whole practice

DISCUSSION

The FQHCs that participated in these case studies are benchmarks for successful service integration. Many indicated that integration was not necessarily a conscious choice for the organization; the need for integrated care was instead made evident by their highly complex patients, many of whom present with multiple medical comorbidities complicated by unmet social, nutritional, and housing needs. Integrating service delivery was described as the only reasonable path to ensure that health center providers helped patients to improve their health status and their life outcomes.

These FQHCs exhibited structural characteristics and clinical and administrative processes indicative of integrated organizations and comprehensive health homes when measured by the objective standards of integrated organizations in two published frameworks on the subject. Each organization displayed multiple aspects of clinical, organizational, professional, functional, and normative integration as described by Valentijn et al.[6] All exhibited horizontal and vertical integration in their service menus.[6]

These FQHCs would also be placed at Level 5 (approaching integrated practice) or at Level 6 (integrated/transformed practice) of the SAMHSA-HRSA framework.[7] It is important to remember that integration requires flexible and mutable processes in multiple functional areas that meet both the consistent and changing needs of patients. Thus, one or another aspect of an organization may be working on improving integration while other areas within the same organization may be more progressed. In most organizations, there continue to be aspects of integration that are difficult to institutionalize; difficulties with integration are exacerbated in large organizations by their growing size, expanded scopes of services, and by staff turnover.

One noteworthy finding from this work was that while organizations can describe formal, concrete steps or processes to encourage service integration, some of the elements most critical to achieving it are not concrete. It would be difficult to spend time within these health centers and not recognize the importance of mission-driven teams leading the effort to integrate services. Ensuring that all staff share organizational goals, having leadership that encourages innovation, hiring clinical providers willing to learn new skills and engage in change, and building personal relationships and teams within the health center are pivotal to successful efforts at integration. These intangibles, of course, are encouraged by tangible initiatives such as rigorous hiring practices, offering frequent training and education to new and existing staff, creating formal opportunities for team building, and providing formal tools for communication among providers and across disciplines.

Although there are published guidelines to help with planning, process, and implementation and current benchmarks to gauge successes on the road to integration, there is no fixed template for integrating

every organization. Efforts to provide comprehensive integrated health services to patients must be guided iteratively by individual patient need. Tracking patients and their outcomes is essential to understanding the successes and gaps in truly integrating service delivery.

The majority of patients in these case study organizations had complex medical, oral, and behavioral health needs; however, case study informants cautioned that these patient were not "special" but were typical of the general population. The HIV population, the LGBTQ community, those with mental illnesses, and those who use and abuse substances have varying demographic and economic backgrounds and represent all sectors of society. Thus, while efforts at integration might be more exigent in these provider organizations, patients in any health care provider system would similarly benefit from integrated, coordinated care.

The literature review for this study revealed a number of limitations in studies related to integration of health care organizations, including small sample sizes and limited focus. The present study suffers from similar limitations. While the results may not be generalizable, the findings should be useful to organizations attempting to tailor care delivery to meet the comprehensive needs of their patient populations.

The technical report about this study provides further information and includes several appendices. Appendix A of the technical report includes a detailed description of each organization in the study. Appendix B includes the protocol of questions that guided the interviews. Appendix C includes a summary of the literature review.

Technical Report

BACKGROUND

Description and Policy Relevance

At a time when access to high-quality, low-cost health services is a concern among policymakers, clinicians, and patients, many studies have focused on identifying barriers and facilitators to availability and affordability of services for currently underserved populations or those at risk for diminished access. One strategy recognized as a probable facilitator to access is integrating service delivery for patients in a comprehensive health home.

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METHODS AND STUDY DESIGN

Hypothesis, Design, and Analysis

The main hypothesis for this study was that integration of primary care, oral health, and mental behavioral health services in a comprehensive health home promotes positive health outcomes for populations with medical comorbidities, mental health conditions, addiction disorders, and poor oral health status. A secondary hypothesis is that integration of services is enabled in health care settings where services are co-located and in clinics with organizational missions that encourage integration.

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Case Studies of 6 Safety Net Organizations

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Table 1. Percentage of Patients Receiving Services in 6 FQHCs in 2016 by Type of Service

Health Center	Percent of Total Patients Receiving Service in 2016 by Type of Service		
	Primary Care	Dental	Mental/ Behavioral
Albuquerque Health Care for the Homeless	70.70%	30.93%	32.81%
HELP/PSI/Brightpoint Health	69.16%	24.55%	40.02%
Colorado Coalition for the Homeless	82.63%	24.30%	29.82%
Compass Health Network	25.48%	51.70%	54.03%
Health Partners of Western Ohio	73.55%	41.02%	24.94%
Whitman-Walker Health	93.90%	23.44%	22.61%

Source: HRSA, 2016 Health Center Program Grantee Data, Uniform Data System.

OHWRC solicited the participation of these organizations in the case studies through email invitations to executive leadership and clinical directors at each of the selected FQHCs. Once consent was received for inclusion in the study group, FQHC leadership selected a convenient date for the site visit. All case studies were conducted in person at one of the health center's sites. At least 2 staff from OHWRC traveled to each location. Interviews were conducted with multiple participants, including executive and administrative staff, clinical professionals, and behavioral health providers, in individual or group sessions in each health center.

A formal protocol of questions (see Appendix B of this report) guided the interviews. The protocol of questions was developed after a review of peer-reviewed literature describing the importance of service

integration, outcomes from efforts at service integration, and critical elements of process and program characteristics that facilitated integration.

The interviews were, however, mainly unstructured to permit case study participants to provide individual insights about the process and progress of integration in the health center. The protocol was used to ensure that all substantive areas of interest to study staff were addressed. This study was reviewed and overseen by the Institutional Review Board of the New York State Department of Health.

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Critical components of successful integration in these organizations included the following:

- Inclusion of service integration as a primary organizational goal

- Leadership and provider engagement with the goal of integration

- Employees who identify with the organizational mission

- Opportunities for training in specialized approaches to care delivery to gain an understanding of the characteristics of the patient population, of mental illness, etc.

- Formal communication processes that enable referral and information sharing

- An environment that encourages innovation and frequent, informal communication

- Organizational engagement with a community of internal and external providers to improve collective impact on patients

These findings are discussed in detail in the following pages in the context of 2 different frameworks describing the characteristics of integrated health care organizations. Appendix A of this report includes a description of each organization in the study. Appendix B includes the protocol of questions that guided the interviews. Appendix C includes a summary of the literature review.

Characteristics of the Case Study Organizations

The health centers that participated in the project case studies served patients from a variety of demographic and socioeconomic backgrounds; many of the patients were also medically complex.

Table 2. Demographics of Patients in 6 FQHCs, 2018

Characteristics of the Health Centers	Albuquerque Health Care for the Homeless	HELP/PSI/Brightpoint Health	Colorado Coalition for the Homeless	Compass Health Network	Health Partners of Western Ohio	Whitman-Walker Health
Patients						
Adults	X	X	X	X	X	X
Children	X	X	X	X	X	
Economically disadvantaged	X	X	X	X	X	X
Racially/ethnically diverse	X	X	X	X	X	X
Behavioral health/mental health diagnoses	X	X	X	X	X	X
HIV positive	X	X	X	X		X
Homeless	X	X	X	X		X
Lesbian, gay, bisexual, transgender, queer (LGBTQ)	X	X		X		X
Patients with substance use disorders	X	X	X	X	X	X
Patients who have experienced trauma	X	X	X	X		X
Patients with transportation challenges	X	X	X	X	X	X
Patients with unstable food supply	X	X	X	X	X	X
Publicly insured	X	X	X	X	X	X
Uninsured	X	X	X	X	X	X

The 6 case study organizations also provided a comprehensive array of services to meet the medical, behavioral health, social, and housing needs of their patient populations. The service menus at these organizations were reflective of efforts to address many of the medical and social needs of the complex patient populations.

Table 3. Services Offered by 6 FQHCs, 2018

Characteristics of the Health Centers	Albuquerque Health Care for the Homeless	HELP/PSI/Brightpoint Health	Colorado Coalition for the Homeless	Compass Health Network	Health Partners of Western Ohio	Whitman-Walker Health
Services Offered						
Primary care	X	X	X	X	X	X
Behavioral health	X	X	X	X	X	X
Dental	X	X	X	X	X	X
Pharmacy	X	X	X	X	X	X
Medical and/or dental specialty services	X	X	X		X	X
Psychiatry services	X	X	X	X		X
Women's health services	X	X	X	X	X	X
Pediatric services		X	X	X	X	
Pain management		X				
Substance use/medication-assisted treatment (MAT) services	X	X	X	X	X	X
Specialized HIV care	X	X				X
Specialized LBGQT services/ Gender affirmation services						X
Art therapy	X					X
Other ancillary services (eg, vision)	X	X	X	X	X	X
Triage services (medical or nursing)	X	X	X	X	X	X
Walk-in/urgent care services	X	X	X	X	X	X
Mobile/portable services	X	X	X	X	X	
Telehealth services			X	X	X	
Medical respite services	X		X			
Case management services	X	X	X	X	X	X
Community outreach services	X	X	X	X	X	X
Individual/group therapy/counseling	X	X	X	X	X	X
Peer support services			X	X		X
Social and support services	X	X	X	X	X	X
Housing units/vouchers	X		X	X		
Transportation services or vouchers	X	X		X		X
Insurance enrollment or re-enrollment services	X	X	X	X	X	X
Legal services						X

Models of Integrated Care

Although the literature review for this project did not yield any published framework describing the characteristics of health care organizations that deliver integrated oral health, behavioral/mental health, and primary care services, it did yield 2 frameworks that are useful descriptors in the context of this work.

The Valentijn et al. Framework

The first is a framework developed by Valentijn and colleagues based on the integrative functions of primary care.[6] The authors discuss the centrality of primary care to implementing and achieving integrated service delivery. Primary care is identified as the usual first point of contact for many patients and the pathway to continuous, comprehensive, and coordinated care. The research by Valentijn et al. included an extensive literature search on the dimensions of integration. This review and analysis subsequently resulted in the formulation of a conceptual framework for integration, joining the functions of primary care with the aspects of integrated care. The framework assumes that person-centered and population-based health are principal drivers of integration.[6]

The structural framework is organized at 3 levels[6]:

- The **Micro** level, at which clinical integration occurs

  - *Clinical integration* **(C):** The extent to which care services are coordinated

- The **Meso** level, which includes professional and organizational integration

  - *Professional integration* **(P):** The extent to which professionals coordinate services across various disciplines

  - *Organizational integration* **(O):** The extent to which organizations coordinate services across different organizations (in the context of primary care)

- The **Macro** level, which includes system integration

  - *System integration* **(S):** The extent to which rules and policies are aligned within a system of care that is population based and person focused

- The 3 levels are connected by functional and normative integration

  - *Functional integration* **(F):** The extent to which back-office and support functions are coordinated

  - *Normative integration* **(N):** The extent to which mission, work values, etc. are shared within a system

  - *Vertical integration* **(V):** Strategies that link different levels of specialized care services

  - *Horizontal integration* **(H):** Strategies that link providers at similar levels of care

Table 4 describes the efforts of the 6 case study organizations in relation to this framework. For the purposes of this project, each FQHC in the case studies was considered to be an integrated system exhibiting some or all of the characteristics described by Valentijn et al. The letters in the last column of the table refer to the types of integration described by Valentijn et al (see above) into which each strategy or effort at the FQHCs might fall.

Table 4. *Characteristics of 6 FQHCs and Types of Integration on the Scale of Valentijn et al[6]*

Characteristics of the Health Centers	Albuquerque Health Care for the Homeless	HELP/PSI/Brightpoint Health	Colorado Coalition for the Homeless	Compass Health Network	Health Partners of Western Ohio	Whitman-Walker Health	Valentijn et al. Framework Level
Structural Characteristics							
Co-location of primary medical, behavioral health, and dental clinical services in a health center	X	X	X	X	X	X	**F,H,O,V**
Designation as a Primary Care Medical Home (PCMH)	X	X	X	X	X	X	**H,O**
Designation as a Health Home		X		X			**H,O**
Integrated clinical pods (services in same clinical area)			X	X	X		**F,H,O**
Dental operatory located in primary care clinic	X		X				**F,H,O,V**
Multiple clinic locations		X	X	X	X	X	**F,H,O,V,S**
Open office space/ not discipline specific	X		X		X		**F,H,O,V**
Common waiting areas	X	X	X	X	X		**F,O**
Service-specific waiting areas	X		X	X		X	**F,O**
Near public transportation	X	X	X	X	X	X	**F,O**
Shower facilities for patients	X						**F,O**
Computer banks for patients	X						**F,O**
Engagement with external community-based organizations with mutual interests in patients	X	X	X	X	X	X	**S,V**
Engagement with municipal programs benefitting target population	X	X	X	X		X	**S,V**

Abbreviations: C, clinical integration; F, functional integration; H, horizontal integration; N, normative integration; O, organizational integration; P, professional integration; S, system integration; V, vertical integration.

Table 4. *Characteristics of 6 FQHCs and Types of Integration on the Scale of Valentijn et al[6] (cont.)*

Characteristics of the Health Centers	Albuquerque Health Care for the Homeless	HELP/PSI/Brightpoint Health	Colorado Coalition for the Homeless	Compass Health Network	Health Partners of Western Ohio	Whitman-Walker Health	Valentijn et al. Framework Level
Process							
Common medication list	X	X	X	X	X	X	C,F,H
Clinical activities linked to integration efforts	X	X	X	X	X	X	C,H
Depression screening	X	X	X	X	X	X	C,H
Smoking/alcohol screening	X	X	X	X	X	X	C,H
Caries risk assessment	X	X	X	X			C,H
Patient history form Includes question(s) about last dental visit	X	X		X		X	C,F,O
Patient history form includes question(s) about behavioral health	X	X		X		X	C,F,O
Regular review of patient medical, dental, social history by all clinical providers	X	X	X	X		X	C,F,O
Collection and use of outcomes measures in clinical protocols	X	X	X	X	X		C,F
Patient registries used to alert to specific medical needs	X	X	X	X		X	C,F
Participation in emergency room diversion programs	X	X		X	X	X	C,S,V
Engagement with hospitals in providing post-discharge treatment		X	X	X	X		C,S,V
Providers encouraged to engage in informal communication and warm handoffs of patients	X	X	X	X	X	X	C,H,O,P,V
Interaction between clinical and nonclinical staff enabled and encouraged	X	X	X	X	X	X	N,O
Established internal referral mechanisms	X	X	X	X	X	X	C,F
Established mechanisms for external referrals for specialty or hospital services	X	X	X		X	X	C,S

Abbreviations: C, clinical integration; F, functional integration; H, horizontal integration; N, normative integration; O, organizational integration; P, professional integration; S, system integration; V, vertical integration.

Table 4. *Characteristics of 6 FQHCs and Types of Integration on the Scale of Valentijn et al[6] (cont.)*

Characteristics of the Health Centers	Albuquerque Health Care for the Homeless	HELP/PSI/Brightpoint Health	Colorado Coalition for the Homeless	Compass Health Network	Health Partners of Western Ohio	Whitman-Walker Health	Valentijn et al. Framework Level
Process (Continued)							
Fully or partially integrated electronic health record (EHR)	X	X	X	X	X	X	F,H
Organization-wide case management/treatment plan	X			X			C,F,H,O
Programs/services to mediate social problems encountered by patients	X	X	X	X	X		F,H,O,S
Resources to address social determinants of health	X	X	X	X			F,H,O,S
Regular staff and/or committee meetings that include clinicians from a variety of disciplines	X		X	X	X	X	N,O,P
Efforts to recruit staff who identify with organizational mission	X	X	X	X	X	X	N,P,S
Orientation training includes training about all services at the FQHC	X	X	X	X	X	X	N,O
Training in the special characteristics of the targeted patient population	X	X	X	X		X	N,O,P
Efforts to introduce staff to differing clinical services		X		X	X	X	N,O,P
Staff training in harm reduction strategies	X	X	X	X		X	N,O,P
Staff training in trauma-informed care	X	X	X	X	X	X	N,O,P
Staff training in topics related to other health disciplines	X			X	X		N,O,P
Staff training in de-escalation techniques/anxiety reduction	X			X	X	X	N,O,P
Ongoing training opportunities	X		X	X	X	X	O
Strategic scheduling (eg, double-booking appointments, specific consideration of patients' needs)	X	X	X	X	X	X	C,F

Abbreviations: C, clinical integration; F, functional integration; H, horizontal integration; N, normative integration; O, organizational integration; P, professional integration; S, system integration; V, vertical integration.

Table 4. *Characteristics of 6 FQHCs and Types of Integration on the Scale of Valentijn et al[6] (cont.)*

Characteristics of the Health Centers	Albuquerque Health Care for the Homeless	HELP/PSI/Brightpoint Health	Colorado Coalition for the Homeless	Compass Health Network	Health Partners of Western Ohio	Whitman-Walker Health	Valentijn et al. Framework Level
Clinical Providers							
Behavioral health specialist embedded on clinical team	X		X	X	X	X	C,H,P
Oral health professional embedded on clinical team	X		X				C,H,P
Clinical pharmacists on site	X	X	X	X	X	X	C,H,P
Leadership involvement in integration activities	X	X	X	X	X	X	N,O,P
Medical history review by dentist	X	X	X	X	X	X	C,H,O,P
Medical services in dental clinic (eg, A1C testing)	X		X	X	X		C,H,O,P
Oral health assessment by primary care clinician	X	X	X	X		X	C,H,O,P
Primary care providers managing medication-assisted treatment (MAT)	X	X	X	X	X	X	C,H,O,P
Primary care providers prescribing drugs for depression or anxiety	X	X	X	X	X	X	C,H,O,P
Access to staff psychiatrist for clinical consultations	X	X	X	X		X	C,O,P,V
Other Staff							
All staff is oriented to services available in the organization	X	X		X	X	X	F,N,O
Peer support workers or patient navigators on staff	X		X	X		X	F,N,O
Case management personnel on staff	X	X	X	X	X	X	F,N,O
Insurance navigators in health center	X	X	X	X	X	X	F,N,O

Abbreviations: C, clinical integration; F, functional integration; H, horizontal integration; N, normative integration; O, organizational integration; P, professional integration; S, system integration; V, vertical integration.

Valentijn and colleagues also describe a continuum of integration beginning with segregation, progressing to linkages, then to coordination, and finally arriving at integration.[6] As an organization progresses along the continuum leading to the goal, the duration of commitment to integration increases, as does the extent of shared decision-making, so that in an integrated organization there is a long-standing commitment to integration and high levels of shared decision-making. It is clear that the FQHCs that participated in these case studies exhibit multiple characteristics of integrated systems and that they are integrating care at significant levels.

Each of these organizations exhibited a culture of integration that was apparently institutionalized as common practice. Case study participants performed various roles and functions in the health centers. Several described a variety of small changes in process and practical steps toward integration that eventually resulted in innovation and a more pervasive culture of integration. They indicated that working towards integration was transformative for patients, for providers, and for the organizations.

Case study participants also discussed efforts within the organization to ensure comprehensive care for patients and the benefits not only to patients but to the staff and the health center. Many discussed a feeling of increased efficacy among providers in helping patients to achieve health goals. These efforts also resulted in a growing commitment to organizational goals among staff at all levels.
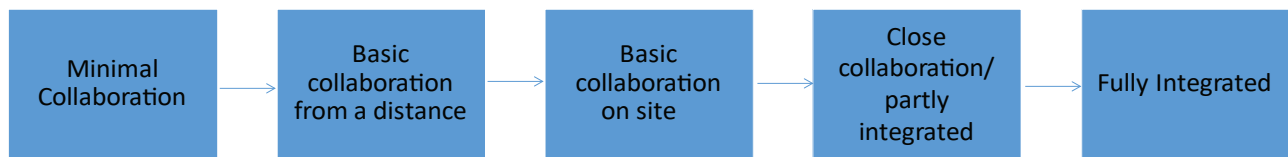
Case study participants observed that a commitment of executive leadership and clinical leaders to integrating service delivery is key to effecting change. However, while acknowledging that leadership must guide and foster implementation, they also noted that change occurs through care provided to individual patients. Active change occurs from the bottom up rather than from the top down.

This observation was further supported by comments suggesting that integration is an ongoing process that must be sufficiently flexible to address individual patient needs for particular services or interventions. There is no template for integration that is exactly replicated because unique patients dictate the continuum of necessary services in a singular manner. Still, organizational policies and processes must encourage integrated service delivery.

The Hypothetical Standard Framework From SAMHSA and HRSA

A second framework for integrating behavioral health and primary care, designed conjointly by the US Substance Abuse and Mental Health Services Administration (SAMHSA) and HRSA, is especially useful to describe the qualitative findings from this project. The SAMHSA-HRSA Center for Integrative Health Solutions published a hypothetical standard framework for levels of integrated health care in 2013 to categorize aspects of organizations as they move along a continuum from collaboration to integration.[7]

This framework expands upon a framework originally developed by Doherty, McDaniel, and Baird, which included 5 levels or stages of primary care–behavioral health collaboration and integration.[8] The continuum of integration described by Doherty et al is as follows:

| Minimal Collaboration | → | Basic collaboration from a distance | → | Basic collaboration on site | → | Close collaboration/ partly integrated | → | Fully Integrated |

The SAMHSA-HRSA Center builds upon this model and expands upon the source document to achieve an elaborated framework. The resulting framework groups organizations into 3 progressive categories, beginning with

   (1)   Coordinated care, progressing to

   (2)   Colocated care, and culminating in

   (3)   Integrated care.[7]

Each of the 3 "overarching" categories includes 2 subcategories, resulting in a framework that describes 6 levels of progressive integration. The 3 categories and their corresponding sublevels are each defined by a key element, which increases in frequency along the advancing scale. At the first level (coordinated care), communication is key; at the second level, co-location/proximity-shared systems and processes are critical. At the third level, which describes full integration, practice change is the pivotal component.

Table 5 describes the SAMHSA-HRSA framework in detail and the characteristics of an integrated organization at each level. In the pages that follow this table, the findings from this study are discussed in common themes in the context of this framework. These themes are organized in relation to the various attributes of integrated organizations as described by the SAMHSA-HRSA framework.

Table 5. *SAMHSA-HRSA Framework for Levels of Integrated Health Care[7]*

COORDINATED KEY ELEMENT: COMMUNICATION		CO-LOCATED KEY ELEMENT: PHYSICAL PROXIMITY		INTEGRATED KEY ELEMENT: PRACTICE CHANGE	
LEVEL 1 Minimal Collaboration	LEVEL 2 Basic Collaboration at a Distance	LEVEL 3 Basic Collaboration Onsite	LEVEL 4 Close Collaboration Onsite With Some System Integration	LEVEL 5 Close Collaboration Approaching an Integrated Practice	LEVEL 6 Full Collaboration in a Transformed/ Merged Integrated Practice
Behavioral Health, Primary Care and Other Healthcare Providers Work:					
In separate facilities, where they:	In separate facilities, where they:	In same facility not necessarily same offices, where they:	In same space within the same facility, where they:	In same space within the same facility (some shared space), where they:	In same space within the same facility, sharing all practice space, where they:
1.A- Have separate systems **1.B**- Communicate about cases only rarely and under compelling circumstances **1.C**- Communicate, driven by provider need **1.D**- May never meet in person **1.E**- Have limited understand ing of each other's roles	**2.A**- Have separate systems **2.B**- Communicate periodically about shared patients **2.C**- Communicate, driven by specific patient issues **2.D**- May meet as part of larger community **2.E**- Appreciate each other's roles as resources	**3.A**- Have separate systems **3.B**- Communicate regularly about shared patients, by phone or e-mail **3.C**- Collaborate, driven by need for each other's services and more reliable referral **3.D**- Meet occasionally to discuss cases due to close proximity **3.E**- Feel part of a larger yet non-formal team	**4.A**- Share some systems, like scheduling or medical records **4.B**- Communicate in person as needed **4.C**- Collaborate, driven by need for consultation and coordinated plans for difficult patients **4.D**- Have regular face-to-face interactions about some patients **4.E**- Have a basic understanding of roles and culture	**5.A**- Actively seek system solutions together or develop work-a-rounds **5.B**- Communicate frequently in person **5.C**- Collaborate, driven by desire to be a member of the care team **5.D**- Have regular team meetings to discuss overall patient care and specific patient issues **5.E**- Have an in-depth un derstanding of roles and culture	**6.A**- Have resolved most or all system issues, functioning as one integrated system **6.B**- Communicate consistently at the system, team and individual levels **6.C**- Collaborate, driven by shared concept of team care **6.D**- Have formal and informal meetings to support integrated model of care **6.E**- Have roles and cultures that blur or blend

Source: SAMHSA-HRSA Center for Integrated Health Solutions.

Table 5. *SAMHSA-HRSA Framework for Levels of Integrated Health Care[7] (cont.)*

COORDINATED		CO-LOCATED		INTEGRATED	
LEVEL 1 Minimal Collaboration	LEVEL 2 Basic Collaboration at a Distance	LEVEL 3 Basic Collaboration Onsite	LEVEL 4 Close Collaboration Onsite With Some System Integration	LEVEL 5 Close Collaboration Approaching an Integrated Practice	LEVEL 6 Full Collaboration in a Transformed/ Merged Integrated Practice
Key Differentiator: Clinical Delivery					
1.F- Screening and assess ment done according to separate practice models **1.G-** Separate treatment plans **1.H-** Evidenced-based practices (EBP) implemented separately	**2.F-** Screening based on separate practices; information may be shared through formal requests or Health Information Exchanges **2.G-** Separate treatment plans shared based on established relation-ships between specific providers **2.H-** Separate responsibility for care/EBPs	**3.F-** May agree on a specific screening or other criteria for more effective in-house referral 3.G- Separate service plans with some shared information that informs them **3.H-** Some shared knowledge of each other's EBPs, especially for high utilizers	**4.F-** Agree on specific screening, based on ability to respond to results **4.G-** Collaborative treatment planning for specific patients **4.H-** Some EBPs and some training shared, focused on interest or specific population needs	**5.F-** Consistent set of agreed upon screenings across disciplines, which guide treatment interventions **5.G-** Collaborative treatment planning for all shared patients **5.H-** EBPs shared across sys- tem with some joint moni toring of health conditions for some patients	**6.F-** Population-based medical and behavioral health screening is standard practice with results available to all and response protocols in place **6.G-** One treatment plan for all patients **6.H-** EBPs are team selected, trained and implemented across disciplines as standard practice
Key Differentiator: Patient Experience					
1.I- Patient physical and be havioral health needs are treated as separate issues **1.J-** Patient must negotiate separate practices and sites on their own with varying degrees of success	**2.I-** Patient health needs are treated separately, but records are shared, promoting better provider knowledge **2.J-** Patients may be referred, but a variety of barriers prevent many patients from accessing care	**3.I-** Patient health needs are treated separately at the same location **3.J-** Close proximity allows referrals to be more successful and easier for patients, although who gets referred may vary by provider	**4.I-** Patient needs are treated separately at the same site, collaboration might include warm hand-offs to other treatment providers **4.J-** Patients are internally referred with better follow up, but collaboration may still be experienced as separate services	**5.I-** Patient needs are treated as a team for shared patients (for those who screen positive on screening measures) and separately for others **5.J-** Care is responsive to identified patient needs by of a team of providers as needed, which feels like a one-stop shop	**6.I-** All patient health needs are treated for all patients by a team, who function effectively together **6.J-** Patients experience a seamless response to all healthcare needs as they present, in a unified practice

Source: SAMHSA-HRSA Center for Integrated Health Solutions.

Table 5. *SAMHSA-HRSA Framework for Levels of Integrated Health Care[7] (cont.)*

COORDINATED		CO-LOCATED		INTEGRATED	
LEVEL 1 Minimal Collaboration	LEVEL 2 Basic Collaboration at a Distance	LEVEL 3 Basic Collaboration Onsite	LEVEL 4 Close Collaboration Onsite With Some System Integration	LEVEL 5 Close Collaboration Approaching an Integrated Practice	LEVEL 6 Full Collaboration in a Transformed/ Merged Integrated Practice
Key Differentiator: Practice/Organization					
1.K- No coordination or management of collaborative efforts **1.L**- Little provider buy-in to integration or even collaboration, up to individual providers to initiate as time and practice limits allow	**2.K**- Some practice leader ship in more systematic information sharing **2.L**- Some provider buy-into collaboration and value placed on having needed information	**3.K**- Organization leaders supportive but often colo cation is viewed as a project or program **3.L**- Provider buy-in to making referrals work and appreciation of onsite availability	**4.K**- Organization leaders support integration through mutual problem-solving of some system barriers **4.L**- More buy-in to concept of integration but not consistent across providers, not all providers using opportunities for integration or components	**5.K**- Organization leaders support integration, if funding allows and efforts placed in solving as many system issues as possible, without changing fundamentally how disciplines are practiced **5.L**- Nearly all providers engaged in integrated model. Buy-in may not include change in practice strategy for individual providers	**6.K**- Organization leaders strongly support integration as practice model with expected change in service delivery, and resources provided for development **6.L**- Integrated care and all components embraced by all providers and active involvement in practice change
Key Differentiator: Business Model					
1.M- Separate funding **1.N**- No sharing of resources **1.O**- Separate billing practices	**2.M**- Separate funding **2.N**- May share resources for single projects **2.O**- Separate billing practices	**3.M**- Separate funding **3.N**- May share facility expenses **3.O**- Separate billing practices	**4.M**- Separate funding, but may share grants **4.N**- May share office expenses, staffing costs, or infrastructure **4.O**- Separate billing due to system barriers	**5.M**- Blended funding based on contracts, grants or agreements **5.N**- Variety of ways to structure the sharing of all expenses **5.O**- Billing function combined or agreed upon process	**6.M**- Integrated funding, based on multiple sources of revenue **6.N**- Resources shared and allocated across whole practice **6.O**- Billing maximized for integrated model and single billing structure

Source: SAMHSA-HRSA Center for Integrated Health Solutions.

Table 5. *SAMHSA-HRSA Framework for Levels of Integrated Health Care[7] (cont.)*

COORDINATED		CO-LOCATED		INTEGRATED	
LEVEL 1 Minimal Collaboration	**LEVEL 2** Basic Collaboration at a Distance	**LEVEL 3** Basic Collaboration Onsite	**LEVEL 4** Close Collaboration Onsite With Some System Integration	**LEVEL 5** Close Collaboration Approaching an Integrated Practice	**LEVEL 6** Full Collaboration in a Transformed/ Merged Integrated Practice
Advantages					
1.P- Each practice can make timely and autonomous decisions about care **1.Q**- Readily understood as a practice model by patients and providers	**2.P**- Maintains each practice's basic operating structure, so change is not a disruptive factor **2.Q**- Provides some coordination and information-sharing that is helpful to both patients and providers	**3.P**- Colocation allows for more direct interaction and communication among professionals to impact patient care **3.Q**- Referrals more successful due to proximity **3.R**- Opportunity to develop closer professional rela tionships	**4.P**- Removal of some system barriers, like separate records, allows closer collaboration to occur **4.Q**- Both behavioral health and medical providers can become more well- informed about what each can provide **4.R**- Patients are viewed as shared which facilitates more complete treatment plans	**5.P**- High level of collaboration leads to more responsive patient care, increasing engagement and adherence to treatment plans **5.Q**- Provider flexibility increases as system issues and barriers are resolved **5.R**- Both provider and patient satisfaction may increase	**6.P**- Opportunity to truly treat whole person **6.Q**- All or almost all system barriers resolved, allowing providers to practice as high functioning team **6.R**- All patient needs addressed as they occur **6.S**- Shared knowledge base of providers increases and allows each professional to respond more broadly and adequately to any issue
Weaknesses					
1.R- Services may overlap, be duplicated or even work against each other **1.S**- Important aspects of care may not be addressed or take a long time to be diagnosed	**2.R**- Sharing of information may not be systematic enough to effect overall patient care **2.S**- No guarantee that infor mation will change plan or strategy of each provider **2.T**- Referrals may fail due to barriers, leading to patient and provider frustration	**3.S**- Proximity may not lead to greater collaboration, limiting value **3.T**- Effort is required to develop relationships **3.U**- Limited flexibility, if traditional roles are maintained	**4.S**- System issues may limit collaboration **4.T**- Potential for tension and conflicting agendas among providers as practice boundaries loosen	**5.S**- Practice changes may create lack of fit for some established providers **5.T**- Time is needed to collaborate at this high level and may affect practice productivity or cadence of care	**6.T**- Sustainability issues may stress the practice **6.U**- Few models at this level with enough experience to support value **6.V**- Outcome expectations not yet established

Source: SAMHSA-HRSA Center for Integrated Health Solutions.

Common Themes

The common themes developed during these case studies are described below. Each is grouped under applicable key elements in the SAMHSA-HRSA framework describing the notable characteristics of an organization in its progression to full integration.[7] Since all of the organizations in these case studies provided physically proximate/co-located services and all were using an integrated service delivery paradigm, these case study organizations would each be classified as falling within either Level 5 or Level 6 of the SAMHSA-HRSA framework, in which practice change is occurring or has occurred and service delivery is transformed.

It is difficult to place an organization at an exact point on this scale. As one case study informant observed, an organization—especially a large, complex one—may be at different stages in the growth process toward full integration in various areas of practice, making it difficult to classify the organization at a single level. While some in the case study would indicate that efforts at integration are ongoing and never complete, most would agree that these organizations are integrating patient care at appreciable levels.

1) The philosophy of integrated service delivery is reflected in the physical design of these health centers, in the institutionalized patient management and administrative processes, and in the formal and informal interactions among organizational staff.

2) An integrated EHR is an essential formal communication tool to ensure that clinicians have access to the necessary information to provide comprehensive patient care and to communicate with other members of the care team about patient needs.

3) The "language of integration" is evolving. The primacy of informal communication between providers from various disciplines is emerging as a key feature of successful efforts at integration.

4) Integration of health services requires evolving processes and programs that are responsive to individual patient needs.

5) The characteristics of the patient population sometimes require staff training in specialized approaches to care delivery.

6) Service delivery must be team based; teams must utilize the full competencies of all members, and team members must be open to new learning.

7) Meeting the complex needs of patients in these FQHCs requires the engagement of skilled staff, including medical and dental clinicians, social service and behavioral health providers, and other support professionals.

8) Providers encounter various degrees of difficulty in integrating health services; difficulty increases when there are embedded structural barriers to bridge.

9) Engagement with other community-based organizations and inpatient or specialty health care providers to meet the needs of their patients increases the collective impact of an integrated organization.

10) Public programs and funding streams have encouraged comprehensive services for particular populations, revealing the value of integrated, coordinated service delivery.

These common themes are further described in the pages that follow. Each of the themes and accompanying discussion is preceded by some applicable characteristics of an integrated organization that have been extracted from the SAMHSA-HRSA framework (see Table 5).

SAMHSA-HRSA Key Element in Co-located Care: Physical Proximity

Level 5: In same space within the same facility (some shared space)
Level 6: In same space within the same facility (sharing all practice space)

Common Theme No. 1 from the case studies:

The philosophy of integrated service delivery is reflected in the physical design of these health centers, in the institutionalized patient management and administrative processes, and in the formal and informal interactions among organizational staff.

The physical spaces in these health centers reflected the philosophy of integration. In several of the FQHCs, clinicians and others work in clinical service pods that include open office/administrative spaces designed for easy conversation and frequent encounters among clinicians and others on the team. These spatial configurations enable communication. For example, a social worker might engage a nearby physician about a patient or an insurance counselor to discuss a patient's enrollment status.

In addition, the clinical spaces in these health centers often juxtaposed complementary disciplines to facilitate service integration. As an example, in one clinical service area in an FQHC serving homeless patients, primary care rooms were located on one side of a long hallway; behavioral health consultation and counseling rooms were on the opposite, windowed side of the area. The room heading the behavioral health row was equipped for the team psychiatrist to provide tele-behavioral health consultations through real-time video conferencing. At one end of the same hallway was a dental operatory staffed by a dental hygienist to allow for oral health screening and assessment services. Physically contiguous examination

> Integration is a journey, not a destination. It is important to recognize that there are different levels of integration even within the same organization. There are so many moving parts in a health system and so many barriers that it is sometimes difficult to benchmark progress. If the organization is integrated in many aspects, it is doing well.
>
> *-- A case study participant*

rooms or operatories eased the process of "handing" a patient to another clinical discipline to address emergent need.

In addition to these physical indicators of integration in these FQHCs, there were numerous affective manifestations of a philosophy of comprehensive care. It was apparent to observers that cross-disciplinary communication in these health centers occurred on an ad hoc basis between clinical disciplines when patient need required such immediate consultations. In addition, all health centers had formal referral processes integrated into their electronic appointment scheduling and patient health records.

SAMHSA-HRSA Key Element in Coordinated Care: Communication

Level 4C: Collaborate, driven by need for consultation and coordinated plans for difficult patients
Level 6B: Communicate consistently at the system, team, and individual levels

Common Theme No. 2 from the case studies:

An integrated EHR is an essential formal communication tool to ensure that clinicians have access to the necessary information to provide comprehensive patient care and to communicate with other members of the care team about patient needs.

Instituting formal processes that enable communication and referral is an essential element of integration. All case study organizations shared a common EHR; some used a case management module. Providers in each organization were able to access the medical, behavioral health, and dental case notes, medications, etc. These organizations had strong protocols to protect patients' health records, especially

those related to mental health and substance use, but access to patient information by appropriate providers was fully enabled.

The EHR was described as an essential tool for communicating screening and laboratory test results, medication information, and clinical progress. Providers in various disciplines regularly accessed patient information provided by other clinical disciplines to better evaluate patients' treatment needs. In some organizations, the EHR also included a case management module or care management record that was accessed by patient navigators, case managers, clinicians, and others involved in patient care and follow-up.

All case study organizations used patient data acquired in clinical or social service encounters to evaluate outcomes from service provision. Many used extracted data on health center patients to inform clinical protocols, adjust service delivery processes, track patient referrals, or identify gaps in care delivery as they emerged. These same data were used to measure quality of care and to build patient registries for specific chronic disease management programs, such as for diabetes or HIV.

Level 4C: Collaborate, driven by need for consultation and coordinated plans for difficult patients
Level 6B: Communicate consistently at the system, team, and individual levels
Level 4C: Collaborate, driven by need for consultation and coordinated plans for difficult patients

C**ommon Theme No. 3 from the case studies:**

The "language of integration" is evolving. The primacy of informal communication between providers from various disciplines is emerging as a key feature of successful efforts at integration.

Informants remarked that although physical and structural aspects of clinic design and workforce education are important to integration, the most essential element is communication. Building strong personal and professional relationships within the health center was described by many as critical to successful service integration. These FQHCs encouraged frequent interaction between clinical professionals from various disciplines and other related workforce, especially those involved in case management. According to a case study participant, the "language of integration" is evolving and the importance of effective communication processes in achieving comprehensive service delivery is increasingly recognized.

Case study informants commented on the primacy of informal/ad hoc communication activities that result from building trustful teams inclusive of a variety of health and social service disciplines. Patient-focused discussions and warm handoffs were described by study participants as essential to effecting a continuum of coordinated services.

Many informants to the case studies acknowledged the significant challenges of maintaining pathways to open communication within a large organizational structure where there is considerable staff turnover, but all suggested that efforts to build trustful relationships across disciplines and encourage staff interaction must be ongoing.

Communication is the most essential element in providing care that is patient centered and team delivered.

Providers must also be progressive thinkers and recognize that each member of the care team offers competencies. It is not possible for one provider to offer everything a patient needs, especially for the complex patients that are typical in the homeless population; it is essential that a provider do what they do best and rely on others within the team to do the same.

-- A case study participant

SAMHSA-HRSA Key Element in Integrated Care: Practice Change

Level 5A: Actively seek system solutions together or develop work-arounds
Level 6A: Have resolved most or all system issues, functioning as one integrated system

Common Theme No. 4 from the case studies:

Integration of health services requires evolving processes and programs that are responsive to individual patient needs.

Case study participants were clear that co-location of services at health center sites provides an organic path to enable integration. However, many other factors are involved in its achievement, with no single formula for accomplishing coordinated comprehensive patient care. Organizational missions must include integration as a goal. Administrative systems and clinical protocols must support its achievement. Clinicians and others must be educated on its importance and impacts.

However, informants noted that actual service integration occurs one patient at a time. While organizational processes must encourage its realization, individual patient need is the active catalyst for practical implementation and the driver of adoption. Once comprehensive service delivery becomes familiar practice, disturbing historical habits and disrupting ingrained patterns of service segregation, new practice models emerge in which patient outcomes and satisfaction improve, clinician efficacy is enhanced, and value-based care is delivered.

> *The necessity for cross-disciplinary care is obvious to any clinician or support staff who works with the homeless. Most patients are in chronically traumatic conditions, so the model of care delivery must be comprehensive, integrated care. The complexity of need requires that all providers communicate with each other to help their mutual patients.*
>
> *-- A case study participant*

Several of the case study participants commented that integration of services was a logical, almost inevitable, strategy in these health centers because of the significant complexity of patients' conditions. One informant commented that there is no acceptable alternative to integrated service delivery for patients with profound medical and social needs. In order to address these issues, providers must engage in purposeful, "conscious" practice in delivering a comprehensive array of services.

Level 5E: Have an in-depth understanding of roles and culture
Level 6S: Shared knowledge base of providers increases and allows each professional to respond more broadly and adequately to any issue

Common Theme No. 5 from the case studies:

The characteristics of the patient population sometimes require staff training in specialized approaches to care delivery.

The 6 organizations in this study all described clinical protocols based on "trauma-informed care," an especially relevant approach to providing health and social services for patients who have experienced past, ongoing, or immediate trauma. The literature describes this approach as "an organizational structure and treatment framework that involves understanding, recognizing, and responding to the effects of all types of trauma. Trauma Informed Care also emphasizes physical, psychological and emotional safety for both consumers and providers, and helps survivors rebuild a sense of control and empowerment."[9]

One case study informant discussed the importance of recognizing that while trauma may have initially contributed to the physical, mental, or social condition of a patient, the experience of trauma is often ongoing for the patient/survivor. Many experience trauma in their daily lives from living on the street or from incarceration due to these circumstances, but also from well-meaning people, including medical or

social service professionals. These ongoing patient experiences confound the ability of the medical and social service community to provide competent and useful care for their patients.

In addition, many of these organizations were guided by a philosophy of "harm reduction," described in the literature as a strategy to reduce the harms associated with certain behaviors by reducing adverse consequences from those behaviors.[10] Implementing this approach to care requires acknowledging that total abstinence from the behavior may not be realistic for the individual under care. Rather, the approach assumes that some level of the same behavior will continue. Nevertheless, the patient and provider can reach agreement on ways to avoid the serious adverse consequences of the behavior and, in doing so, improve outcomes. Needle exchange programs and access to methadone clinics for substance users are examples of harm reduction interventions. This concept was first used to treat adults with substance use disorders, but it is easily extended to other areas such as sexual health, to reduce rates of teen pregnancy or HIV infection.

One informant provided a practical example of the usefulness of approaching care through the lens of harm reduction. A patient at the health center was HIV positive and an excessive user of alcohol. Primary care clinicians were concerned that the patient was not complying with the recommended HIV medication protocol to reduce viral load. The patient had recently developed diabetes, which could not be effectively treated until the HIV viral load was better controlled. The provider suggested that the patient take the HIV medication with the first glass of wine each day. Because there is no direct interaction between HIV medication and alcohol, this strategy would do no harm to the patient. However, it would allow providers to better treat and control the patient's comorbid conditions. Obviously, clinicians also encouraged the patient to reduce alcohol intake, but regularly taking the HIV medication was considered an essential and fundamental goal. The patient accepted this recommendation as doable and has since regularly complied with the HIV medication protocol.

Informants discussed that the opioid epidemic has demonstrated the need for service integration to address the crisis and its multiple causes. These health centers recognized the need for a unified approach to patient care, one in which all clinicians and staff work together to help patients with substance use problems.

The opioid epidemic will stimulate and accelerate efforts to achieve service integration.

-- A case study participant

Case Studies of 6 Safety Net Organizations That Integrate Oral and Mental/Behavioral Health With Primary Care Services

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Level 5L: **Nearly all providers engaged in an integrated model. Buy-in may not include change in practice strategy for individual providers**

Level 5J: **Care is responsive to identified patient needs by a team of providers as needed, which feels like a one-stop shop**

Level 5P: **High level of collaboration leads to more responsive patient care, increasing engagement, and adherence to treatment plans**

Level 6L: **Integrated care and all components embraced by all providers and active involvement in practice change**

Common Theme No. 6 from the case studies:

Meeting the complex needs of patients in these FQHCs requires the engagement of skilled staff, including medical and dental clinicians, social service and behavioral health providers, and other support professionals.

Provider engagement with and commitment to the objectives of integration are essential to its achievement. Informants spoke of the importance of clinicians' openness to process innovation and willingness to work with other team members and across disciplines to better outcomes for patients. While practice behaviors that enable integration can be learned experiences, the personal commitment of providers and leadership to the mission of the FQHC is essential to successfully achieving integrated care.

Clinical providers in this organization are increasingly exposed to competencies that have traditionally been outside their scope of services. For instance, many are becoming more comfortable with differential diagnosis, etc. There is a rolling effect from these efforts. The more staff is exposed to new skills, the more their interest increases and the more sure they become of the supports behind the integration effort.

-- A case study participant

Informants discussed the importance of staff engagement with the mission and goals of the FQHC and the necessity of a rigorous interview process during recruitment of new staff. Case study participants commented that it is essential to ascertain that potential hires share the mission of the organization and are considerate of the patient population. In several of these FQHCs, leadership recognized that it was easier to teach new or improved clinical or administrative skills to an employee than to engender personal receptivity to a particular patient group. All case study informants commented on the importance of providing respectful services to patients.

Several of the FQHCs were exerting conscious effort to hire staff that reflected the community in which the organization operated as well as the community of patients. The health centers were attempting to recruit

staff who were familiar with the patient population, shared similar cultural or language backgrounds, and exhibited awareness of the variety of social conditions among the health center's patients. Several had also recruited current or former patients for employment.

Level 5J: Patient needs are treated as a team for shared patients
Level 6C: Collaborate, driven by shared concept of team care
Level 6F: Have roles and cultures that blur or blend

C**ommon Theme No. 7 from the case studies:**

Service delivery must be team based; teams must utilize the full competencies of all members, and team members must be open to new learning.

Achieving integration requires a team-based approach to care delivery. Teams in these FQHCs included clinical, social service, and other support professionals. Case study participants spoke of the necessity of strong teams that encourage individuals to contribute specific skill sets to patient care.

FQHCs had different strategies to build a workforce that was oriented to organizational goals and engaged with their coworkers in serving the needs of patients. In one FQHC, the clinic director hosts a weekly all-staff gathering scheduled for the hour before the health center opens to patients. The meeting includes a team-building activity followed by announcements regarding particular services or programs.

In another health center, leadership regularly convened staff for team meetings and used daily announcements and staff bulletins to keep staff well informed. The director would sometimes initiate a competition or contest culminating in breakfast or lunch for the staff.

Clinical leadership from both medicine and dentistry are in tune with the necessities of integration. The dental director and medical director talk frequently and meet often; each encourages their respective providers to use a broad lens when evaluating patients.

Many clinicians learn more about the importance of integration on the clinic floor during practice with patients than they do from formal didactic training. The complexity of many patients' medical, mental, and dental needs supports the importance of effecting service integration to achieve improved health outcomes.

-- A case study participant

One FQHC holds an annual "Make a Friend" week during which each staff member is paired with someone from another discipline or service area. Sometime during that week, the pair is expected to share lunch or coffee and learn about their respective roles in the organization, or to visit each other's work area to become acquainted with the tasks and focus of that partner.

In another FQHC, new staff are oriented to the health center during a 90-day period in which training is tailored to a particular role in the organization. For instance, a new medical assistant would first work with a mentor to learn new clinical skills or improve existing ones. The orientation also includes "integration rotations," especially for administrative or lower skilled staff. New hires spend a few hours per day in dental, pharmacy, and primary care; they may shadow a behavioral health provider or spend time in medical records to learn about all aspects of the health center. All new intake and reception staff are provided with the business cards for all clinicians in the health center so that individual phone extensions are immediately available to directly contact any provider. Case study participants advanced the opinion that training staff at all levels—not just clinicians —is important to successful integration of patient care.

Informants also discussed the importance of clinical providers being willing to learn new roles or perform new functions. Training in medication-assisted treatment was offered as an example of a clinical role expansion that benefits patients. In several of the FQHCs, primary care providers were also prescribing medications for depression and other mental illness diagnoses, with backup consultations by psychiatric service providers as needed.

Everyone at this health center works together in the interest of patients. It's easiest to integrate behavioral health with other disciplines because there are behavioral components to all medical and dental diseases. For example, a patient's choice of nutrition, exercise, and their medication compliance and personal hygiene affect their health and oral health outcomes.

-- A case study participant

Level 6J: Patients experience a seamless response to all health care needs as they present, in a unified practice

Level 5Q: Provider flexibility increases as system issues and barriers are resolved

C**ommon Theme No. 8 from the case studies:**

Providers encounter various degrees of difficulty in integrating health services; difficulty increases when there are embedded structural barriers to bridge.

The long history of structural separation of medical and dental clinics and the systemic separation of medical and dental information in patient record systems make it more difficult to seamlessly effect integration between primary care, behavioral health, and dental services. There are many historical and clinical reasons for this ingrained separation. And while significant attention is now being paid to the importance of integrating primary care with behavioral medicine, integrating oral health continues to be perceived in many quarters as somewhat less exigent.

Some informants to the case studies observed that it was somewhat more difficult to effectively integrate or to seamlessly navigate patients to dental services than to either primary or behavioral health services. That said, the need for dental services in the populations served by these health centers was substantial, and providers were exerting considerable effort to cross the various structural barriers (for example, the location of dental suites in a different part of the health center) to ensure that patients were scheduled for and received dental services. All of the FQHCs in the case studies exhibited high rates of utilization of dental services.

> In health care organizational structures, dental has always been siloed. There are many historical and clinical reasons for this separation. The procedure-oriented nature of the discipline is isolating. Dental providers do invasive procedures that need sterile equipment, dedicated plumbing, and a considerable array of tools and materials to provide oral health services. Other clinical disciplines tend to provide more consultative services, so personnel flow inclusive of a variety of health disciplines is more natural.
>
> -- A case study participant

Workflow during the clinical day is a pervasive issue, especially in primary care, which is often the hub for integration. Many primary care providers feel overburdened with expanded tasks such as depression screening, substance use screening, and attempting to determine if patients are experiencing mental illness or social trauma. Adding more clinical tasks, including oral health screenings, increases that burden.

Providers in these FQHCs acknowledged the systemic linkages of oral disease with other chronic illnesses and the effect of medications on the oral cavity, which spurs them to attend to the oral health care needs of their patients. Dentists in these FQHCs were also paying increased attention to the health status of their patients. In several of the health centers, blood pressure checks and even A1C monitoring were routine practice in the dental clinic for patients with certain medical diagnoses.

Level 6P: Opportunity to truly treat the whole person

Level 6R: All patient needs addressed as they occur

Common **Theme No. 9** **from the case studies:**

Engagement with other community-based organizations and inpatient or specialty health care providers to meet the needs of their patients increases the collective impact of an integrated organization.

FQHCs' staffs were acutely aware of the immediate effects of the social determinants of health on their patients' behaviors, compliance with treatment, and overall ability to access services of any kind in their communities. Consequently, many of these organizations provided comprehensive wraparound services for their patients, including providing linkages to other community organizations that would address the social, nutritional, and housing needs of patients.

Organizations that are internally integrated acknowledge the importance of engagement with the external community to increase their collective impact on patient outcomes. Some of the case study organizations provided care only to homeless populations in their clinic sites. Others focused on the HIV community, including those who had acquired the disease through substance use, sexual transmission, blood transfusion, or were infected at birth. As a result, these organizations provided quantities of health care services to patients with specific and often intense health care, social, or medicolegal needs.

These same organizations and the others participating in this project provided substantial quantities of behavioral health services to patients with a wide range of diagnoses, including anxiety disorders, posttraumatic stress disorder, brain injury, bipolar disorder, schizophrenia, depression, alcoholism, and other conditions. These diagnoses were confounded by comorbid medical conditions such as diabetes, heart disease, circulatory issues, hepatitis C, and HIV, making provision of services more complicated and requiring a high level of medical expertise, including specialty services.

These FQHCs had established referral systems for specialty medicine; many worked with transportation companies or themselves provided transportation to enable patients to access a variety of services in the community. Many also actively engaged with local hospitals in efforts to reduce emergency room use or to avoid readmissions of common patients after hospital discharge. Some organizations provided medical respite beds for patients experiencing homelessness. Some also collaborated with local municipalities in programs to address recidivism in the criminal justice system, reduce homelessness in their cities, or provide harm reduction outreach education and services to targeted populations. These efforts were enabled by outreach teams at the FQHCs and by others in the respective organizations.

Level 5M: Blended funding based on contracts, grants, or agreements

Level 5N: Variety of ways to structure the sharing of all expenses

Level 5O: Billing function combined or agreed upon process

Level 6M: Integrated funding, based on multiple sources of revenue

Level 6N: Resources shared and allocated across whole practice

C**ommon Theme No. 10 from the case studies:**

Public programs and funding streams have encouraged comprehensive services for particular populations, revealing the value of integrated, coordinated service delivery.

These FQHCs were all funded through HRSA grants to provide primary medical services; some were also funded through other HRSA programs. Most provided services under prospective payment systems with their state Medicaid programs. Many also benefited from other government grants, from local philanthropy, and from participation in municipal programs that supported mutually common goals.

Case study participants spoke of the important legacy of certain government programs that have enabled service integration. One of these is the Ryan White program, which funds comprehensive integrated services for patients diagnosed with HIV. The program has long encouraged innovative models of care delivery and provides funds not only for direct care but also for provider training and planning. Experience with the program and improvement in patients' health outcomes provided the incentive and background for some of the health centers to extend the care delivery model to other patients.

Another federal program, the Demonstration Program for Certified Community Behavioral Health Clinics, which was funded by the 2014 Protecting Access to Medicare Act (PAMA), advanced integration efforts in participating health centers. This demonstration project set program participants on a course to service integration for behavioral health patients and reinforced existing organizational efforts to achieve service integration. It provided support to integrate care, including consultations with providers about medical or dental interventions for behavioral health patients. The funding also enabled expanded access to community-based substance use and mental health services, provided access to care coordination services for patients, and encouraged integration of behavioral health and primary care.

Flexibility in program guidelines and the bundled payment model allowed organizations to provide services in a coordinated format, which was described as very challenging in a fee-for-service environment due to the payment constructs applying to service delivery. Informants encouraged policymakers to review the benefits of these programs and to extend these models more broadly to address need in other than these specific population groups.

DISCUSSION

The FQHCs that participated in these case studies are benchmarks for successful service integration. Many indicated that integration was not necessarily a conscious choice for the organization; the need for integrated care was instead made evident by their highly complex patients, many of whom present with multiple medical comorbidities complicated by unmet social, nutritional, and housing needs. Integrating service delivery was described as the only reasonable path to ensure that health center providers helped patients to improve their health status and their life outcomes.

These FQHCs exhibited structural characteristics and clinical and administrative processes indicative of integrated organizations and comprehensive health homes when measured by the objective standards of integrated organizations in two published frameworks on the subject. Each organization displayed multiple aspects of clinical, organizational, professional, functional, and normative integration as described by Valentijn et al.[6] All exhibited horizontal and vertical integration in their service menus.[6]

These FQHCs would also be placed at Level 5 (approaching integrated practice) or at Level 6 (integrated/transformed practice) of the SAMHSA-HRSA framework.[7] It is important to remember that integration requires flexible and mutable processes in multiple functional areas that meet both the consistent and changing needs of patients. Thus, one or another aspect of an organization may be working on improving integration while other areas within the same organization may be more progressed. In most organizations, there continue to be aspects of integration that are difficult to institutionalize; these are are exacerbated in large organizations by their growing size and scope and by staff turnover.

One noteworthy finding from this work was that while organizations can describe formal, concrete steps or processes to encourage service integration, some of the elements most critical to achieving it are not concrete. It would be difficult to spend time within these health centers and not recognize the importance of mission-driven teams leading the effort to integrate services. Ensuring that all staff share organizational goals, having leadership that encourages innovation, hiring clinical providers willing to learn new skills and engage in change, and building personal relationships and teams within the health center are pivotal to successful efforts at integration. These intangibles, of course, are encouraged by tangible initiatives such as rigorous hiring practices, offering frequent training and education to new and existing staff, creating formal opportunities for team building, and providing formal tools for communication among providers and across disciplines.

Although there are published guidelines to help with planning, process, and implementation and current benchmarks to gauge successes on the road to integration, there is no fixed template for integrating every organization. Efforts to provide comprehensive integrated health services to patients must be

guided iteratively by individual patient need. Tracking patients and their outcomes is essential to understanding the successes and gaps in truly integrating service delivery.

The majority of patients in these case study organizations had complex medical, oral, and behavioral health needs; however, case study informants cautioned that these patient were not "special" but were typical of the general population. The HIV population, the LGBTQ community, those with mental illnesses, and those who use and abuse substances have varying demographic and economic backgrounds and represent all sectors of society. Thus, while efforts at integration might be more exigent in these provider organizations, patients in any health care provider system would similarly benefit from integrated, coordinated care.

The literature review for this study revealed a number of limitations in studies related to integration of health care organizations, including small sample sizes and limited focus. The present study suffers from similar limitations. While the results may not be generalizable, the findings should be useful to organizations attempting to tailor care delivery to meet the comprehensive needs of their patient populations.

Appendix A

CASE STUDIES

The following pages contain descriptive briefs of each of the case studies conducted for this project. The organizations that participated in the study were:

- **Albuquerque Health Care for the Homeless,** headquartered in Albuquerque, New Mexico

- **HELP/Project Samaritan Services (PSI)/Brightpoint Health,** headquartered in New York, New York

- **Colorado Coalition for the Homeless,** headquartered in Denver, Colorado

- **Compass Health Network,** headquartered in Clinton, Missouri

- **Health Partners of Western Ohio,** headquartered in Lima, Ohio

- **Whitman-Walker Health,** headquartered in Washington, DC

Albuquerque Health Care for the Homeless
Albuquerque, New Mexico

History and Background of the Organization

ALBUQUERQUE HEALTH CARE FOR THE HOMELESS

Patients Served by Grantee (Within mapped Areas): 4198

Cumulative % Grantee Patient Origin by Zip Code Tabulation Area (ZCTA)

Cumulative to 75%
Cumulative 75%-100%
Delivery Sites

Source: Uniform Data System, Bureau of Primary Health Care, 2017

ZCTA Label Key
12345 - ZCTA Number
1,234 - Patients in ZCTA
12% - % of Patients from ZCTA
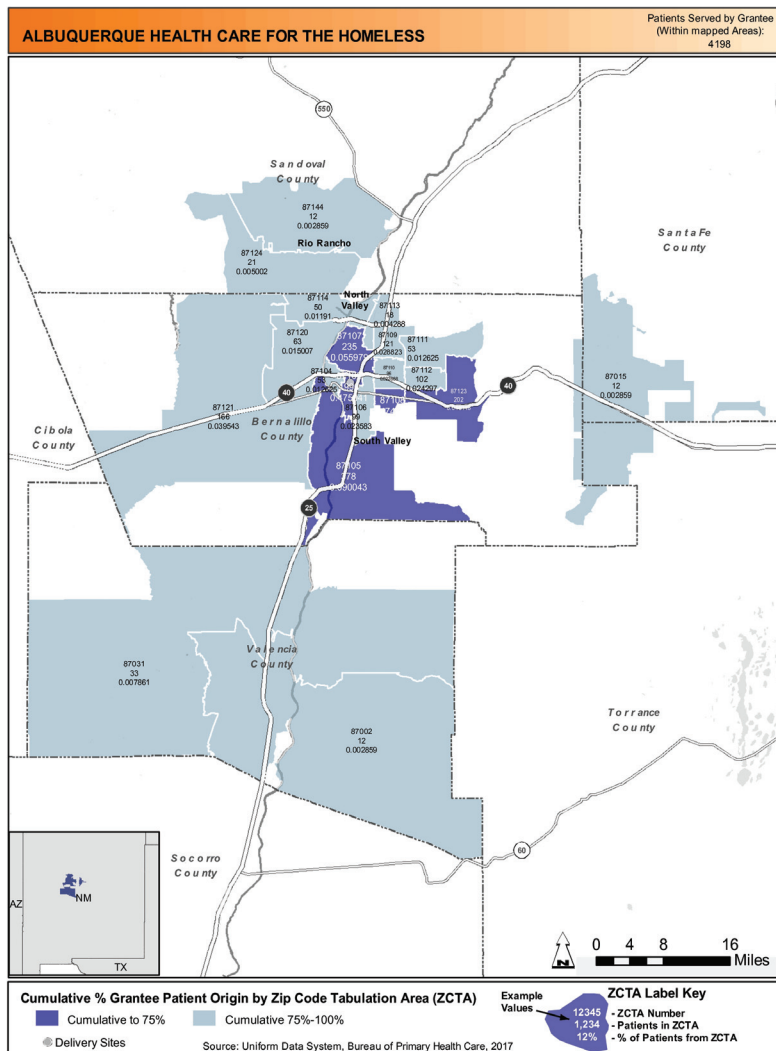
In 2018, Albuquerque Health Care for the Homeless (AHCH) marked 33 years of providing services to people experiencing homelessness in central New Mexico, offering a distinctive continuum of integrated services to address the health-related causes and consequences of homelessness. In 2017, AHCH served 4485 patients in 21,882 client visits and made 10,000 outreach contacts through one or another of its community outreach teams.

The organization was founded in 1985 to provide services to the growing number of homeless people in Albuquerque. In the early years, the organization focused mainly on the social, housing, and nutritional needs of the population, in addition to some medical services. All services were delivered from an Airstream trailer that moved to one or another of the several day shelters or meal sites in Albuquerque.

Dentistry was introduced as a patient service when a stationary dental operatory was installed in a former garage to meet the recognized need for dental services among the homeless. As resources permitted, other health care services were gradually introduced; these services were eventually consolidated and co-located in a central health clinic site beginning in 2000.

The main health center of this federally qualified health center (FQHC) is housed in a complex of 3 interconnected buildings arranged in a horseshoe in a convenient location in the northern sector of the

city. A 8600-square-foot resource center for the homeless, also sponsored by AHCH, sits on the opposite side of the street. The resource center contains shower and bathroom facilities, a computer bank, coffee and water stations, patient navigation staff to connect the homeless to community services, a primary health care services suite, and counseling and therapy rooms. The resource center serves as the home base for all behavioral health providers at AHCH, although members of that team also work in the health center. The resource center is a bright space fronted by large windows, making it a welcoming environment.

The various discipline-specific health clinics located in the large main health center contain state-of-the-art medical equipment and laboratories, including dedicated areas for each program. The health center also houses multiple conference and group or individual counseling rooms used by staff and patients for multiple purposes.

The AHCH health center is located near several day and night shelters for the homeless, all of which are sponsored by other community-based organizations in the city. The health center is also close to hospitals and is located on a public transportation line, making access to health services more convenient for the targeted population. The services that AHCH provides include the following:

- Primary health care services
- Psychiatry services
- Dental services
- Optometry services
- Podiatry services
- Pain management
- Individual or group behavioral health therapy
- Crisis intervention
- Community outreach
- Case management
- Permanent supportive housing

- Outreach and enrollment
- Acupuncture
- Pharmacy (340B)
- Harm reduction services
- Referrals for food and clothing

A limited number of specialty services, including optometry and podiatry, are provided by volumteer clinicians.

The hallways and conference rooms throughout the health center are decorated with art created from various media by artists who are homeless in a large open studio (art therapy workspace) co-located with the primary care programs. The art center provides materials for a range of expressive art, including painting, sculpture, and collage.

In addition, the rear exterior walls of the health center building are home to an extensive memorial wall for those who have died while homeless or having experienced homelessness.

These walls are decorated with numerous individual commemorative tiles designed by families, friends, and members of the homeless community. Each is unique and includes differently colored designs to reflect something characteristic of the remembered person. The health center hosts an annual memorial vigil to commemorate those who are represented on the wall and especially those who have died in the recent year.

Patient Population

The organization serves only people who are experiencing homelessness, defined as any person who spent the previous night in an emergency shelter, at a motel, temporarily in the home of a friend or family member, or in a location not intended for "human habitation" such as an abandoned building, a vehicle, or otherwise outdoors.

The patient population is constantly in flux, although some patients are consistently and chronically homeless. Some fall in and out of homelessness and return cyclically for services at the health center. The organization continues to serve patients who were formerly homeless for up to 12 months after they are formally housed.

Ninety-two percent of the patient population are adults between 20 and 64 years of age; almost two-thirds (63%) are male. Many male patients are severely mentally ill, and substance use is a significant issue in designing services for the patient population. One-quarter are living on the streets (25%), while about 26% are residing in temporary shelters. The patient population includes some females (37%) but very few families with children. Pregnant women are able to access health care services through the expansive midwifery practice at the University of New Mexico and throughout the service area, which are able to handle their special medical needs.

AHCH administration and clinical staff link children in homeless families to health care services elsewhere to address the intensity and variability of their particular mental health needs. Albuquerque has family shelters, some of which include childcare services. In addition, health care services are more widely available to children from the private health sector than for adults. However, for children at the AHCH health center, there is a separate, brightly decorated waiting room for families.

Informants were asked about any changes in the demographic characteristics of people experiencing homelessness. Case study participants observed that in recent years, new patients have presented with higher medical complexity from multiple comorbidities and chronicity. They speculated that, based on needs assessments, the homeless population may now include more elderly than in the past, partly due to an uptick in the number of grandparents who are raising grandchildren and experiencing homelessness or people falling into homelessness at a later age. Raising children creates economic stress on the incomes of the elderly, which may result in loss of housing.

People of color are disproportionately represented among the homeless population. Native and African American/Black populations have disproportionality higher rates of homelessness, as does the transgender population. According to the service area's 2017 Point-in-Time count, Hispanic men with children who were experiencing homelessness were more likely to be living on the streets or in shelters instead of in temporary or supportive housing compared with other demographics.

Case study informants discussed the importance of breaking stereotypes and improving understanding of the significant complexity and diversity of social and health needs within the population. Studies have shown that approximately 60% of the homeless population has worked at least part of the time in the previous 6 months. Those who work sometimes also encounter wage theft from employers who may hire

them at a job center on a daily basis and then fail to pay a fair wage, pay them less than promised, or do not pay them at all.

The clinic's patients were described as experiencing higher rates of poverty than in the past; more patients seem destitute as wages continue to fall further behind costs of living. The living wage required to afford an apartment in Albuquerque is estimated at $15.35 per hour. A person working at minimum wage ($8.45 per hour in New Mexico) would need to work 68 hours a week to afford a 1-bedroom unit in Bernalillo County. In addition, economists estimate a gap between need and supply of approximately 76,000 housing units in the metropolitan area.

AHCH manages 230 housing vouchers, which are tied to supportive services to help end homelessness and keep people housed. AHCH also utilizes motel vouchers for patients in need of respite care after discharge from inpatient hospital care or who are incapacitated by serious injury or illness. Some medical beds are also available at shelters.

A small minority of the health center's patients are in permanent supportive housing. Usually, available vouchers are allocated to adults with chronic health conditions and some families with children. However, even those vouchers are insufficient in number. Many are for studio or 1-bedroom apartments, which are unsuitable for families. Although construction of affordable housing is occurring in the metropolitan area, a service area fair housing assessment reveals a continuing need for affordable housing units. Despite the identification of secure housing as a primary need in the patient population, a solution to the problem is often elusive.

Specialized Approaches to Delivery of Health Services

AHCH enables access to health services in numerous ways, including supporting outreach services, structuring low-demand entry settings, and offering comprehensive site-based services. All services are mindfully designed and heedful of personal choice, dignity, and respect for the patient. Both leadership and clinicians hope that by addressing the health-related causes of homelessness, AHCH is helping people find solutions to end their homelessness.

Among the challenges in engaging the patient population to receive oral health services are patients' anxiety and competing priorities; overcoming these in order to get patients into care and to return for care requires creativity on the part of the oral health program. Those suffering from posttraumatic stress disorder (PTSD), which is common in populations that have experienced personal trauma, are hypervigilant about any perceived danger or risk. In addition, even though potential clients may be aware of the services available at AHCH, they may be unable to get to the center to access them.

Case study participants discussed the importance of trauma-informed care, recognizing that trauma is not only part of the formative experience of the homeless but also an ongoing feature of life as a homeless person. Threats to personal safety and exposure to health risks are a daily experience for many without stable homes. There are many behavioral health needs and crises among the patient population with ongoing use of hospital emergency departments, especially those at nearby University of New Mexico Hospital, Loveless Hospital, and Presbyterian Hospital.

The homeless encounter many challenges. People living on the streets—described by case study participants as a potentially violent environment—are at greatest risk. Some experience severe mental illness, a status which is, at times, confounded by substance use disorders or chronic health conditions. Additionally, the effects of poverty often shape negative outcomes, from poor health status to lower levels of employability to mortality. Poor nutrition, the adverse impacts of weather, injuries from falls or abuse/assault on the street, and other factors all portend exacerbations of chronic mental or physical illness for the homeless population.

The following are effects of homelessness described by AHCH as increasing the complexity of helping homeless individuals[11]:

- Inadequate nutrition
- Uncertain diet
- Overcrowded shelters and exposure to infection and pests
- Unhealthy and dangerous environments, including lack of personal safety on the streets and in public places
- Exposure to weather and temperature extremes
- Lack of access to facilities for toileting and personal hygiene
- Chronic stress
- Sleep deprivation
- Extreme poverty
- Criminalization
- Lack of health and dental insurance
- Lack of access to social, medical, behavioral health, and dental services
- Personal and emotional isolation from the larger community

Many within the population are forced to live in vehicles or in parks or other public spaces where they are exposed to verbal or physical abuse from the general population. Some individuals are subjected to beatings or injuries, even resulting in death. People who live on the street will look for isolated areas where they can sleep to minimize exposure to these dangers. However, such places are difficult to find in a large city.

In addition, many homeless people are forced to make poor decisions relative to their health care, having to choose between paying for food, getting to a shelter, or taking day labor opportunities that make it impossible to prioritize health. Homeless individuals have few resources; every day they confront the question of what to do with what they have. Thus, buying medicine may be a low priority when one needs to eat.

About 77% of patients at AHCH are Medicaid eligible. Many clinical encounters are for emergent medical issues rather than preventive care. In 2017, patients made 8,592 medical visits, 3,783 dental visits, 5,255 behavioral health service visits, and 4,351 social service visits. AHCH provided 783 nights of medical respite for patients in need of those services.

Community Outreach

AHCH deploys outreach workers to engage people who are homeless in their own environments to triage need and educate about services available at the health center. These contacts are essential because the personal relationships that develop between the outreach workers and the patients often make the person who is homeless more receptive to receiving care from clinical providers at the health center.

The outreach teams, which integrate medical and social service providers and others, visit locations where people who are homeless typically congregate, such as shelters, transitional housing units (including certain motels), meal sites, and other locations. Some outreach is also conducted on foot on city streets by amplified outreach teams. In addition, AHCH has placed a client advocate at the main library in Albuquerque to engage and refer people in need of services.

AHCH collaborates with other community organizations in this endeavor. AHCH also targets outreach to particularly marginalized populations, including sex workers and intravenous drug users, by visiting certain motels, detention centers, and shelters where people are known to gather. These outreach teams provide specific services appropriate to the patients to promote harm reduction, such as screening for sexually transmitted diseases, pregnancy testing, syringe exchange, HIV/hepatitis C testing and referrals, HIV/hepatitis C prevention and education, and so forth.

AHCH staff also conduct "inreach" at the AHCH-sponsored resource center, where homeless people take showers or use the computers. The organization makes about 10,000 outreach contacts annually to engage new patients and to build trusting relationships, which are essential to successful patient engagement.

Providers

AHCH is staffed by an extensive team of professionals working in administration, as clinical providers, or as allied health or support staff. Two physicians and 2 nurse practitioners (NPs) provide the primary medical services. Oral health services are provided in 5 dental operatories by 1.4 full-time equivalent dentists, 1 volunteer dentist who contributes about 4 hours per week, a dental hygienist (DH) who works half time, and 3 dental assistants (DAs). The counseling and therapy team includes 4 clinicians, 1 clinical director, and 2 psychiatric NPs. AHCH employed the first psychiatric NP in 2003 and added a second in 2014 because of behavioral health initiative expansion funds.

Retention of clinical staff is always a challenge with provider shortages and competing salaries in larger health care settings. While salaries at AHCH are competitive with the local market, the patient population presents more difficult challenges than are usually encountered in medical environments, which contributes to staff attrition. The administration makes a concerted effort to recruit employees who are mission driven. Once hired, employees are encouraged to be attentive to self-care, especially because of risk for burnout.

AHCH has developed a crisis intervention team to address emerging issues that arise due to patient volatility at the health center. Many patients suffer from PTSD for a variety of reasons, including childhood trauma or service in the military. Some are homeless veterans; others were previously incarcerated; some have persistent depressive disorders; others suffer from schizophrenia. These conditions make it necessary to have a crisis team to protect both patients and staff.

Efforts at Service Integration

Cross-disciplinary care is important to any clinician or support staff working with the homeless. Because most patients at the health center are in chronically traumatic conditions, the model of care must be comprehensive and integrated to best address the needs of the population. The complexity of patient needs requires that clinical providers regularly engage in transdisciplinary communication and referral to help their patients.

AHCH was peculiar among the 6 case study organizations in that interview participants noted a level of integration of oral and behavioral health services that was comparable to the level of primary care

integration in their organization. One reason for this was that dentistry had been introduced early and was therefore an established clinical service at the health center.

Moreover, the predominance of mental illness in the patient population emphasizes the need to focus on oral health in this population. Homeless patients with anxiety, paranoia, and depression in addition to other co-occurring medical conditions experience increased risks for oral disease due to oral neglect, use of psychotropic medications with oral side effects, and abuse of other legal and illegal substances that affect the oral cavity. Interview participants acknowledged that dental anxiety, compounded by long-unaddressed oral health needs because of the lack of access to affordable and relevant care and, sometimes, the circumstances of homelessness, is an issue for many.

Informants were clear that both formal and informal efforts at integration pervade the organization. All medical providers inquire of each patient if there are other services that the patient might need. These providers easily accomplish warm handoffs to co-located behavioral health and dental professionals; medical providers will also accompany a patient to the dental clinic to ensure that a patient is immediately triaged and treated or scheduled for needed services.

The dental clinic permits walk-in appointments, which is especially important for a population that has only intermittent means of transportation. Patients who present as walk-ins may wait, but each is triaged and provided with palliative services until indicated services can be scheduled. In a typical week, there are approximately 60 walk-in patients and 40 scheduled visits. This is necessary to effectively serve the target population. Approximately 23% of the health center's primary or behavioral health patients access dental services at the AHCH health center.

At the time of the case study, primary care, dental, and behavioral/mental health providers at AHCH were involved in a formal initiative to identify and manage xerostomia (dry mouth), which is a risk factor for dental disease and a side effect of many medications. It is especially problematic for patients with diabetes, those taking psychotropic medications, and those living with an opioid use disorder managed with buprenorphine, which is often dosed sublingually. The typical course of treatment for xerostomia involves both education and prevention. Dental providers discuss the potential ill effects of dry mouth with patients and place fluoride varnish or silver diamine fluoride on the patient's teeth; clinicians also encourage more frequent dental visits. The xerostomia initiative sought to identify any patients on medications that might cause dry mouth, to ask these patients whether they had a dentist, and to ensure that they were navigated to services.

In addition, dental providers monitor the blood pressure of every patient; dentists also track patients with diabetes through routine measurement of blood sugars at the dental clinic and refer back to primary care. Dental patients are screened for tobacco use and provided with a brief cessation intervention.

Dentists and other members of the dental team work directly with behavioral health providers when patients exhibit anxiety during a dental visit. Members of the behavioral health team are expert at calming patients for dental work. Some behavioral health clinicians at AHCH are trained in eye movement desensitization and reprocessing therapy and have successfully used it with particularly anxious patients to manage stressful situations, including dental work. This therapy helps patients to identify and manage their thoughts and feelings. Some therapists also use bilateral stimulation, either visual or auditory, to help patients reprocess memory of an anxiety-producing trauma. This stimulation is intended to reduce the negative emotions associated with a previous trauma that results in anxiety in a present situation. The dental clinic provides a range of services for patients, including root canals and stainless steel crowns. Almost 30% of patients complete their dental treatment plans at the clinic, which is high considering the transient nature of the population and the difficulties associated with people arriving for scheduled health services.

Medical providers are also involved with meeting the behavioral health needs of the population. There is ongoing interchange between clinical disciplines to effectively manage both physical health and mental health conditions. Primary care clinicians are adept at prescribing medications for acute mental health diagnoses because they have access to behavioral health counselors and the psychiatric NP for consulting. Their confidence in prescribing these medications is increased by the presence of psychiatric clinicians in the health center who can act as fail-safe providers, especially for the medically/mentally complex.

All services are designed and delivered with the experience of homelessness in mind and with an effort to providing comprehensive care. Two mornings each week, clinic hours at the health center are specifically reserved for walk-in patients; no patients are scheduled on those days. This was described as a productive strategy to promote utilization of health services in the homeless population.

Process Fostering Integration

Staff Engagement With Organizational Mission and Training

Significant formal annual planning and evaluation occurs in the health center and is driven by soliciting staff at all levels for their input.

Training is an important way to provide health center staff with the tools to effectively work with the patient population and to foster integration of services. Staff orientation begins with the basics about the organization and its mission, the services provided, and the needs of the patient population.

All staff receive de-escalation training, an overview of the medical and behavioral health needs of the patients, and instruction around trauma-informed care. Every month, the staff receives in-house training; many of the topics selected for these educational sessions are related to behavioral health. Topics vary, however, and include such diverse subjects as chronic disease, nutrition and accessing nutritional food, spirituality, suicide prevention, and culturally knowledgeable care for the transgender population.

Every Wednesday, the health center is closed to patients to enable time and space for cross-staff team meetings that include staff from every discipline, agency staff meetings, meetings about high-risk patient care management, and meetings about difficult-to-engage patients. There are also systemwide strategies and projects to foster service integration.

Case study informants remarked on the primacy of informal communication processes that develop as a logical result of building health care teams inclusive of a variety of health and social service disciplines. These warm handoffs are essential to providing patients with a range of necessary health services and to successfully creating a continuum of care.

Electronic Health Record

Providers record patients' history, progress notes, medications, and so on in an integrated electronic health record (EHR) system that houses an organization-wide treatment plan for each person. This centralized treatment plan is continuously updated by primary medicine, dental, social services, and other providers, making it an excellent tool to manage patient follow-up and to obtain metrics to measure quality and volume of services. Each patient's health record contains a common medication list used by all providers. In addition, the EHR system provides easy access to case notes from the various clinical disciplines. Patient data are also used to accrue measures of service provision and quality of care that guide performance improvement processes at the health center.

Staff perform ongoing chart reviews to collect a range of performance data, including service frequency and type, patient utilization patterns, quality of life measures, and efficacy of case management services. Data selection is driven mainly by the funding mechanisms and their specific evaluation and tracking requirements related to reportable outcomes. Overall, the metrics of interest are relatively uniform across funders. AHCH consistently achieves its goals and objectives; at times, the health center even overachieves.

Patient Engagement

AHCH works to engage patients in immediate and ongoing care when they come to AHCH for their health care needs. AHCH conducts engagement surveys of patients to collect data on length of time receiving services at the AHCH; various quality of life indicators in the domains of behavioral health, social services, and housing status; and receipt of services, including case management and clinical indicators such as screening and prevention measures. Clients also provide feedback and information through a client leadership committee comprising at least a 51% majority of patients. Between one-quarter and one-third of the members of the Board of Directors are currently or formerly homeless. AHCH staff mentors select clients as client leaders and nominate them to these positions. Many of these leaders have been in recovery programs and are able to provide well-rounded ideas of what needs to happen for patients.

Addressing the Social Determinants of Health

Clients of the health center are the beneficiaries of services in both the medical and social realm. Every attempt is made to connect people to other services. Each patient completes a housing assessment and is connected to a primary or behavioral health care provider, as needed or desired. Two community health workers and a team of social service providers work with patients to access wider services in the greater Albuquerque community.

AHCH has a $50,000 budget to provide patients with daily bus passes to address transportation barriers. AHCH also participated in the development of a community services shuttle bus, which is sponsored by the city. The shuttle transports people to a pharmacy, a food bank, and other locations as appropriate and as needed.

People who are homeless, regardless of whether they are health center patients, access the AHCH resource center on an ongoing basis. The center's offerings help the health center staff to seamlessly engage new patients. There is a primary care exam room in the resource center as well as social service meeting rooms to help people find needed community supports.

AHCH Engagement With the Larger Community

The health center hosts an art therapy and access-to-the-arts program called ArtStreet, which is accessible to any person in the homeless community as well as other community members who

wish to work with a variety of media to create art. The art center is a large studio space with an extensive array of supplies and multiple work surfaces. The products include painting, sculpture, collage, and other media that are eventually displayed in the health center and in the community. Art therapists also coordinate group therapy sessions for subgroups of clients who frequent the art studio.

Funding for Services

Informants remarked on an increase in the number of homeless people who do not qualify for Medicaid benefits due to income that marginally exceeds eligibility requirements for single persons. The New Mexico Medicaid program provides a limited adult dental benefit; the benefit provides 1 cleaning a year, restorative care (fillings), crowns under some circumstances, and full or partial dentures on a time-limited basis. Services that fall outside the scope of the benefit, including root canals, are generally provided free of charge to patients at AHCH.

The dental program services at the health center are subsidized by city grant funds, which are awarded to grantee organizations to support access to oral health and other services that are lacking in the service area, especially for patients who are homeless. Some of these funds are pass-through funds from the US Department of Housing and Urban Development (HUD).

In the early years of the organization, AHCH had no designated billing department because it was unnecessary. The organization had 40 different funding streams, mainly federal, state, and local grants or foundation money; clients paid nothing for the services they received. Currently, AHCH has numerous funding streams. One of the largest is the federal grant for the FQHC from the US Health Resources and Services Administration (HRSA), and the other is revenue from patient services. Now that much of the revenue comes from the state Medicaid program and other insurers, there is a need for administrative staff, including billing specialists, to manage revenue and expenses.

New Mexico Medicaid is largely administered through managed care organizations. AHCH bills under 2 different prospective payment system (PPS) rates depending on the services provided to the patient. The PPS rates are not sensitive to acuity, which is difficult for AHCH as the organization provides services to a large number of patients with multiple medical comorbidities and extensive social service needs. Costs to provide high-quality clinical services continue to rise, and the special characteristics of the population require additional expenses not usual for many FQHCs, including added security.

The health center also has multiple grants from HUD, the US Substance Abuse and Mental Health Services Administration (SAMHSA), the city of Albuquerque, and various county-sponsored grants. Approximately 6% to 7% of the financial resources of the health center are from philanthropic donations.

HELP/Project Samaritan Services (PSI)/Brightpoint Health
Inwood Avenue Clinic
Bronx, New York

## History and Background of the Organization
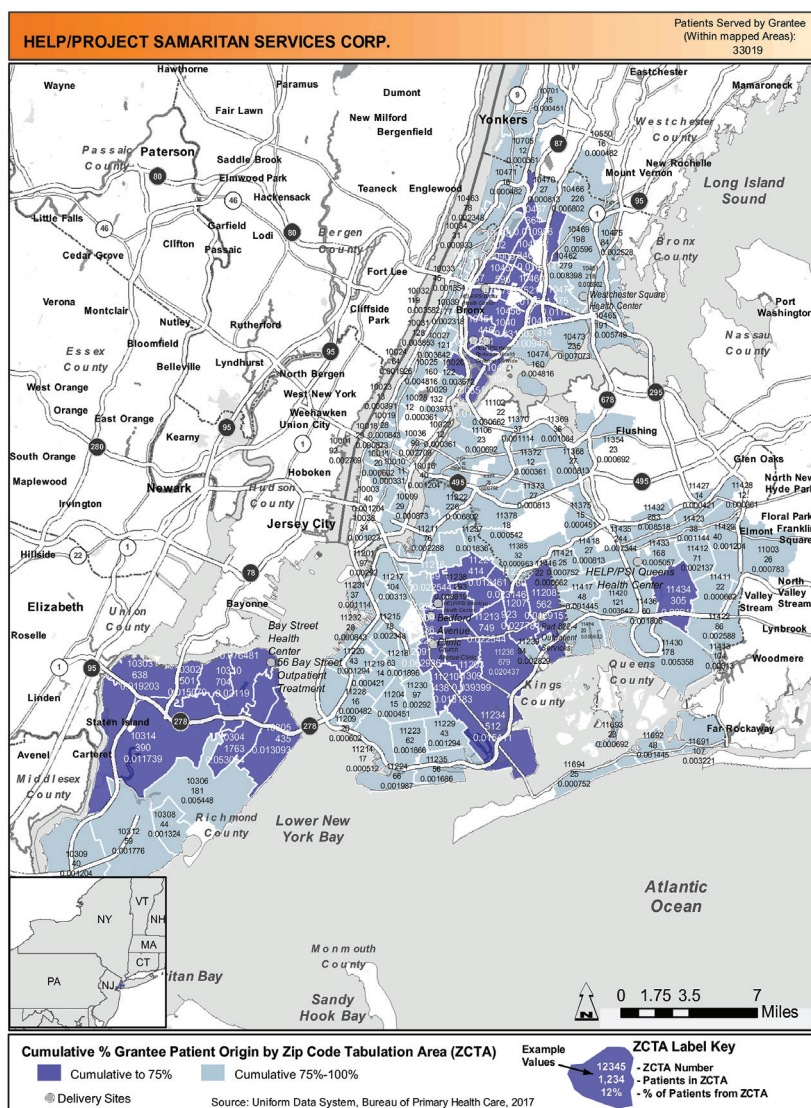
HELP/Project Samaritan Services (HELP/PSI) was founded in 1990 when 2 organizations joined to provide coordinated health care services for people diagnosed with HIV in New York City (NYC), many of whom were struggling with substance use disorders. At that time, most services provided by the organization were offered in a residential facility in the Bronx. The organization began providing case management services in 1994. By 1997, HELP/PSI had established several Adult Day Health Care Centers for HIV-positive people.

Over successive years, the organization opened primary care centers in Brooklyn, the Bronx, and Queens. The first dental center opened in the Bronx in 2010.

The organization received official designation as an FQHC and as a Level 3 Primary Care Medical Home (PCMH) in 2012. In that year, the organization also opened a behavioral health center in the Bronx. HELP/PSI expanded its services to include community-based services for lesbian, gay, bisexual, transgender, and queer (LGBTQ) people in several of its health center locations and became a designated Health Home in collaboration with the Visiting Nurse Service of New York (VNSNY). The Health Home care management program is the largest of its kind in the area.

In 2015, HELP/PSI changed its name to Brightpoint Health and expanded services to each of the 5 boroughs of NYC (Manhattan, Brooklyn, the Bronx, Staten Island, and Queens). Brightpoint Health currently operates in 6 locations in the Bronx and in 20 other locations throughout the other boroughs.

In addition, the FQHC sponsors the Alpha School, located in the Bronx, to help young adults between the ages of 17 and 21 years prepare for the New York State high school equivalency examination. The FQHC also has a Bronx-based program for young adults that provides comprehensive behavioral health, primary medical, and HIV prevention services.
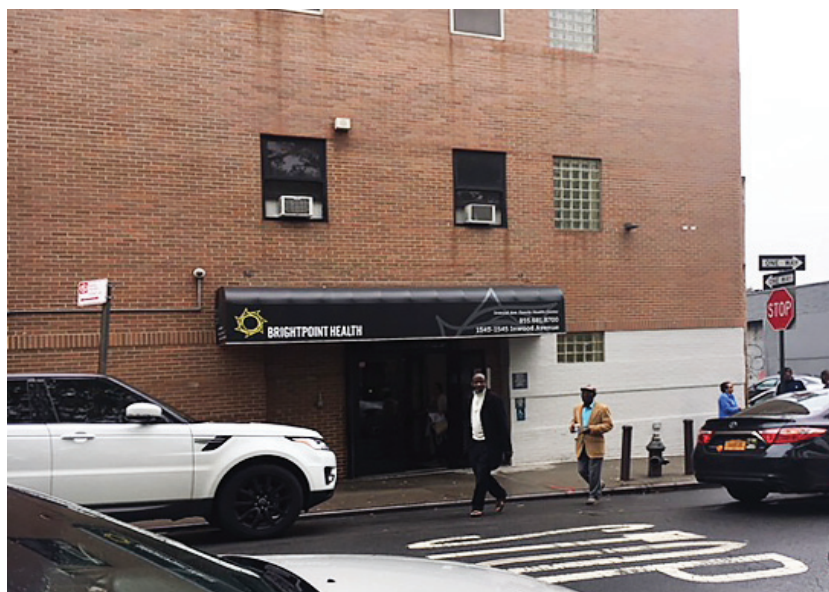
Patient Population

The Inwood Avenue clinic of Brightpoint Health, at which this case study was conducted, welcomes people "with nowhere else to go," many of whom have significant life problems. Seventy percent of the patients served in the clinic are homeless; many have co-occurring medical, behavioral health, and/or substance use disorders. A proportion of the patient population is HIV positive.

Street homelessness is especially difficult in NYC, where the streets are not only frightening but, at times, also dangerous. Homeless patients include those who are living on the streets; those living in unstable situations, including temporary or transitional housing; and those living on an emergency basis with family, relatives, or friends. Problems with homelessness in the NYC boroughs have increased since the Section 8 housing program was closed to new applicants in 2009. In addition, NYC has an ongoing influx of homeless people from other states, perhaps driven by the misguided belief that there are more opportunities for employment in a large city than in their states of origin.

Despite some current efforts by the government and others to increase the number of low-income housing units available to qualified city residents, growth in the homeless population continues to outpace new supplies of housing. Many buildings with low-income units use a lottery system to select potential residents due to the overwhelming need. The city purchased old motels as transitional housing for people in crisis, but even these cannot accommodate the rates of homelessness. Case study participants indicated that 100 new people enter shelters throughout NYC every day. In the Bronx

alone, there are approximately 100 shelter organizations providing various services to people experiencing homelessness.

Patients who are HIV positive have priority for automatic placement in housing programs managed by private providers of single room occupancy (SRO) residences in which inhabitants share kitchens and bathroom spaces. Women with children and victims of domestic violence receive preference when housing becomes available.

Case study participants observed that the majority of the homeless population do not abuse substances; most are homeless because of a change in life circumstances resulting in a personal economic downturn. The homeless population includes the working poor with insufficient income to pay the extremely high rents commanded for city housing.

Brightpoint Health now requires that all new patients first establish as primary care patients at one of its affiliated clinics. However, the FQHC provides an exception for certain patients who are already well served by other health networks, including transgender people. Brightpoint serves a substantial number of patients who identify as LGBTQ, many of whom encounter special difficulties with finding competent health care.

Community Kinship Life (CK Life), a community-based organization in the Bronx, provides comprehensive services for transgender people, including primary medical care and support groups. CK Life is recognized as the community expert for providing hormone treatments to effect biologic marker alterations that are required to legally change gender and name. Brightpoint acts in a complementary/wraparound capacity for CK Life's patients by providing dental and mental/behavioral health services for these patients.

In 2018, Brightpoint provided services to 24,120 unique patients, many of whom were adults, in more than 130,000 patient encounters. Brightpoint recognized that in several of its health center locations, it was not appropriate to mix children with the general patient population. The waiting rooms in some clinics may contain people with various mental health problems that can stimulate bad behavior. Brightpoint now offers pediatric primary care and dental services at the Inwood Avenue clinic only on Saturdays. The weekend clinic schedule began about 2.5 years ago. The pediatric clinics serve between 15 and 20 children weekly. In some clinic locations, such as Staten Island, the patient population is more typical and includes children; in those health centers, adult and pediatric services are provided during regular clinic hours.

The FQHC aims to create a peaceful and welcoming environment for all of its patients. Patients travel to the Inwood Avenue clinic from as far as Staten Island using the ferry or the shelter transfer buses to the Bronx because they are comfortable with providers at the clinic.

Specialized Approaches to Delivery of Health Services

Anyone spending time in the waiting room at the Inwood Health Center would gain an appreciation for the complex needs of the patient population served at the clinic. It is readily apparent that health center staff are personally engaged with meeting the needs of patients on an emergent basis. Front desk staff are responsive and helpful; clinical staff know many patients by name and are freely approached with questions as they pass through the patient waiting area on the way to their respective clinics. Although the space is small, the atmosphere is welcoming.
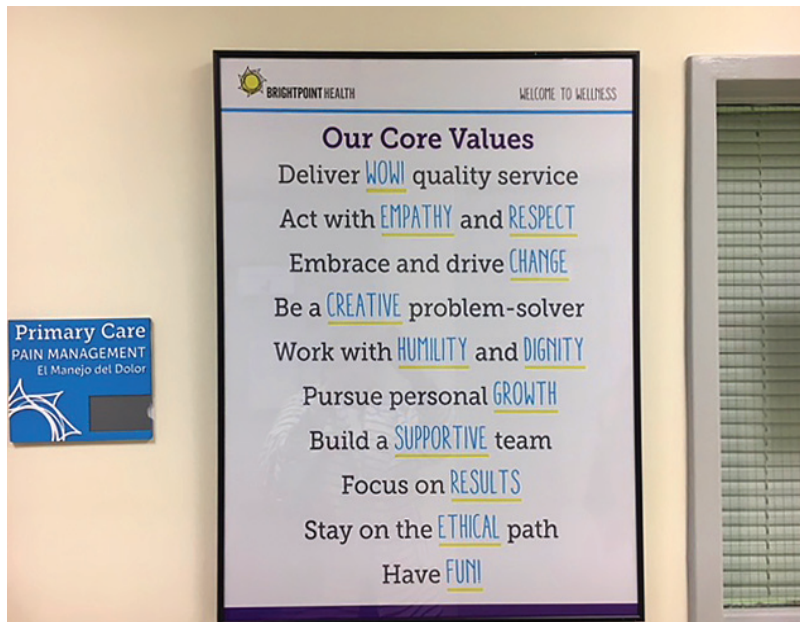
Staff base their care delivery model on the principles of trauma-informed care mixed with harm reduction strategies, recognizing that many patients have experienced and continue to experience trauma because of their living conditions and other circumstances. The FQHC positions itself as a safe place for patients and operates on the theory that services must be oriented to their special characteristics.

Clinicians discussed a harm reduction approach to patient care as more productive and useful to the clinic's patients, many of whom are marginalized and difficult to engage. For instance, while all providers would encourage complete abstinence from substance use, many also recognize that patients struggle with judgmental care. Patients are more willing to modify behavior or accommodate reasonable suggestions by a trusted professional who can present an acceptable compromise to abstinence.

One nurse case manager spoke of a recent encounter with a patient who had uncontrolled diabetes and was also HIV positive. The patient abused alcohol and was not adhering to suggested medication schedules. The primary care provider was concerned about reducing HIV viral loads in order to more effectively control the diabetes. Clinicians proposed a simple solution, counseling the patient to remember to take the HIV medication with the first sip of wine each day. Because alcohol did not interfere with the absorption of the HIV medicine, taking both at the same time would not be harmful. The patient agreed and, in fact, was able to effect this change.

Community Outreach

Brightpoint has several outreach workers on "business development" teams who travel on dedicated vans to shelter organizations in the 5 boroughs to triage patients on a daily basis. The vans then transport both scheduled patients and those with acute or emergent needs to the various clinic sites for services. This mechanism, while helpful to patients, is not ideal for the clinic, as it means that a large group of patients arrive at the same time rather than in a staggered format for individual appointments. This practice affects the wait times for services. Sometimes, the best that can be offered to an unscheduled patient is a thorough screening and palliative care.

The FQHC also sponsors a mammography van that travels the circuit of organizations serving the homeless to provide screening and diagnostic services for women. The FQHC recently attempted to provide mobile medical and dental services in and around the Bronx. Leadership of the FQHC and medical and dental clinicians recognized a need for these services in the target population and hoped that a mobile model might improve access.

The FQHC purchased and equipped 2 vans, one for medical services and another with dental operatories. However, the organization quickly realized that there were major infrastructure challenges to this endeavor due to roadways with low overhead clearances from subway trestles. In addition, the constant traffic congestion and narrow streets resulted in difficulty finding parking places for the vans on a predictable and repeated basis. At times, the vans would be required to park on sidewalks in order to provide services. The vans also experienced significant wear and tear due to the conditions of the streets and the winter weather in New York. Clinicians found the vans useful but quickly realized that financial sustainability would require scheduling patients for services rather than relying mainly on walk-in patients. The physical logistics such as the constricted roads presented serious barriers, so these mobile programs ended.

Providers

This large FQHC has an extensive cadre of physicians in both primary and specialty medicine, NPs, dentists, nurses, DHs, medical technicians and assistants, psychiatrists, psychologists, and other behavioral health clinicians. The FQHC employs approximately 800 people in the various locations throughout the 5 boroughs.

The behavioral health staff at the Inwood Avenue clinic includes a psychiatrist, 5 psychiatric NPs, and 5 licensed clinical social workers. At the time of the case study interviews, there were 3 openings for behavioral health staff. Social workers treat approximately 10 patients per day in individual or group therapy sessions, including both men's and women's therapy groups.

The FQHC has been fortunate to have some dentists who have been with the clinic for many years and others who are seeking loan repayment for a 3- to 4-year work commitment.

At one time, the FQHC tried to participate with the pediatric dental residency program sponsored by Staten Island Hospital, but there were difficulties, including the lack of an in-house pediatric dentist to supervise the resident.

The Inwood Avenue clinic has an onsite pharmacy operated by an outside contractor as well as onsite laboratory services. While medication prices at the pharmacy are reasonable, a portion of the population has no insurance. When providers encounter an uninsured patient, they provide sample medications, but that is a difficult strategy for long-term medication management.

The clinic has a common reception area where patients are triaged to appropriate services and where an insurance and benefits counselor works with patients to certify or recertify them for Medicaid or select a health care plan through the state marketplace. Only a very small percentage (3%) of patients at the health center carry private insurance.

The organization has in-house security staff at the Inwood Avenue clinic, as patients are sometimes abusive or even psychotic; these behaviors are often attributable to substance use, particularly K2 (synthetic marijuana).

Efforts at Service Integration

Efforts to integrate services include both system-wide processes and individual staff effort. As one informant discussed, all employees are trained to understand the importance of viewing every interaction in terms of a patient's total health care needs.

The FQHC uses a team model of care delivery. Each patient team includes a clinical provider, a nurse, a medical technician or assistant, and a case manager. The health center also provides HIV specialty care in their Adult Day Health Care programs that address the specific needs of the population. In 2017, 78% of

the health center's patients with HIV achieved desired viral load suppression levels.

One case study participant remarked that integration begins at the front desk. All employees who interface with patients in the reception area are trained to obtain essential demographic information and schedule services. Each is familiar with the clinicians and the services at the particular clinic site. Front office staff and others are instructed to repeatedly query patients about the need for services other than those for which they have an appointment. Intake staff will also ask if there are children or others in a patient's family who might also need health services. Case study participants provided an example of "conscious practice" by staff intended to meet the specific needs of patients. Front office personnel will make a concerted effort to schedule patients who have previously exhibited anxiety in a crowded waiting room for a first-in-the-day appointment, when the waiting room is less crowded.

Informants provided another example of staff awareness of patient behavior. Triage personnel, located in the reception area of the clinic, noted a young woman antagonizing other patients and immediately summoned clinical staff. The patient, who was newly homeless, was introduced to the health center's crisis team for triage; she was eventually admitted to a hospital.

When an emergent situation that requires hospital care arises, the patient is transported to their preferred hospital by ambulette. If the patient is eligible for Medicaid (as many are), this service is paid for through the transportation benefit.

On the day of the case study, the waiting room at the Inwood Health Center was full to overflowing with patients for both scheduled and walk-in care. The daily walk-in list is extensive, especially for primary care–related complaints. The clinic rule is that every patient will be seen, but walk-ins are cautioned about the necessity of waiting in line.

Although the Inwood Avenue clinic encourages patient appointments, patients may not appear when expected due to various difficulties with appointment compliance related to homelessness. These include difficulty finding transportation, unexpected incarceration due to events on the streets, or even illness. Homeless patients in NYC are also mobile within the city environs, so that a homeless person might now spend time in a borough distant from the health clinic in which services were originally provided.

Many homeless people now have cell phones with which to call the clinic and through which the FQHC can reach the patient. If staff encounter difficulty in finding a patient who has failed to show for follow-up care, they will inquire of other homeless organizations in the area about the patient's whereabouts. The NYC Department of Health will also help to locate patients assigned to the Health Home. Patients who are part of the Health Home program at the FQHC receive intensive case management, which ensures access to all necessary available services. The VNSNY, who is the managing partner of the Health Home, triages eligible patients and navigates them to the health center.

Even though daily schedules are relatively unpredictable, clinic staff are able to efficiently manage patient caseloads because they understand patient behaviors. As an example, one of the part-time primary care physicians at the Inwood Health Center has a strong patient following. Staff are generally certain that most of that physician's patients will show for their appointments, as the patients would otherwise be required to see another provider or wait a substantial amount of time to be rescheduled. As a result, this provider has very limited capacity to see walk-in patients.

Clinicians are instrumental in integrating services. All new patients to the clinic are triaged and see a medical provider. Primary care providers ask patients, for example, when they last saw an eye doctor, a dentist, a behavioral health specialist, or a podiatrist. These efforts are encouraged by electronic alerts in the clinical EHR to ask about other health services. The health history completed by all patients includes information about their last medical or dental exam, although the registration and history forms completed at intake primarily assess medical and mental health history and separate forms are used to collect dental history information.

The FQHC has a triage staff that manages calls from patients to determine exactly which clinical area is appropriate. For instance, if a patient complains of pain in the jaw, staff will suggest that the best place to start is with the dental clinic rather than primary care. Knowledgeable triage staff helps patients get efficient care and helps the clinic to effectively manage patient volume.

Several screenings of patients routinely occur. Patients are prescreened during triage and are subsequently rescreened by a nurse who always asks about patient well-being. If the nurse observes a change in affect or overall presentation, he or she will ask a behavioral health specialist or primary care clinician to consult. Dental screenings are also common. All children from birth to 9 years of age have a caries risk assessment. The age group for risk assessment will soon expand to include older children.

The dental clinics at the health centers have a high compliance rate for scheduled appointments, which are in great demand. Patients are aware of long wait times after a missed appointment. At the Inwood dental clinic, dentists treat between 13 and 15 patients each day, 4 of whom might arrive for emergent, walk-in care.

The volume at the Staten Island dental clinic is a bit higher, averaging 23 to 25 patients per day, including approximately 5 walk-in patients.

Case study informants discussed the problem of substance use in the population, noting that despite not observing large increases in rates of abuse, there are higher rates of mortality in the user population due mainly to fentanyl-laced heroin and greater use of K2, which is a very cheap but highly problematic drug. They also commented on increasing abuse of benzodiazepines in the population.

Many of the primary care providers at Brightpoint are certified in MAT to manage patients with addiction disorders on buprenorphine/naloxone. Providers who prescribe in this program see between 20 and 30 patients per day for medication management.

Thirty-eight percent of patients system-wide receive dental services through one or another of the FQHC's dental clinics. Informants pointed out that patients are aware that dental providers at Brightpoint do not prescribe opioids in any of the dental clinics sponsored by the FQHC. The dental staff believes that tooth preservation is an important goal.

Clinical staff know that dental pain is exacerbated by prolonged or extensive treatment services. Therefore, clinicians limit the extent of services at each encounter (eg, no quadrant dentistry, no third molar extractions) to minimize post-treatment pain, to accommodate patient anxiety, and to reduce frustration levels for patients, many of whom have mental health comorbidities. The dental clinics are each equipped with Panorex imaging technology, which allows dentists to visualize and diagnose cancerous lesions. The FQHC's dentists refer complex patients to several oral surgeons in the Bronx or to the New York University dental clinic for extensive or involved surgical care.

The dental clinic is profitable for the FQHC because dental services are in high demand and patients generally show for appointments. Walk-in/dental emergency patients fill schedule gaps that occur due to no-show patients. Dental staff identified the lack of oral health literacy in the patient population as a major cause of acute care visits.

On the day of the site visit, the FQHC was holding a weekly pain management clinic conducted by a physician specializing in palliative care. All patients submit a urine sample for a toxicology screen before any pain management services are provided. The physician prescribes medications that include muscle relaxants and medications for nerve pain (eg, gabapentin) and also uses a variety of other pain management therapies.

Process Fostering Integration

Staff Engagement With Organizational Mission and Training

Case study participants offered that the higher-level processes in the organization always revolve around the organization's core mission and goals, among which is comprehensive, high-quality care for patients. When hiring new staff, recruiters search for people with values that are consistent with organizational values to increase the likelihood of their being attuned to the importance of treating people holistically.

Case study participants commented that much of the recognized success of the FQHC is attributable to its staff and their commitment to the patients and the organizational mission. The FQHC strives to provide a stable environment for patients by recruiting providers from the local community to ensure that staff understand the background and circumstances of patients. According to case study informants, in health centers such as Inwood that serve a complex patient population, it is essential to hire personnel that fit with the culture and understand the importance of being respectful of all people.

The Inwood Health Center has hired former and current patients as staff because they are especially empathetic to patient circumstances. All staff members receive training in cultural diversity, in the special circumstances and challenges of homelessness, and in the core values of the organization, with a focus on improving social and health outcomes for patients. As a result, the staff forms a team that is supportive both of patients and of each other.

Formal and Informal Communication Processes

Health center staff members function as a cohesive team to manage patient care in a demanding environment. While formal referral processes are in place and effective at the health center, efforts to coordinate or integrate services for specific patient needs are facilitated by frequent warm handoffs between clinicians, social workers, and other support staff during each clinic day.

Case study participants commented that it is essential to address a patient's needs while they are in the clinic because there is some uncertainty about follow-up care due to the circumstances of homelessness. In addition, it is imperative to coordinate and integrate health services when the population of patients is not only medically complex but is also experiencing significant life challenges. Doing so requires ongoing communication through both formal pathways and informal interactions with the range of clinical professionals and support personnel at the health center.

Electronic Health Record

The EHR, eClinicalWorks, interfaces with Open Dental, the practice software used for the dental record. Case study participants noted that patients' health records were fully integrated because they are universally accessible, although dental uses a different platform and separate templates. All demographic information is commonly available, but some clinical notes still require access to the dedicated dental record. Providers commented that they were able to use either the health or dental record with ease.

Patient Engagement

The health center had several ongoing initiatives to engage patients. At one point, the health center tried to generate new patients by providing bag lunches. However, some people would come for the lunch and not avail themselves of any health services, treating the clinic as a meal site. Because the program was expensive and failed to have the intended impact, the clinic ended the program. However, free coffee is still available in the waiting room for anyone who wishes it, regardless of patient status.

Outreach services were described by case study participants as critical to the successful engagement of the patient population, especially at the Inwood Health Center. The business development vans, which visit various homeless shelters, also travel to a very large shelter for men in Manhattan. Wards Island Shelter is a relatively dangerous location. To provide some level of safety to those in the shelter, operators have installed 3 levels of security through which anyone entering the multi-building complex must pass. The shelter is a difficult environment partly due to the large concentration of people with complex social and mental health needs. The Brightpoint business development buses transport patients from the island to the clinic for scheduled visits or for emergent care.

Case study participants were complimentary of the health center's patients, indicating that the "patients are pretty patient," especially considering the sometimes long waits for services. While some may act out or become disgruntled, reception staff remains attuned to the emotional atmosphere in the waiting room. Staff will seek help from the nurse manager or security staff if a problem seems emergent.

The organization has medical case managers who handle acute medical issues arising in patients. Office staff run registry lists to identify patients with unsuppressed HIV counts, uncontrolled diabetes, or concerning hypertension who may need immediate attention, and efforts are made to find and follow those patients. The quality control department in the FQHC maintains dashboards for every provider and compiles useful data on case management services and reports on targeted populations, such as those with an HIV diagnosis or those with hepatitis C being treated with ledipasvir/sofosbuvir.

All staff pay close attention to the many needs of patients, including the social determinants of health. For instance, staff will work with patients to find a food pantry, clothing, or transportation services. The FQHC has a fleet of 23 transportation and outreach vans, several of which are wheelchair accessible to allow patients with disabilities to more conveniently access health services. The FQHC transports patients to homeless service organizations and to specialty medical or dental providers across the city.

The FQHC makes a concerted effort to ensure that patients are as comfortable as possible in the health center setting. Center leadership has pizza delivered for patients in the waiting rooms on "Fabulous Fridays," and, as previously indicated, coffee is available at all times to both patients and non-patients.

Engagement With the Larger Community

Hospitals in the metropolitan area contact the health center on a daily basis to alert providers when mutual patients who have been hospitalized are in need of post-discharge services. The hospital will often make an appointment for the patient with the primary care provider at the health center so that follow-up care is in place.

Many of the shelters in NYC require that residents have current negative tuberculosis tests, which helps the FQHC engage the homeless population with receiving medical services. Patients will come to the health center for testing and be informed of other services that are available to them. In addition, housing providers often require a psychosocial evaluation, which also draws people to behavioral health services at Brightpoint. Shelters do not, however, require any mental health evaluations or dental services, so attracting patients to those services is more challenging for the health center. Nevertheless, dental services are in high demand generally and particularly for Medicaid-insured adults, so that the FQHC has no problem filling dental chairs.

Leaving the safety of the primary care setting can be overwhelming for a patient. Clinic staff make an effort not to inundate patents with community referrals for specialty medical services by keeping treatment plans uncomplicated and by doing as much for patients in-house as staff competence will permit. In addition, as it is sometimes difficult to identify providers to accept referrals, the FQHC relies heavily on local hospital systems for specialty care. However, even that is problematic because hospitals do not accept every insurance plan.

When the FQHC provides an external referral, it is not always possible to track whether a patient actually receives the recommended services. In the experience of case study informants, referrals to private providers are an optimal solution whenever possible because these specialists will send clinical notes to the FQHC, which does not always happen through large health systems.

Finance

Funding for the FQHC is from federal grants and reimbursement for services provided to patients under the Medicaid PPS in New York. Approximately 87% of the patient population is insured by Medicaid. Medicaid-insured patients in New York are enrolled in a managed care plan, although some remain fee-for-service by exemption due to disability or medical diagnosis. Because the FQHC serves a high number of HIV-positive patients, the organization also receives Ryan White funds and other state program grants for the HIV-diagnosed population for not-otherwise-covered services.

The approval protocols for some of the health maintenance organizations (HMOs) contracted with Medicaid create additional barriers related to referrals. In New York State, Medicaid-eligible adults are provided with a comprehensive dental benefit, but the managing HMOs vary in what they will allow. Some HMOs will allow for dental prophylaxis only once a year, whereas others will pay for dental prophylaxis twice a year, the current standard of care. The variation in standards and approval requirements among HMOs complicates service delivery.

Colorado Coalition for the Homeless
Stout Street Health Center
Denver, Colorado

History and Background of the Organization
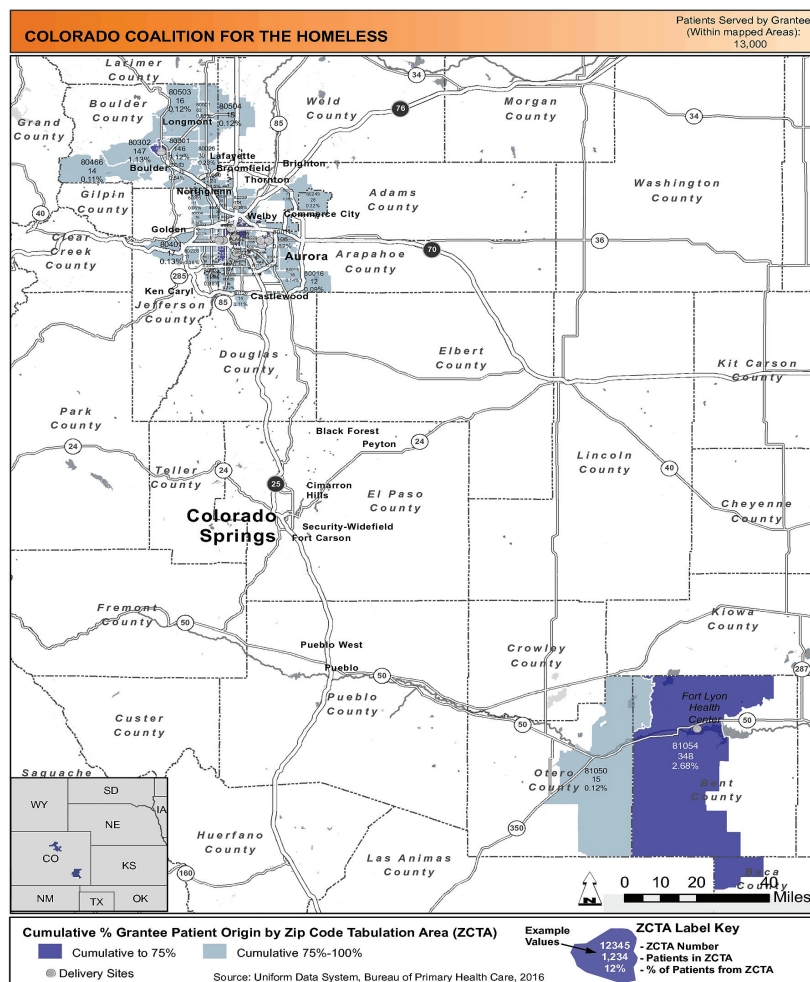
The Colorado Coalition for the Homeless (CCH) has a lengthy history of service integration including social, health, and vocational services for its clients. CCH began as a medical clinic tending to the needs of an increasing homeless population in Denver, Colorado, due to a merging of societal and economic issues that left hundreds of people without homes and forced to live on the streets. The Coalition grew substantially in size and scope over the intervening years, largely due to the ongoing homelessness crisis and a growing recognition that health care must be paired with housing to improve outcomes.

The organization now employs more than 600 people to provide housing, health care, and support services in its main health center and associated satellite clinics, 19 housing properties, and administrative buildings. Staff includes medical and behavioral health clinicians, dental providers, pharmacists, nurses, ophthalmologists, peer navigators, street outreach workers, case managers, and administrative staff in dozens of programs sponsored by the Coalition.

Additionally, the headquarters houses the rental property management company that oversees approximately 1900 housing units owned or operated by CCH throughout Denver as well as the

administration of approximately 2000 vouchers for individuals and families in scattered-site housing. Housing units are designated variously as permanent supportive housing, transitional housing, or affordable housing units. CCH also operates respite beds for the medically fragile.

The Stout Street Health Center of CCH, where this case study was conducted, is an FQHC. The main health center building was designed to be visually pleasing, comfortable, and easy to navigate, with 4 differently colored clinical suites. In order to provide continuity of care, each time a patient visits the health center, he or she returns to the same suite and sees the same clinical team for services.

The first and second floors of the building are clinic floors; the top 3 floors, known as the Stout Street Lofts, are permanent supportive housing units for individuals and families. The Stout Street Health Center is also located directly across from a large complex of additional residential units owned and operated by CCH.

The health center is near public transportation and other services and shelters for people experiencing homelessness. The FQHC serves about 13,000 patients annually through approximately 115,000 patient visits. All patients of the FQHC are currently experiencing homelessness, are at risk of homelessness (eg, experiencing housing insecurity), or were previously homeless.

The 53,000-square-foot main health center, which opened in 2014, replaced the original clinic from 1984. The Stout Street Health Center is a state-of-the-art clinic setting providing primary, behavioral health, dental, vision, pharmacy, and pediatric services at no charge to patients. In addition to this main site, CCH offers health services at several other locations in Denver, including the West End Health Center, Samaritan House, and St. Francis Center, as well as the Fort Lyon Health Center in Las Animas, Colorado. Behavioral health services are also available at the Quigg Newton Family Health Center, and dental services are offered either at the Stout Street Health Center or at the organization's Champa Dental Office.

The FQHC provides telepsychiatry services, mobile health services, and street outreach. The health outreach van travels to drop-in centers and shelters for people experiencing homelessness throughout the community to build trust with clients and to encourage them to receive health services.

Additionally, CCH provides medical respite services at Beacon Place. Respite services include acute and post-acute medical care for people experiencing homelessness who are too ill or too frail to recover from physical illness or injury on the streets but are not ill enough to be in a hospital, or for those who are discharged from a hospital but are not yet well enough to be on the streets. Patients must have a doctor's referral to enter a respite care facility. Stout Street Health Center maintains contracted relationships with various area hospitals and respite centers to provide these services.

Each week, Stout Street Health Center hosts wellness classes and groups that aim to improve individuals' quality of life. For example, the Diabetes Self-Management class teaches participants how to better control their diabetes. Another wellness class intended to help with substance use disorders, The End of the Tweak, helps clients who are struggling with methamphetamine use.

CCH has impacted the Denver community in many ways. In 2017:

- CCH helped 18,637 adults and children with housing, health care, and support services
- CCH served 13,613 patients with health care services
- CCH served 1600 families in metropolitan Denver
- 57% of patients showed improvement in chronic disease measures
- 89% of those who received integrated services remained stably housed for a year or longer
- 591 volunteers provided more than 10,938 hours of service to CCH

Patient Population

A large majority of the health center's patients (87.8%) are adults aged 18 to 64 years. Approximately half are from racial/ethnic minority groups, including nearly one-quarter identifying as Hispanic/Latino (24.3%) or Black/African American (22.6%). Nearly all patients (98.8%) report incomes at or below 200% of the federal poverty level (FPL), and about two-thirds (65.6%) are insured by Medicaid or the Children's Health Insurance Program (CHIP). Ninety-one percent of patients are homeless.

Most patients (79.9%) receive primary medical services, 27.9% receive dental services, 30.6% receive behavioral health services, and 23.9% receive some support services through the health center and CCH affiliates. Many patients have some income through employment in short-term/temporary jobs or through Social Security or Social Security Disability. All patients can choose to benefit from the other supportive services available at CCH, including peer mentors and patient navigators.

Case study participants discussed the epidemic of homelessness in Denver and its many causes. Informants indicated that the reasons are complex and multifactorial: some are ecological, others are economic, and still others are medical. Homelessness was described as the result of a complex mix of circumstance and life history. The risk for homelessness in the population was thought to be increasing because of various environmental factors, including increasing housing costs and overall cost of living, increasing rates of substance use disorders, increasing prevalence of mental illness, and sluggish growth of wages in entry-level jobs and service industries. Participants remarked that the public face of homelessness is often just the tip of the iceberg, with more families than are seen by the public eye reporting homelessness.

One participant commented that many homeless adults experienced severe trauma early in life. Patients' experience of trauma is ongoing and often prolonged by life on the streets or in shelters. This life is at best unpleasant, and at times extremely unsafe. People experiencing homelessness are subject to significant and enduring environmental stress, compromised nutrition, and deteriorating health from living on the streets. Many cope with the severities of homelessness or mental illness with substance use and have chronic and persistent mental illness, conditions that are further complicated by a range of diseases such as hypertension and diabetes.

Only a small percentage (6.7%) of CCH's patients are 65 years of age or older. Case study participants observed some increase in the expected life span of patients since the clinic first opened, although many still die at a young age from the effects of homelessness. Studies show that people experiencing homelessness often have the medical fragility of a housed person 20 years older. Alternatively, those who are elderly and homeless are able to access elder services in the city, which are better equipped to meet the specific needs of older adults.

Case study discussants remarked on the number of new people experiencing homelessness who regularly arrive at the clinic. The Health Center currently has a long waiting list of people in need of a comprehensive evaluation. Housing prices in the Denver metropolitan area have risen steeply in recent years, while wages have been largely stagnant. Competition for affordable housing has greatly increased, making it difficult for those with marginal incomes to find and retain housing. One participant remarked that in the past, it was possible to help a person experiencing homelessness find subsidized housing relatively quickly; there is now a 1- to 3-year wait under the OneHome coordinated entry system.

Case study participants observed that there are more people new to Colorado in the patient population than in the past, perhaps attributable to Denver's rapid growth. They suggested a misperception among job seekers that this growth is commensurate with a significant increase in opportunities for work that provides a living wage.

Substance use, including opiate or heroin addiction and alcoholism, among people experiencing homelessness is a recognized problem. The organization has found it necessary to provide MAT services that integrate medication therapy with counseling services for patients.

Specialized Approaches to Delivery of Health Services

Clinicians and others in the organization aim to provide trauma-informed care, recognizing that trauma—especially childhood trauma—is a major contributing factor to homelessness. This approach to service delivery pervades both structure and process in the health clinics. The design of the expansive Stout Street Health Center, including the colors on the walls and the signage in the health center's primary care corridors, was purposeful. The interior is physically appealing and uses soothing colors to encourage patient engagement. For example, waiting areas are sunny, inviting spaces.

The health care outreach activities of the organization were described as a critical tool for patient engagement. Street outreach is a formal service of both CCH and other partner groups in the city. The health center has identified 3 high-priority patient groups for targeted case management: children, pregnant women, and diabetics. Case managers and outreach workers actively pursue these patients to encourage them to seek ongoing care, even reaching out through other community providers, including shelter organizations.

Using innovative tools for health service delivery was described as an important means of keeping patients engaged with ongoing care. The FQHC provides telepsychiatry services to patients at the Fort Lyon clinic in southern Colorado, one-third of whom are veterans. The Fort Lyon program is a peer-led recovery program with housing and support services and a community health center.

A clinician at the Stout Street Health Center spends an entire day each week providing telepsychiatry consultation services for those patients. In addition, CCH has a special formal arrangement with the Veterans Administration (VA) hospital in Denver to provide dental and behavioral health services for the VA's primary care patients who are also homeless.

Community Outreach

Since 2002, CCH has sponsored a Health Outreach Program (HOP) using a large recreational vehicle equipped with 2 treatment rooms, a small pharmacy, and a laboratory area. A primary care clinician and a medical assistant staff the HOP vehicle, which travels throughout the city on a scheduled basis during both day and evening hours to several shelters, local motels that provide transitional housing for families, and various drop-in centers throughout Denver. Services include treatment for acute and chronic illnesses and for acute dental and vision problems; foot and wound care; tuberculosis testing; vaccinations and immunizations; testing for sexually transmitted diseases, HIV, and hepatitis C; and gynecological services. Clinicians refer patients to the Stout Street Health Center when more extensive care needs are identified.

The HOP mobile clinic travels to an overnight women's shelter 2 evenings a week; another day, it provides services at the Renaissance Children's Center. At other times, it moves to day shelters or to mixed-gender shelters in Denver (Father Woody's, Gathering Place). Some of the day shelters operated by other community organizations are also meal sites with laundry facilities.

Behavioral health outreach services at CCH are managed by 2 behavioral health navigators working in partnership to identify and engage people in need of, but not currently receiving, mental/behavioral health services. These navigators work with patients and community providers to ensure that the patients are diagnosed, treated, and navigated to appropriate care services.

CCH leads the larger community outreach efforts to provide aid to the city's homeless population by coordinating the Denver Street Outreach Collaborative, which includes partner organizations serving people experiencing homelessness as well as various city and county agencies with an interest in addressing the needs of people living on the streets. Target populations include those living in parks, under bridges, near highways, and in vehicles and tents throughout Denver. In 2015, outreach workers in the collaborative made more than 30,000 contacts with people experiencing homelessness.

Providers

The FQHC employs numerous clinical professionals across the various sites, including 16 primary care clinicians, 7 of whom are physicians; 2 physician assistants (PAs); and 7 NPs. The West End Health Center

is staffed with a PA; the Fort Lyon clinic uses a locum tenens PA. Primary medical teams are composed of clinicians and a large contingent of nurses and medical assistants. A physician who does not usually provide clinical services acts as the clinical director of the organization. The organization chose to designate a chief *clinical* officer rather than a separate medical officer and dental officer to emphasize its goal of integration.

There are 7 behavioral health providers in the suites at the clinics and 1 in the satellite clinic in Fort Lyon. The Stout Street Health Center has an Integrated Behavioral Health Program Manager, who is a licensed behavioral health clinician with responsibility for overseeing and ensuring integration of behavioral health services with other health services at the FQHC.

The clinic employs 7 psychiatric providers, including 4 medical doctors (MDs) and 3 NPs. One of the MDs is dually boarded in child psychiatry and adolescent psychiatry. The organization is actively recruiting more of these providers, but they are difficult to find.

Staffing of CCH's MAT program is multidisciplinary, incorporating a licensed clinical social worker, 2 certified addiction counselors, and 1 peer navigator in addition to clinical providers, including primary care physicians.

The FQHC has 3 dental clinics; 2 are within the main health center at the Stout Street Health Center. Eight dental operatories are located in the main-floor dental clinic, with a separate operatory situated in the primary care clinic on the second floor. The Champa Street Dental Center has 6 operatories. There are approximately 26 dental staff, 8 of whom are dentists, 4 of whom are part time. The organization employs 5 DHs and many DAs. In addition, 2 dental students and 2 dental hygiene students rotate through the clinics on a frequent basis. At the time of the case study, the dental director was in the process of effecting an agreement with a dental assisting education program to allow dental assisting students to rotate through the dental clinics. It was hoped that participation in clinical rotations would be a potential source for recruitment of promising new DAs.

CCH has successfully recruited some of the many dental students who have rotated through the dental clinics. Two of the full-time dentists currently at the health center rotated through the dental clinics as students. Executive staff of CCH prefer that a dentist has gained some experience in the community before hiring him or her for the clinics. The organization has a high Health Professional Shortage Area (HPSA) score, so it is able to offer loan repayment.

The clinic has a rapid response team that manages the emergencies that sometimes arise when patients come to the clinic. The health center will send a patient with an urgent need to the hospital by ambulance as necessary; CCH has a partnership with Denver Health to provide this level of care to patients.

Efforts at Service Integration

One case study participant spoke of the passion within the organization to provide comprehensive, integrated care to patients and establish a fully integrated health home. He remarked that it is important when discussing the topic of integration to recognize that it is a journey, not a destination. Efforts to achieve integration must be ongoing and flexible enough to alter direction as needed. Health systems have many moving parts and encounter many regulatory and structural barriers to innovation. He also noted the importance of recognizing that there are differing degrees of integration even within the same organization.

Another participant described communication as the most essential element in providing care that is patient centered and team delivered. Providers must also be progressive thinkers and recognize that each member of the care team offers unique competencies. It is not possible for one provider to offer everything a patient needs, especially for the complex patients that are typical in the homeless population. Rather, it is essential that a provider do what they do best and rely on others within the team to do the same.

Case study participants confirmed that everyone works together in the interest of patients. Participants commented that it was easier to integrate behavioral health with other disciplines because there are behavioral components to all medical and dental diseases (choice of nutrition, exercise, medication compliance, hygiene, etc). The amount of acuity in the patient population was a general concern, making efforts at service integration particularly important.

Case study participants noted that integration of services is a fundamental function for the FQHC. CCH has purposeful structural features and formal and informal processes that manifest this philosophy of care. The main health center was designed with 4 individually decorated and differently colored clinical suites in which integrated care teams deliver services. The primary care rooms in these suites are located on one side of the hallway; the behavioral health rooms are situated on the opposite side. All of these treatment rooms have windows. One of the behavioral health rooms is specifically equipped to enable telebehavioral health/psychiatry services to patients in distant clinics. In addition, in one of these clinical pods—the "yellow" suite—there is a dental operatory located at the head of the hallway in which a team DH can screen patients for oral cancer, perform a caries risk assessment, and provide other preventive services.

The team on each of the clinical halls includes, doctors, nurses, PAs, NPs, psychiatrists, counselors/social workers, peer mentors, patient navigators, a DH, and a DA. Interaction and communication is endemic within the clinical pod and is encouraged by the physical structure of the clinics. Clinical protocols were

also developed with integration in mind. For instance, the smoking cessation workflow includes a referral to a dental provider for evaluation.

Case study participants offered many examples of the processes and behaviors that effect integrated service delivery at the Stout Street Health Center. When a primary care clinician is concerned that a patient's oral health is compromised, the clinician will send the patient to the dental clinic. If a dental provider finds that a patient has elevated blood sugar or high blood pressure, the patient is immediately referred to the primary care clinic.

Patients who are new to the health center usually begin with a primary care or dental service. The FQHC strongly encourages patients, especially behavioral health patients, to also become primary care patients of the clinic. It is very difficult to manage medications, especially psychotropic drugs, when a patient's primary care doctor is elsewhere; it is relatively seamless when the patient is receiving medical care in house. Patients are navigated to behavioral health services in various ways, including through screening for depression or substance abuse by primary care providers. Sometimes, a patient specifically asks for the service; in other instances, a provider determines the need and makes recommendations to the patient.

Behavioral health providers are embedded in each of the health suites, providing an immediate primary point of contact. These providers may be licensed clinical social workers, licensed professional counselors, or candidates for those credentials. Many have substance abuse training and dual credentials, including as certified addiction counselors or licensed addiction counselors. Behavioral health clinicians complete patient assessments and diagnostic testing, provide primary management services for patients, and consult with staff psychiatrists as needed.

Primary care clinicians at the health center will initiate psychiatric medications for patients if the need is urgent and will order a confirmatory consultation with a psychiatric provider as indicated. Psychiatrists and psychiatric NPs are available "curbside" in the suite, enabling real-time consultation in person or by telephone. A behavioral health provider might manage the patient according to the primary care clinician's recommendation and then schedule the patient with psychiatry as needed.

Some patients with PTSD syndromes are treatable with antidepressant drugs, while others may need antipsychotics. Clinicians will sometimes suggest long-acting injectable medications when patients have difficulties with medication management.

However, patients must agree to the injection. Permission is not always easy to obtain, as some patients are paranoid about such interventions and may refuse. Other times, patients are unable to access these high-cost medications because they have no insurance. The clinic has sample medications available for episodic need; however, health center staff recognize the importance of helping patients find sustainable sourcing for medications that are needed on an ongoing basis.

According to case study participants, the comprehensive skills of providers on the care teams in the clinic are useful. For instance, primary care providers may feel more secure initiating psychiatric medications, such as mood stabilizers, knowing that the in-house psychiatric providers are available for follow-up consultation. Some people with psychotic disorders are reluctant to seek psychiatry services because their psychosis makes them suspicious of such systems of care; however, they may be more accepting if the recommendation comes from a primary care clinician with whom they have established a trusting relationship.

The behavioral health staff, primary care staff, and dental staff often are able to see patients on the same day. Nurses triage patients and navigate them according to need. One example of how patients are managed in a team-based clinical environment involves a patient with a mental health diagnosis. A psychiatric NP questioned the patient about not taking his prescribed medication. The patient explained that he was having difficulty swallowing the pills. The NP asked the team's DH to assess the patient; she identified a lump in his throat that was interfering with swallowing. The patient was immediately seen by a primary care clinician and then by an oncologist.

The dental staff is actively involved in efforts to integrate services. Dental professionals perform a risk assessment on all patients that could result in an active referral for substance use treatment after point-of-care screening. Dental providers discuss self-care and health status with diabetic patients and ask others about their familial risk for certain conditions. Dentists also observe a patient's weight status and frailty. If the risk assessment reveals the need, dental staff will perform A1C testing in the dental

clinic and refer the patient to a medical provider. Dentists also assess tobacco risk and caries risk and provide appropriate counseling and education. Blood pressure readings and glucose testing are performed on all patients who require anesthesia for any dental procedure.

All providers are aware of and use the established mechanisms for referral to other clinicians as well as warm handoffs to other disciplines. Primary care clinicians actively refer diabetic patients to the dental clinic. The interaction between different clinical professioals at the health clinic is ongoing, and communication is frequent. For instance, the dental director provides her phone number to the behavioral health providers working the crisis intervention line in case a patient presents with an acute dental problem.

Behavioral health providers frequently refer edentulous patients to the dental clinic for dentures to help improve the patient's self-image. Behavioral health providers have been trained by the dental staff at the health center on the process for taking dental impressions and creating a denture. This training allows the behavioral health providers to educate their patients on the process and reduce anticipatory anxiety by building an understanding of what to expect from the various procedures related to making a denture.

Dental providers make a concerted effort to reduce patient stress by streamlining denture services for these behavioral health patients. In turn, behavioral health providers support the work of the dental clinic. They might accompany a patient to the dental clinic or sit with a patient who is very anxious. The dental staff also educate the primary care staff about the dental needs of pregnant women and the importance of dental referrals.

The fact that the health center provides dental services attracts new patients because dental services for the uninsured and for those insured by Medicaid are difficult to find in the Denver area. Even veterans who receive their primary health care at the VA medical center in Denver are patients of the Stout Street Health Center for dental services.

About 15% to 20% of the dental services provided in the clinics are urgent care services; 5 or 6 patients arrive at the dental clinics each day in acute need for treatment or palliative care. Many patients have mouths that exhibit extraordinary neglect. Some have only root tips remaining. The dental treatment

plan completion rate is about 25%, which is high considering the itinerant nature of and the many challenges experienced by the target population.

The oral health clinics have established referral mechanisms for specialty services in the community. Children are referred to a nearby pediatric dentist. Patients with suspected oral cancer are referred for an urgent exam to an oral surgeon in the Denver Health system.

Process Fostering Integration

Staff Engagement With Organizational Mission and Training

Case study participants commented that the health center is fortunate to have a mission-driven staff that is respectful of patient choices. The work is immensely difficult on a daily basis because of the acuity and complexity of the clinic's patients. The health center has been very careful about its recruitment, interview, and hiring practices to ensure continued success in hiring talented staff who remain at the health center.

All staff receive an orientation training that includes classes in trauma-informed care, cultural competency, Health Insurance Portability and Accountability Act (HIPAA) compliance, and specific clinical topics. A new member of the behavioral health staff might receive training in primary care issues or in behavioral health areas that differ from their particular area of expertise, including behavioral training and interventions for medical conditions like diabetes or weight loss. Because many treatment protocols require behavioral change, the skills learned in one area are often transferrable to others. Staff is taught to continually ask how they can use the cognitive behavioral therapy skills learned in behavior management training to, for instance, help people to manage chronic pain, stop smoking, or routinely take their medicine.

Formal and Informal Communication Processes

The primacy of effective communication was stated and restated throughout the various interviews for this case study. Communication was viewed as the most essential tool to achieve desired outcomes for patients and to effectively engage all members of the clinical and support teams with this goal.

Even the administrative spaces within the health center were designed to foster transdisciplinary communication. The desk space for clinicians is located in an open area used by all clinical and support staff in each service area so that physicians, nurses, behavioral health providers, and other staff can more easily collaborate on a patient's care.

Electronic Health Record

The organization uses NextGen software to power its EHR and QSIDental software for the dental record; the systems are integrated. Navigation to either requires a single click, and no special password is required, provided the clinician is cleared for access. Medical records specialists monitor access to patient records, especially behavioral health records, to ensure that only those who need access to the patient chart are viewing those items. Patients' electronic health records are used to gather outcomes data and to benchmark progress within the patient population.

Patient Engagement

About 25% of the services provided by the clinic are preventive care services; however, getting patients to show for those services is challenging. The health center schedules patient appointments, but there is a high no-show rate. Front office staff maintain both an appointment schedule and a separate ghost schedule that is backfilled daily with people who arrive for same-day care. On an average day, 92% of provider capacity is fully engaged. Clinical teams have learned to accommodate unanticipated patients and to alter their expectations about scheduled appointments through an understanding of the many challenges of homelessness.

When patients do not show for appointments, providers are reminded to view the visit through the lens of a patient experiencing homelessness. A patient might not remember the appointment due to a mental health condition, or may not have available transportation or money to pay for the bus. One patient might not feel capable of walking to the clinic that day; another might have been unexpectedly incarcerated. Case study participants noted that all care and treatment suggestions must be adapted to the nuance of homelessness. It is important to provide customized therapy that fits with a patient's circumstances. For instance, it is futile to refer a patient without a phone to a smoking quitline.

Health center staff have developed strategies to contact patients who do not show for appointments for follow-up care. Part of acquiring a patient history is asking if there is a particular drop-in center or shelter where a patient might be reached or if there is a relative who could be contacted. Staff will call local shelters and ask shelter personnel to pass a message to a mutual client who is known to frequent that location. Some people experiencing

homelessness have cell phones, even smartphones, because of a cell phone program sponsored by the Obama administration, so they can be called directly; however, some have pay-as-you-go phones, which creates challenges with monthly minutes.

The Health Center makes every effort to make health services convenient for patients. For instance, the Stout Street Health Center hosts a monthly pediatrics night so that families with children who are unable to access services during regular appointment hours can access pediatric primary care, dental, and vision services during evening clinic hours.

One criterion used at the health center to benchmark patient engagement is the return of a patient to the health center for subsequent services after an initial visit.

Engagement With the Larger Community

The City of Denver issued a social impact bond that engages a coalition of community providers in an effort to provide supportive housing, nutrition, health care, and wraparound services to 250 chronically homeless individuals in the city, many of whom have substance use or behavioral health issues. The objective of the program is to reduce the appreciable costs of recidivism in the criminal justice system and the use of emergency services, including incarceration, court services, detox facilities, police services, and emergency department use. CCH has been a service partner in this remarkably successful program. Since 2016, when the program began, more than 200 individuals have been housed, with an expectation of a 35% to 40% reduction in jail bed days.

The FQHC is also fortunate to have numerous community partners that also provide health care services to this population, including several local hospitals and the University of Colorado. In addition, many specialty medical providers accept referrals from the health center. The citywide outreach program for people experiencing homelessness also engages many community partners

Finance

In 2016, CCH had a budget of $71,132,964. A large portion (41%) of support monies come from federal, state, and local grants ($29,313,445). Ninety percent of the private contributions and special event revenues ($3,897,471) in 2016 were used to fund CCH's programs, particularly housing and health care. The remainder of revenue is from patient services.

The homeless population is a very intense population with scant health resources. According to case study participants, Medicaid eligibility and the Affordable Care Act (ACA) were "a game changer" both for the homeless population and for homeless clinics. In the past, 80% of the population was uninsured;

currently, 80% of patients at the health center are insured. Having insurance also provides patients with access to subspecialty providers in the community. However, the ability to pay has never been a barrier to specialty or subspecialty services, as the health center helps patients with these services through a variety of agreements with specialty providers in the community.

CCH works to enroll eligible patients in the state Medicaid program. In Colorado, individuals earning less than $15,000 annually are eligible for Medicaid. Medicaid benefits cover a range of services, including family planning and breast and cervical cancer screening. Many of the services provided at the health center are reimbursed by Colorado Medicaid on a PPS. Currently, the rate for primary care and dental services is the same, though the health center was expecting the state to establish a separate prospective dental rate.

While Colorado Medicaid provides adult dental coverage up to a maximum annual benefit of $1000, the health center does not limit patients to this service cap. The organization works on a sustainable business model that allows dental clinicians to provide a full scope of services to patients, including restorative treatments, prosthetics, scaling and root planing services, and root canals.

Certain dental services are out of the scope of many insurance benefits. Dentists will provide as much oral surgery as possible in house using local anesthesia or nitrous oxide. The dental clinics provide bridges, crowns, and dentures, which are fabricated by an outside laboratory. The patient is required to pay only the laboratory fees for these services.

Compass Health Network
Crider Health Center
Wentzville, Missouri

History and Background of the Organization
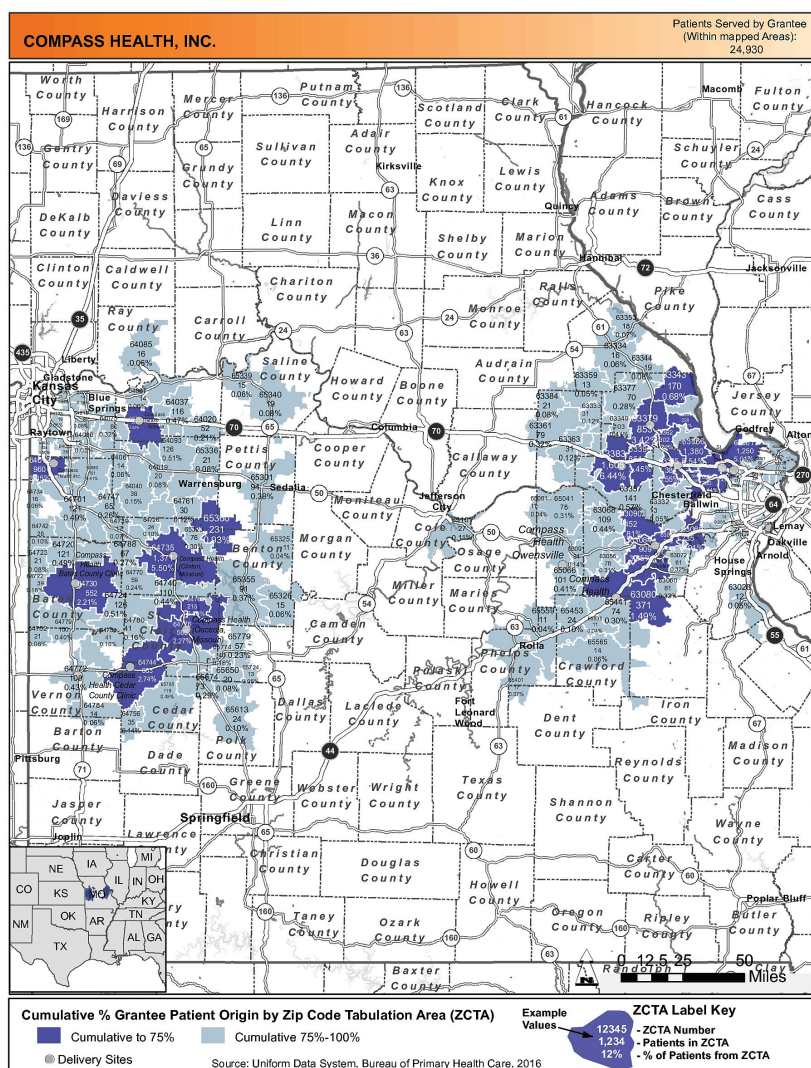
Compass Health Network is a nonprofit organization that is both a community mental health center (CMHC) and an FQHC. The organization operates in 45 counties in central Missouri and provides health services to about 10% of the population living in the 29,900-square-mile service area. The network is composed of 3 previously separate provider entities: Pathways Community Health, Crider Health Center, and Royal Oaks Hospital (a 50-bed, 501[c][3] psychiatric hospital). These organizations collectively provide health services to approximately 184,850 patients annually.

Compass Health provides prevention and early intervention services to an additional 63,969 children and adolescents annually through school-based suicide prevention, bullying, and alcohol and drug prevention programs. These services are provided in 78 schools in the catchment area. In 2016, more than 1,719 students received school-based mental health services from clinical providers affiliated with Compass Health.

Pathways Community Health began as a stand-alone entity in 1973, and Crider Health was founded in 1979. Both organizations provided behavioral health and community mental health services to patients

as grant funding from the state Office of Mental Health and other sources. The organizations had similar patients, including children with emotional disorders and chronic persistent mental health diagnoses, people with substance use and chemistry disorders, and adults with mental illness. Behavioral health services have consistently comprised a large portion of the services delivered to patients within the Compass Health network, as these were the patients originally served by the 3 component organizations.

Over time, Crider Health began providing primary medical and dental services for their behavioral health patients, since many of providers of these services in the catchment area did not accept Medicaid. At that time, there were no local FQHCs. Crider Health achieved FQHC status in 2007, which generated interest among other local CMHCs in becoming FQHCs. From the beginning, the administrative and clinical teams at Crider Health were purposeful about focusing on an integrated service delivery model.

In the years following the founding of Crider Health and Pathways Community Health, funding streams had shifted, demand for services had intensified, and costs to provide patient care had risen. As it became increasingly apparent that smaller organizations would struggle in the demanding fiscal and regulatory environment in health care, Crider Health began to search for partner organizations with a common mission in order to consolidate services.

Pathways Community Health, which operated in contiguous counties to those in which Crider Health served patients, had a long history of growth, largely due to having executive leadership with vision. In 2014, Pathways Community Health achieved FQHC status, and the 2 organizations merged to become Compass Health Network. The merger represented a necessary shift toward administrative and structural consolidation to enable the network to continue to be an innovative organization. Prior to the merger, Pathways Community Health owned Royal Oaks Hospital, which provides step-down services and stabilization units for the mentally ill. A separate acute care psychiatric hospital in the area provides long-term care for those with mental illness who require hospitalization for longer periods.

In 2018, Compass Health Network employed more than 2,500 people. The FQHC now has 11 locations throughout the catchment area to provide primary medical, dental, and behavioral health services. The

network continues to provide a full range of services in the community, including behavioral health, psychiatry, and counseling services in schools and community clinics, as well as supportive housing programs, substance use disorder clinics, telehealth services, and mobile and portable services using evidence-based clinical protocols.

The network operates 50 behavioral health clinics in the various counties in the catchment area. Dental services are provided in 9 of the 11 health center sites; primary care services are offered in 7 of these clinics, and all FQHC locations provide behavioral health services. In addition, Compass Health has partnered with other FQHCs throughout Missouri to supply behavioral health services to those FQHCs' patients; psychiatrists are in high demand, and FQHCs have difficulty filling slots. This arrangement with Compass Health has been beneficial.

Compass Health Network provides supportive, transitional housing and independent living units for qualifying patients, with some of these units used by patients in recovery from substance use disorders. Two of the housing complexes are for adults only; another is for women with children; still another is for adolescents. Compass provides inpatient, outpatient, and day programming services for these patients. The network also has HRSA funding to support a MAT clinic to help those with opioid addictions. The consortium does not currently have a methadone clinic, although there are several in the catchment area that are privately operated.

Compass Health Network generates about $160 million in annual revenue. Even though Compass Health's partners began mainly as community mental health providers, the network now has a reputation for its array of integrated health care services.

Patient Population

The patient population at the health centers is representative of the general population in Missouri. Most (86.8%) are white, with 13.3% from racial or ethnic minority groups, including Black/African American (6.1%). About half of all patients (50.3%) are adults aged 18 to 65 years, but many are children (45.7%). Nearly all (98%) report incomes at or below 200% of the FPL. About one-quarter of the health center's patients (25.5%) receive primary medical services at one or another of the health clinics under the auspices of the FQHC. More than half of the FQHC's patients (54.5%) receive mental health services or dental services (51.7%).

About 80% of the patients treated at one or another of the health centers have a psychological or substance use disorder. Approximately 60% of these patients have a chronic or persistent mental illness; between 35% and 40% have a substance use disorder; and about 20% have a developmental disability

or an autism spectrum disorder. Case study informants identified the most prominent diagnosis among patients as bipolar disorder, though patients have many other illnesses, including PTSD.

Compass Health clinicians are currently managing numerous patients on buprenorphine/naloxone therapy. The network is fortunate to have a highly qualified physician in the area of medication-assisted recovery, which has energized other physicians to learn this competency. There are now 10 physicians on staff in the health centers who are certified in addiction treatment.

Many of the network's patients access both primary and behavioral health services through Compass Health. Demand for dental services is so high that Compass Health is constantly working on ways to improve access. While the FQHC provides a high quantity of dental services in its communities of interest, many dental patients are not primary or behavioral health patients of the network. There are very few community providers of dental services for the publicly insured, so the network fills a large gap for dental services in the multiple counties in which it has a presence.

The organization is in the thick of the opioid crisis in the state, providing a strong presence through its substance use treatment center and MAT services. Clinicians stabilize patients using behavioral health treatment services in conjunction with medication, including prescribing long-acting injectable medications for schizophrenia and bipolar disorder. Clinicians at the health center observed that, over time, use of injectable treatment medication, with efficacy of approximately 3 months, has reduced the number of admissions to local hospitals by patients with mental health diagnoses.

Specialized Approaches to Delivery of Health Services

The FQHC is one of the largest providers of telebehavioral health services in the US. In 2015, psychiatrists completed 35,427 telehealth sessions with patients. Compass Health has 50 behavioral health clinics in the catchment area, but many do not have a full-time psychiatrist on staff; 38 of these locations are telehealth-enabled sites. Some clinics provide all necessary psychiatry consultations through telehealth, whereas others use a mixed model. Each of the health centers in the network has a dedicated room from which an in-house psychiatrist can conduct a consultation with a patient at a remote behavioral health clinic; a nurse can situate the patient and ready the equipment for the consult at the distant site.

The camera resolution is excellent, and the camera is equipped with a moving lens to enable the physician to observe the patient from head to toe to assess presentation and affect. Telehealth works extremely well as a mode for medication consults in urgent situations. The modality is used for family consults between a psychiatrist at a hub clinic and a family at the affiliated psychiatric hospital. The telehealth equipment is also used as a means to provide training to staff at remote sites. Outcomes from these telehealth services are monitored and reviewed at regular meetings of the network's continuous quality-improvement

committee. Initially, there was some resistance to the application from providers and patients, but there is now 97% patient satisfaction with consults conducted in this manner.

Community Outreach

Compass Health is the recipient of a SAMHSA grant, state funding, HRSA funding, and county tax board funding, which enables placement of behavioral health clinicians and case managers in many of the grade schools in the area. Counselors usually see referred students within a week to address any psychological or social problems that arise. The schools view this program very positively and are open to interacting with health center providers.

The St. Louis City public schools have now integrated this approach for all schoolchildren. The results have been positive; fewer children are now segregated for special education services, and case managers are able to develop partnerships with the children and their families for ongoing services. Referrals are made from the school setting to clinicians in the health centers when more extensive or intensive services are needed. The behavioral health staff report to the schools as well as to the clinic.

This program, which began with SAMHSA funding, is now sustained by revenues from a state children's services tax. These funds support both Compass Health Network and other partners who participate in the program, including the child division of the state's juvenile justice system and peer support efforts, resulting in a successful parent–partner program. The FQHC also conducts dental screenings in schools with referral to the network's dental clinics when needed.

Providers

The organization is fortunate to have an incredible range of clinical expertise among its professional staff, from genetics and sleep medicine to hepatology and child psychiatry. The organization employs 12 primary care clinicians and 6 NPs in its primary medical clinics. Compass Health currently employs about 24 dentists, 4 of whom work in the eastern region of the network, which includes Lincoln, Warren, Franklin, and St. Charles counties in Missouri. This case study was conducted in St. Charles County, Missouri. The dental clinic in that center has 11 operatories, with a separate entrance at the front of the health center adjacent to nearby parking. Two pediatric oral surgeons provide sedation dentistry services for children. The FQHC employs 10 DHs and usually 2 DAs per dentist; some of the DAs meet state qualifications to perform expanded functions such as placing and carving amalgam.

 The organization is unique in the geographic area because it employs more child psychiatrists than any other provider entity. There are 71 psychiatric and behavioral health clinicians, including psychiatrists, psychologists, advanced practice nurses, and PAs. Compass Health is steadily increasing this number to

meet the needs of the communities it serves. The psychiatry department at the FQHC collaborates with the University of Missouri to provide residency slots for psychiatry residents. Over the last 3 years, the FQHC has offered 10 slots to residents. This partnership has been beneficial for the patients and for the FQHC generally, especially from a recruitment perspective.

The head of psychiatry at the FQHC is a recognized expert in child psychiatry and is a fellow of the University. Thus, the opportunity for mentoring under his auspices is attractive to new psychiatrists, and his presence increases the competitiveness of the program.

In addition, the FQHC qualifies to offer loan repayment for clinicians, which is an appealing benefit to new psychiatrists who are completing their residency program. The HPSA scores for all 3 disciplines (medicine, dentistry, and behavioral health) are consistently high enough to qualify for this federal program.

The FQHC is able to recruit and retain a large clinical workforce by offering competitive salaries and loan repayment opportunities. The FQHC also expects to create other incentives for clinical providers, many of whom enjoy the state-of-the-art clinical facilities and the challenges of the patient population. Moreover, clinicians are attracted to the scheduling flexibility that is more available in the health centers than in smaller private practices.

Case study participants commented that there is more turnover in entry-level positons than in clinical personnel at the FQHC. Leadership has made focused efforts to address these issues by offering supports for entry-level workers to obtain training and become certified in an area of health care (eg, medical assisting, phlebotomy) and by offering to pay for license renewals or education. These efforts have resulted in a positive rebound in retention.

Efforts at Service Integration

Compass Health Network is one of 67 organizations in 8 states to participate in a national Demonstration Program for Certified Community Behavioral Health Clinics with funding from SAMHSA. The 2014

Protecting Access to Medicare Act (PAMA) enabled funding for this program. The goals of the demonstration included expanding access to community-based substance use and mental health services, advancing ntegration of behavioral health services with primary health care, and providing care coordination for patients.

Funded organizations work under a PPS specific to behavioral health, which services had previously been reimbursed on a fee-for-service basis by state Medicaid programs. The demonstration project created a new type of organizational provider and funded designated organizations for process and administrative changes. The program standards provide participants with improved allowance for documenting and treating of mental disorders, novel pathways to providing holistic care, and easing of an organization's ability to treat co-existing/co-occurring health conditions in addition to mental health, behavioral health, and substance use disorders. The program allows clinicians to treat, for instance, a co-occurring substance use disorder in a patient with mental illness, something that had been challenging in a fee-for-service environment because integrated service delivery in that paradigm is difficult due to the different payment constructs.

This program encouraged and reinforced existing organizational efforts at Compass Health to integrate care, including consultations with other providers on medical or dental interventions for patients, and set program participants on a course to service integration for behavioral health patients.

Support for service integration has also come from Missouri Medicaid through its Comprehensive Substance Treatment and Rehabilitation (CSTAR) program, which uses a continuum-of-care approach to mental health and substance use disorder treatment. The program supports a spectrum of social support services such as housing, community support, and day care to enable employment. Compass Health has approximately 12,000 patients receiving some supports through their participation in this program. About 4,500 of these patients are 18 years of age or younger.

In addition, several of the managed care insurance companies in Missouri are supporting pilot programs using case management and other services and permitting expanded services to the clinic's high-risk patients. Compass Health is now able to complete full metabolic screenings for patients in a variety of diagnostic categories; this is extremely helpful in designing care plans and addressing the comprehensive health needs of patients. Nurses initiate the patient evaluations, and other providers feed off the basic information acquired by the nursing staff to move clinical inquiry forward.

The FQHC offers open access to behavioral health screenings for anyone in the community. Once a patient is determined to have a behavioral health need, he or she is assigned to a case manager in the organization. Case management tools were viewed by Compass Health staff as a major contributor to the successful provision of integrated care. Case managers ensure that patients are aware of and are

accessing services across the spectrum of those available within the total network and, especially, at the community health centers.

Providers in all disciplines are aware of the importance of integration. Dentists attend to patients' health histories and current medications, including clinical notes about use of substances. Dentists are attentive to blood pressure and the importance of effecting referrals to other clinical providers as need arises. Efforts at integration within the network encompass medical providers who screen for behavioral health and oral health conditions, behavioral health providers who are now more attuned to other health care needs in their patients, and oral health providers who work with other clinical disciplines to provide assessment and referral services for patients. The organization now regularly performs metabolic screenings for patients, where indicated; this information fuels consultation about medication interactions and health conditions, which is imperative to supplying high-quality integrated care.

Because of the high number of behavioral health patients in the health centers, dentists at the FQHC must consider patients' needs for premedication for dental services more often than most other dentists. Patients with autism or psychosis, those with anxiety, residents of mental health facilities, and others may require special interventions. Dentists make a concerted effort to avoid heavier sedation techniques and tend to use what is safe for the patient within the parameters of pharmaceutical compatibility with other medications. They will communicate with a psychiatric or behavioral health provider about specific patients to minimize risk and avoid causing the patient any trauma. For example, a dentist may choose a benzodiazepine to prevent anxiety.

Case study participants spoke of dental anxiety and fear among many of the behavioral health patients at the clinics and working with dentists, counselors, and case managers to address those fears so that patients could be reasonably comfortable receiving dental services. The dental service portion of the comprehensive health home has been very successful, and dental is the fastest-growing segment of the service portfolio. Oral health service delivery continues to evolve with the recent establishment of an express oral health care clinic.

One clinical provider offered a story to demonstrate the commitment of clinical and support staff to providing a comprehensive health home for patients and services that meet both the health and social needs of the patient populations. The provider spoke of a staff dentist who, while examining a female patient, sensed that something was awry because the patient seemed unusually distraught and anxious. The dentist talked with the patient and eventually discovered that the woman was extremely fearful because she was experiencing domestic violence. The dentist was able to help the woman by immediately contacting other providers within the organization who helped her to leave the situation on the same day without returning home.

Integration efforts extend to every aspect of patient care. The FQHC embeds a behavioral health consultant (BHC) with primary care providers. If there is an urgent or emergent need for behavioral health services, the primary care clinician can request that the BHC immediately see the patient. Warm handoffs are common, and patients are accepting because their primary care provider has recommended the consult. The BHCs and physicians work with the case managers to ensure that patients are navigated to appropriate services.

Case study participants noted that clinicians are more likely to query a problem if they have the tools to address a positive finding; they would be discouraged to do so if they had no source for referral. Uncovering a behavioral or mental health issue in a patient is easily addressed in the health center's primary care clinics because there is a behavioral health specialist (a psychologist or social worker) available to every team. Thus, the primary care clinician is confident of reaching a behavioral health provider either by walking down the hall or by calling on the phone. This supportive environment works in both directions. Behavioral health staff are confident that primary care clinicians will provide input and feedback. As a result, a substantial number of professional interactions and collaborative consultations occur, and one or more additional clinicians (for example, a hepatologist) are included when needed.

There are both formal and informal channels for service integration. Primary care physicians screen patients for dental needs to determine whether they have an established dental provider or to identify the most recent dental visit. A scheduler in any of the primary care clinics can view the availability of providers in the dental clinic, which enables primary care clinicians to get a patient to the dentist as soon as is practicable.

Oral screenings for adults generally occur during a well visit unless there is a patient complaint during an acute visit. If there are signs of infection, adults receive a full oral exam from a primary care clinician with immediate referral to a clinic dentist. Providers pay special attention to the oral health of diabetic patients, since the ability to eat a healthy diet is particularly important to maintaining overall health in this population of patients.

Pediatricians in the clinics perform an oral screening on children and inquire about routine oral hygiene and toothbrushing practice; they also monitor blood counts for signs of oral infection. Pediatricians talk with adolescent patients about teeth grinding and ear pain as part of the routine physical.

Medical providers will directly summon a dental provider if a patient is experiencing acute pain or apparent active infection. These informal requests constitute a loose back channel, not a formal one; nevertheless, providers use it on an emergent basis. Every effort is made to immediately address acute issues to keep patients out of emergency departments. When a dentist uncovers elevated blood pressure in a patient, he or she can fast track the patient though express care at the primary care clinic.

Case study participants identified several ongoing challenges with providing integrated care. Dental care was identified as more difficult to integrate than other services because it has always had a separateness that is difficult to bridge. The organization has made many efforts to reduce barriers, including arranging regular joint meetings between the primary care and dental directors. The dental society has provided training on the application of fluoride varnish to many on the primary care staff.

Most of the dental services provided by the organization are for children; very few adults qualify for Medicaid in Missouri. The dental staff is adept at working with children with dental anxiety and use various behavioral tools, including role-playing, to make children comfortable prior to initiating treatment.

Children and adults with emergent dental needs receive priority for appointment scheduling at the dental clinics. The dental clinics will see emergency patients for palliative care on a same-day basis. The no-show rate for dental appointments is lower than that for medical appointments at the clinics, which is an indicator of the high demand for these services in the population. Dentures, which are available on a sliding fee scale, are in particularly high demand. Although dentists prefer to preserve teeth, patients may come for services only when teeth are beyond saving. In some counties in Missouri in which the FQHC provides services, the health center is the only dental provider available to many in the local population.

Clinical providers in the organization are increasingly exposed to competencies that have traditionally been outside of their scope of services; many are becoming more comfortable with differential diagnosis. There is a rolling effect from these efforts. The more staff members are exposed to new skills, the more their interest increases and the more sure they become of the supports behind the effort.

Pharmacy is also involved in integration efforts, which is especially important when so many patients are on medications for mental illness or behavioral health disorders as well as medications for medical conditions. The health center has an onsite pharmacy, and clinicians are in frequent contact with the clinical pharmacist, who is known to walk a medication to a clinic when a patient is in need.

Processes Fostering Integration

Staff Engagement With Organizational Mission and Training

One case study participant offered that in order for service integration to occur, integration must drive the culture of the organization and must be constantly addressed and readdressed. Helping employees to focus on integration is particularly challenging in light of high turnover rates among less well-trained staff. Efforts to achieve the goal are made more difficult by the substantial stream of new employees in the large organization. New hires must be oriented to the philosophy and to the sometimes-complicated mechanics of implementing the goal. In October, November, and December of 2017, there were nearly 500 new employees requiring orientation to the mission and objectives of Compass Health Network. Orientation training occurs over the 6-month period following initial employment. Orientation classes are held every Monday, and each Monday about 50 new people begin the process.

Case study participants spoke of the importance of educating clinic staff, especially those who interface with patients in the community, on a variety of competencies, including understanding symptoms of chronic medical or mental conditions and the array of services and referral sources within the health center. Compass Health supplies ongoing training for employees. An in-house training institute handles the in-service and general orientation trainings, many of which are available online and some of which are required annually of all staff across the enterprise.

The Compass Training Institute offers an array of courses, from comprehensive online training in evidence-based practice to motivational interviewing. Some trainings are mandated for all staff; others are required only of specific staff. For example, new case managers receive disease-specific training related to patient needs but may not be required to learn cognitive behavioral therapy. Many case managers are hired with specific backgrounds that already vest them with the needed experience and skills to do their jobs.

Some training occurs in-person and some is accomplished using telehealth networks and equipment. Many courses include pre- and post-tests to evaluate acquired knowledge. Every member of the organizational team is educated on the meaning and delivery of trauma-based care, in which motivational interviewing is a strong component.

Case study informants also noted that educating the staff about integration is more than a formal training exercise. Staff need ongoing reminders that even when services are integrated in 1 or 2 clinical areas, the other clinical needs of patients cannot be ignored. Leadership fosters both formal and informal discussions about comprehensive patient-centered care. In order to build the expertise of current staff

over time, the organization sponsors lunch lectures, during which organizational leadership lunches with staff and discusses the importance of service integration to patients' improved health outcomes.

The dental department recently hosted a breakfast for clinical providers at the FQHC to discuss the specific oral health needs of pregnant women. In addition, the content for a recent dental staff retreat focused on behavioral and primary health care for patients, which allowed dental staff to learn from and become acquainted with other clinicians at the FQHC. The medical staff meets formally at least 3 times a year. One of those meetings is a 2-day annual retreat that includes all primary care clinicians and may involve other professionals at the FQHC as well.

The organization regularly recruits external speakers to present on various topics, with an emphasis on behavioral health topics. For instance, ongoing concerns around identifying and managing risk for dementia would make that a topic of interest. The presentations are geared to teach about common challenges for staff despite clinical discipline and to introduce and describe changing regulatory and organizational policies and processes.

Formal and Informal Communication Processes

Communication channels that span the organization are broadly encouraged. However, establishing and maintaining avenues for effective communication requires hard work and focus, especially given the size and complexity of the network. The organization supports every opportunity to discuss common issues; there are regular meetings with regional staff, meetings between individual providers, and organization-wide meetings.

Yet despite all the sophistication and formal planning for integration involved in building systemwide processes and communication skills among personnel, sometimes the success of integration is based on a simple warm handoff and an ad hoc communication between providers in different disciplines. Much of the integration effort in the organization occurs on a 1-to-1 basis between professionals through both formal and informal interactions. Case study participants acknowledged significant interaction between providers throughout the organization.

One example provided by an interviewee was a recent call from a primary care provider who was managing the post–hospital discharge care of a patient who had attempted suicide by hanging. The primary care physician had placed the patient on an antipsychotic medication but wanted an immediate psychiatry consult to ensure that the medication decision was appropriate. The psychiatrist consulted with the patient in one of the health clinics and changed the recommended medication to an antidepressant therapy.

Clinical leadership from both medicine and dentistry are in tune with the necessities of integration. The dental director and medical director talk frequently and meet often; each encourages his or her respective providers to use a broad lens when evaluating patients. Many clinicians learn more about the importance of integration on the clinic floor during practice with patients than they do from formal didactic training. The complexity of many patients' medical, mental, and dental needs supports the importance of effecting service integration to achieve improved health outcomes.

Informants commented that there are physical and structural aspects of clinic design and workforce education that are important to achieving integration, but that the essential element in effecting integration is the encouragement of ongoing and frequent interaction between clinical professionals and other staff, especially those involved in case management. The language of integration is evolving, and many recognize the challenges of maintaining ongoing open communication within a large organizational structure.

Electronic Health Record

An integrated health record was seen as crucial in view of the high-risk population treated at the various Compass Health clinics. The health record includes diverse modules pertinent to 12 medical specialties, including nursing notes. It also includes extensive medication lists and medication tracking—an especially important feature given that some health center patients take upwards of 30 medications. The EHR also contains customized screens for patient case management to allow designated staff to receive alerts or case assignments for specific patients.

Compass Health was in the process of converting its EHR to a new platform at the time of the case study. The new system, called myAvatar, was described as a fully integrated platform containing patients' medical and psychiatric histories, current therapies, and case notes. The new system will include seamless access to the Dentrix software that hosts dental documentation for each patient through a virtual bridge. Administrative data and patient demographics will cross to any application within the system. The behavioral health modules of myAvatar were expected to be implemented in June 2018. Informants anticipated conversion of the medical record by the end of the year, followed closely by dental.

Patient Engagement

All patients must complete an extensive screening tool that asks not only the names of their clinical providers (doctor, dentist, etc) but when the patient was last examined by each provider. The instrument also contains an extensive health and oral health history/inventory. This is an important source of information for all providers.

Compass Health has formalized efforts to educate patients on the services available at the health centers. One effort takes advantage of the physical structure of the clinic to enable education. In 2 locations, the FQHC offers both dental and behavioral health services. In Clinton, Missouri, where there is a residential program, the dental clinic is located between an adult behavioral health clinic and an adolescent behavioral health clinic. Every month, staff provide some dental-related education to patients while they are waiting for their behavioral health services in one or the other of these clinics. The clinic located in Union, Missouri, has a shared reception area for primary care and dental services. The common waiting area alerts patients to the availability of both services at the health clinic. In many other locations, reception areas are specific to the service area, so that patients may not be as aware of other service availability.

Engagement With the Larger Community

As previously stated, the organization serves an expansive geographic area. The organization has an impressive and universally acknowledged record of accomplishment for quality care. The network is wholly diversified and large enough to have developed many community partnerships. Compass Health has partnered with schools, the state's criminal justice system, government, and others to meet the social and medical needs of patients. Missouri has a Health Home program, and about 7,528 of the FQHCs' current patients have been attributed to Compass Health by the state Medicaid agency governing that program.

Organizational staff have permission and passwords to log in to the state Medicaid database, enabled by agreement with the administrators of the state's electronic data management system. This privilege allows Compass Health Network staff to track service utilization of many of the high-risk patients served by the organization and especially to monitor diversion from local emergency departments. Compass Health works directly with several local hospital emergency departments as the point of contact for common patients; in this arrangement, discharge information is communicated immediately to primary care and behavioral health providers at the health centers to enable timely follow-up with patients.

The organization also contracts with 8 other FQHCs in central and western Missouri to provide behavioral health services to their patients. Behavioral health clinicians are scarce and in very high demand, so this arrangement is useful for patients whose primary care is managed by other organizations.

Finance

It is difficult for adults to qualify for Medicaid benefits in Missouri; the state did not expand eligibility under the ACA. Nondisabled adults without children are not eligible, regardless of income; parents with

dependent children qualify only if incomes are at 22% or less of the FPL. Children qualify for either Medicaid or CHIP if they are living in families with incomes up to but not exceeding 300% of the FPL. Texas and Alabama are the only states in the US with a lower eligibility standard.

As a result, many patients pay for dental services on a sliding fee scale. However, many also have incomes below 100% of the FPL, so services still cost much less than from a private dental provider. The state Medicaid program eliminated dental coverage for adults earlier in the decade, but in 2017 it restored an emergency or acute care benefit that will pay for fillings and extractions. The ACA benefited the clinic's patient population because of the marketplace options that were introduced; the number of uninsured patients at the clinics dropped by about 50%. Sometimes a patient's insurance status drives management of their care. Between 20% and 25% of patients are uninsured, which can result in an inability to afford therapy. This is particularly problematic for patients with mental health conditions that are usually treated with expensive medicines. As a result of lack of coverage, a psychiatrist might not be directly involved in the care of these patients because the patients cannot access the appropriate medications. Instead, the patient might be limited to behavioral health therapies.

The clinic receives reimbursement from the state Medicaid program for about 78% of the dental services, 66% of the behavioral health services, and 42% of the medical services supplied to patients. The remainder of service revenue is from other sources, including commercial insurances, Medicare, grants, and contracts for services from other organizations. Medicaid is administered through managed care organizations in Missouri, although some patients remain in fee-for-service Medicaid due to medical exemption.

Health Partners of Western Ohio
Dr. Gene Wright Community Health Center
Lima, Ohio

History and Background of the Organization
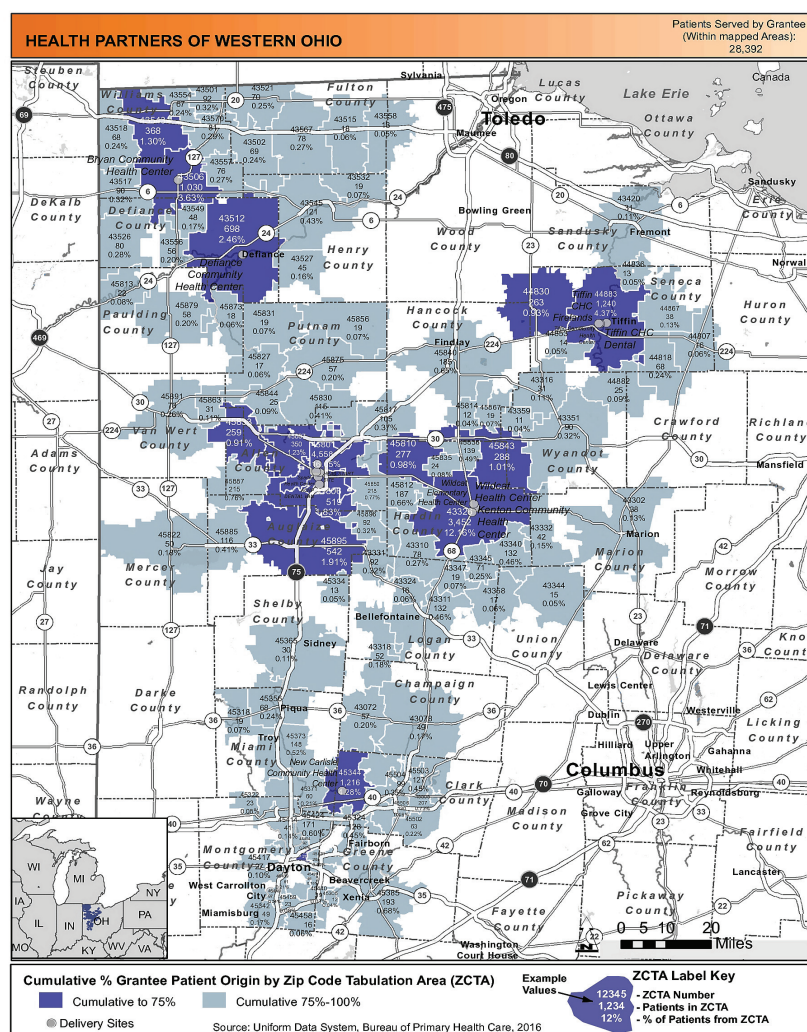
Health Partners of Western Ohio is an FQHC with 11 clinic locations. This case study was conducted at Dr. Gene Wright Community Health Center in Lima, where primary medical, dental, and behavioral health and substance use treatment services are provided. The health center houses a state-of-the-art 340B pharmacy equipped with a robotic pill dispenser. The FQHC also manages a quick urgent care center in Lima and school-based health centers in Kenton.

This health center is located in a small manufacturing city where Procter & Gamble, the Ford Motor Company, an oil refinery, a tank plant, and a chemical plant are the major employers. The surrounding countryside also includes many agricultural areas located north of Dayton and west of Columbus. The patient population at the health centers live in a mix of urban, suburban, and rural locations; some drive more than 30 minutes to access services at one or another of the health centers sponsored by the FQHC.

The organization's efforts started in 1995 as a collaboration between the City of Lima and St. Rita's Medical Center, a local hospital. At that time, Lima had one of the highest crime rates for a city of its size in Ohio. Limited access to health care services was identified as an important community issue for residents in several low-income areas of the city and particularly for the Black/African American population. St. Rita's

placed 3 nurses in each of 3 high-risk neighborhoods to provide health education and act as patient navigators to help residents find health services. The City of Lima placed community-oriented police officers in these areas to help reduce crime.

In 2002, Allen County Health Partners (ACHP) was formed. In 2003, a National Health Service Corps physician was assigned to Lima, and this, coupled with a donation of temporary clinic space, allowed ACHP to begin to directly provide primary care medical services for the community. In the first year of clinic operation, there were 3 employees and approximately 5,200 patient visits.

By 2004, ACHP had outgrown the donated space due to high demand for services. The clinic moved to another location and in December of that year was officially designated an FQHC. In 2006, the health center renovated the existing clinic building to also include dental and behavioral health clinic space and the on-site pharmacy.

In 2007, Health Partners opened its first satellite clinic, the Salud Community Clinic, to serve migrant farm workers in Tipp City, an area bordering the Dayton metropolitan area. In 2010, this clinic moved to a newer, larger building and was renamed the New Carlisle Community Health Center. The expanded clinic provides dental, behavioral health, and pharmacy services in addition to primary medical care.

The FQHC continued to expand. The Kenton Community Health Center opened in 2012; 2 primary care medical practices joined the FQHC in 2013 and co-located with county mental health services to serve patients in Defiance, Ohio; the Spartan Community Health Center opened in 2014, followed by the Tiffin Community Health Center in 2015 and the Bryan Community Health Center in 2016.

Patient Population

In 2017, the health center served more than 34,100 patients; 57.4% were between the ages of 18 and 64 years, 37.1% were children, and the remainder (5.6%) were older adults. Two-thirds of the patient population across all clinic sites is non-Hispanic white (67.7%), and the remainder are from racial/ethnic minority groups (32.5%), including Blacks/African Americans (16.5%) and those with Hispanic/Latino ethnicity (11.9%). The patient population at Dr. Gene Wright Community Health Center is about 40% Black/African American and increasingly Hispanic/Latino, mainly due to an increase in migrant workers in the area (7.2% of the FQHC's patients are agricultural workers). In 2017, the health centers of the FQHC provided 144,108 patient visits.

Almost two-thirds (64.4%) of the patient population has income at or below the FPL, and nearly all patients (95.4%) are at or below 200% of the FPL. Half of the patient population (50.1%) is covered by Medicaid/CHIP, while 21.4% have commercial insurance; approximately 18% are uninsured. More than three-quarters of patients (76.1%) received a primary medical service at the FQHC in 2017; more than one-third (37.2%) received a dental service; 27.9% received a mental health service; and 9.5% received a substance use service. In addition, primary medical and counseling services were provided to more than 1900 students and faculty at Health Partners' school-based sites.

Specialized Approaches to Delivery of Health Services

Behavioral health providers embrace the evidence-based public health approach to substance abuse treatment known as SBIRT (screening, brief intervention, and referral to treatment) for all patients, which allows a clinician to determine the appropriate level of treatment services for individual patients. Patients are screened for depression and substance use. The FQHC also has a MAT program; participants receive behavioral therapies in addition to medication to address addiction.

Community Outreach

The FQHC employs community outreach staff to visit patients in homes or in hospitals as needed and to work especially with health center patients who frequently use emergency department services. Nurses offer medical outreach in the southern part of the catchment area, and other outreach workers provide dental outreach as far south as Cincinnati. Social workers also actively engage in mediating gaps in services for the homeless, transient patients, those in need of food, child protective services, and others.

Two of the staff dentists, one of whom is retired from private practice, work exclusively in the community outreach programs with students and younger children.

Providers

Staff at the various health clinics includes a physician who acts as medical director, 3 primary care physicians, 1 obstetrician–gynecologist, 15 NPs, 4 PAs, 2 chiropractors, 10 dentists, 8 DHs, 13 pharmacists, 12 licensed independent social workers, and 4 licensed professional clinical counselors along with nurses, medical assistants, DAs, and supportive personnel. The clinical teams are usually composed of 2 primary medical care providers and, variously, 1 or 2 behavioral health specialists along with supportive allied health staff. Laboratory services, which are provided by a contractor, are available in the health clinics. Two of the DAs are certified in Ohio to perform extended functions.

The health center in Lima employs 80 people. Clinical staff is configured in teams, including 3 adult medical teams, a women's health team, and a pediatric team. Each team includes a behavioral health provider (there are 4 behavioral health providers in the building). Two clinical pharmacists also work with the medical and behavioral health teams to consult about medications. Each team shares a common office space within a clinical area. The women's health team and the pediatric team each consist of 2 clinical professionals, a behavioral health specialist, 5 licensed practical nurses, and a health coach. Dental teams are located in the dental clinics of the various health centers.

Five of the 11 primary medical clinics of the FQHC have co-located dental clinics. The largest of these is at the Lima site, which houses 9 dental operatories. There are 6 dental operatories in the Kenton clinic, 6 in the Bryan clinic, 3 in the New Carlisle clinic, and 2 in the Tiffin clinic. All dentists at the FQHC are general dentists.

The Lima health center retains an open-access nurse who daily triages emergency room and discharge patients from 2 hospitals, Lima Memorial and St. Rita's. Each day, the hospitals transmit any discharge summaries for common patients to the triage nurse, who then phones patients to schedule appropriate follow-up visits or immediate visits for urgent needs.

The health center also has information technology staff and insurance enrollment specialists, called certified application counselors (CACs), who assist patients with enrolling or re-enrolling in Medicaid or with purchasing insurance on the marketplace. The CACs also work with sliding fee–eligible patients.

Recruiting clinicians to practice at the health center is not generally problematic; there are seldom professional vacancies. NPs mainly staff the medical clinics; the health center also employs primary care physicians. There is very little turnover among DHs, and even behavioral health staff tend to remain once employed.

In the past, the FQHC experienced turnover among dentists, but more recent recruits have remained with the health center for longer periods. Dentists' tenure at the health center has typically been about 3 years. The main source for recruiting dentists has changed over time with the economics in dentistry. Many new dentists now graduate with substantial student loan debt, limiting their resources to immediately buy a dental practice.

The FQHC has a high HPSA score, which allows the organization to offer loan repayment. New dentists are attracted to health center practice because it meets their needs with loan repayment; it offers a competitive salary package; it provides scheduling flexibility not usually available in smaller practices; and there is opportunity to gain experience with mentoring dentists. Contracts with dentists were changed and no longer contain non-compete clauses, which is appealing to potential hires who may eventually consider private practice in the local area.

Dentists with established private practices in the area are not usually interested in moving to health center employment. The health center currently has 1 dentist who is working under an H1-B visa. Case study participants commented on an increase in female dentists applying to the health center, which may be related to an increase in the number of females in dentistry generally.

The center recently improved its interview process, which is relatively rigorous and straightforward in its expectations for the newly hired; this has also improved retention. Interview questions are now tailored to the needs of the health center and include behavior-related questions to better ensure a fit between the organizational mission and the interests of the clinician. Health center leadership recognizes that it is easier to teach new skills, such as patient management, than it is to engender receptivity to the patient population. According to case study participants, clinicians are sometimes more attuned to the technical aspects of providing care and patient relationship skills may be lacking.

In the past, the health center participated with several clinical residency programs but quickly realized that the commitment required a significant investment of staff time and resources. At one time, the health center had a robust pharmacy residency program; however, leadership decided it would rather invest its limited resources in existing employees. The health center still hosts student rotations from educational programs in the area but no longer has any resident clinicians.

Efforts at Service Integration

Health Partners has been fortunate in its ability to provide the highest quality of care for its patients at the lowest cost possible. It is one of the fastest-growing FQHCs in Ohio, although it is not yet the largest. Its model of care delivery and its efforts at service integration are key to its success.

Case study participants commented that co-location of service clinics is a facilitator to integration because it creates an organic path to services. Patients of the health center see the services provided in the health center and are thus easily educated about their availability. In addition, many clinical activities foster integration.

Informants suggested that integration of dental services into other clinical services requires a more concerted effort by staff than integration of other services. One reason advanced by case study participants is that the dental clinics in the health centers are in separate areas from those where primary and behavioral health services are provided. According to informants, the epidemic of substance use disorders has increased awareness of the importance of integration of primary care and behavioral health, but dental lacks that same visibility and urgency. The center now screens everyone for depression, anxiety, and/or substance use. Public policy and program funding make it possible to intervene in patients' substance use problems, as there are now resources devoted to the issue.

Participants reported that integration is a systemwide goal achieved mainly through a concerted effort to address individual patient need. An example of how integration is achieved one patient at a time was provided by a case study participant. A behavioral health specialist had a patient with existing dentures that fit poorly, causing problems with eating and affecting the patient's medical and mental status. The patient reported mouth soreness and depression because the poor fit limited functionality. The patient was not using the dentures, and as a result was becoming socially isolated. The behavioral health provider contacted the dentists in the clinic, who remade the dentures to fit correctly. This appreciably improved the mental and physical health of the patient.

Warm handoffs and back-and-forth communication between disciplines is standard practice at the FQHC. It is commonly acknowledged that some dental patients experience significant anxiety in the dental chair; dental providers are trained to help patients manage their fears. Occasionally, however, the need for a behavioral health provider to assist a patient with special difficulties arises in the health center's dental clinics. In addition, social workers and health coaches can and do accompany patients to dental appointments if indicated or as requested.

Primary care providers at the health center are making a concerted effort to refer their patients with diabetes to the dental clinic and request a panoramic x-ray to enable the dentist to screen for infection and determine if the patient has an urgent issue. The dentists make an effort to see these patients for an acute issue on the same day and to start a patient on an antibiotic or provide another palliative intervention until treatment can be completed. The patient will commonly receive an appointment for one or more subsequent dental visits.

Some health center patients have not seen a dentist in a very long time. When this is discovered, the patient is carefully followed by both primary medicine and dentistry. Case study participants provided an example of the success of such patient management protocols. A primary care patient who was an insulin-dependent diabetic had not been to the dentist for a lengthy period. The patient was referred to the dental clinic and treated for tooth decay and gum disease in conjunction with ongoing medical interventions by the primary care team. As the patient recovered his oral health, his physical health improved and he was able to stop injecting insulin. That patient has maintained acceptable A1C levels and good oral health ever since.

Behavioral health disorders are not uncommon among patients at the health centers. According to case study participants, the staff is very skilled at working with these patients. Behavioral health providers and the medical director consult often about patients' medications; primary care clinicians will prescribe for depression and other mental health diagnoses. Some primary care clinicians are even comfortable prescribing mood stabilizers or antipsychotic medications.

The triage nurses in the health centers are located near patient waiting areas and are vigilant as patients arrive at the health center. If a nurse recognizes that a patient is in psychiatric crisis, the nurse will immediately remove the patient from the public area and place him or her in a room. The centers have established a "Code Violet" that alerts behavioral health providers when a patient seems violent or is presenting "off the rails." Several health center staff have been formally trained in crisis management and are comfortable with de-escalation techniques; some are just naturally able by demeanor to calm patients.

The centers each have a robust MAT program for patients abusing opioids. Several of the primary care clinicians have waivers to provide patients with and manage their use of buprenorphine/naloxone or extended-release injectable naltrexone. NPs can administer this injection. Primary care providers with a waiver to prescribe

buprenorphine/naloxone are limited to 30 patients in the first year; in subsequent years, the waivered provider is allowed to manage up to 200 patients annually.

The health center is committed to helping patients with substance use issues. The preferred protocol is to taper patients' usage over time. Clinicians help patients manage the initial symptoms of withdrawal with a mood stabilizer (eg, quetiapine), an antinausea medication (eg, ondansetron), and gabapentin for neuropathic pain. Once a patient has had 3 clean urine tests that demonstrate no recent substance use and sufficient time has elapsed for detoxification, providers will inject the patient with extended-release naltrexone.

Clinicians are trained to treat abuse disorders like other chronic diseases and to remain vigilant about patient monitoring, education, and treatment. The medical team, the behavioral health team, the dental team, and the pharmacist work together to address substance use issues.

For example, the literature regarding opioids suggests that one of the biggest factors in relapse for substance users is prescription of narcotics for dental pain. The health center has developed a protocol that recommends that, whenever possible, dental patients with pain be treated with a combination of acetaminophen and ibuprofen. In some cases, a dental patient on extended-release injectable naltrexone needs to stop injections because the medication interferes with medications used in dentistry to block pain. Dental providers at Health Partners do not offer sedation services for patients; instead, when those services are indicated, patients are referred to specialists in the community. An endodontist from the community works at the dental clinic 2.5 days each month to perform root canals for children.

Dentists at the health centers use a variety of anesthetics and techniques to minimize patient discomfort and reduce the risk of patients' exposure to opioids or other drugs that might result in complications. For instance, a dentist might reduce the amount of epinephrine used for patients with hypertension or use articaine, which provides better pain control in areas of the mouth with harder tissues.

Dental services are in high demand. The FQHC has many "dental-only" patients because dental providers who accept Medicaid benefits are scarce. Very few private-practice dentists in the catchment area participate with the state Medicaid program. One local practice treats some patients with Medicaid but is unhappy with the no-show rates among patients with the benefit.

There is about a 20% no-show rate for dental services at the health center, but that is managed through a small amount of double-booking and allowing for walk-in/emergent care patients. All scheduled patients receive automated reminder calls; the health center also uses text messaging to reach patients.

The dental staff is able to accommodate unscheduled patient need while still meeting appointment times for scheduled patients. Staff triage patients to determine reasonable treatment to reduce pain or infection. The dental staff understands the necessity of maintaining this delicate balance to keep the clinic productive and on schedule. The clinicians make expert decisions based on what is best for the patient; it may be triage now and treat later. It is important not to do too much unless there is an urgent need, especially if scheduled patients will suffer significant inconvenience. Some patients take advantage of the flexibility of walking in whenever it is convenient.

The health center's dentists are skilled at building patient relationships and encouraging patients to be consistent in care seeking and accessing preventive services. Keeping appointments for preventive services is not easy for some because of lack of transportation and other barriers. Dentists educate patients that lack of preventive services results in urgent treatment needs and pain; routine preventive care would reduce or eliminate these dental symptoms. All staff encourage patients to establish a dental home at the health center.

Staff in the clinics participate in both formal and informal efforts at integration. Dentists regularly check patients' blood pressures and may ask a medical provider to perform a quick assessment when elevations occur. Sometimes, an NP will walk a patient to the dental clinic for a provider to triage an oral health problem.

The DHs at the health center are involved in every aspect of care at the health center. DHs go to the pediatric clinic to do oral health screenings, assessments, and fluoride applications for children. When DHs are not busy in the dental clinic, they notify the pediatric clinic of their availability. They are vigilant about ways to be involved in the various initiatives at the health centers to integrate services and reach patients, particularly the young.

According to case study participants, the probability of achieving integration is enhanced by providing opportunities for and encouraging communication between the various disciplines. In health care organizational structures, dental has always been siloed. There are many historical and clinical reasons for this separation. The procedure-oriented nature of the discipline is isolating. Dental providers perform invasive procedures that require sterile equipment, dedicated plumbing, and a considerable array of tools and materials. Other clinical disciplines tend to provide more consultative services, so personnel flow inclusive of a variety of health disciplines is more natural.

One initiative to better include dental services in organizational flow was to create a central break room for all staff. The dental staff previously had its own break room, which offered little opportunity for incidental interface with others at the center.

Processes Fostering Integration

Staff Engagement With Organizational Mission and Training

On the day the case study was conducted, the staff at the Lima health center was gathered for a regularly scheduled weekly meeting an hour before the clinic opened. The center director led a trivia game, with winners receiving chits for snacks, and then made announcements about upcoming events at the health center. Information about changes in health center routines or policy were included on the agenda. The meeting always includes a weekly team-building activity with refreshments contributed by various staff.

The health center invests in staff training. Every clinical provider is allowed up to $3000 per year for continuing education activities. Regular morning updates address a variety of issues, including education on clinical protocols for such things as A1C tests and second blood pressure tests. Weekly informational emails sent to employees include a training/information component.

The center hosts monthly staff meetings and quarterly provider meetings, which are organized around a subject of common interest to the various clinical disciplines. The educational theme for the current year is pain; the clinical education at monthly or quarterly meetings is on a related topic such as medication management, facial pain, temporomandibular jaw disorder, headache, or low back pain. Breakout sessions include providers from all disciplines so that discussions are cross-disciplinary.

The dental director meets monthly with the dental team, as do the medical and behavioral health teams; another multidisciplinary meeting addresses clinical patient management. The center directors also meet with each other and with their own health center staff. Support staff and the nursing and clinical staffs also meet on a regular basis. The center hosts regular team meetings, with social justice often the focus of the trainings and discussion. Information is shared and mechanisms for communication are built.

The organization recently closed its health centers for an entire day for team training to build close, "familial" relationships among staff, to make them aware of differing roles in the health center, and to learn effective ways to work with different personality types. The health center hired a consultant to increase team cohesion, which was regarded as a good investment. Employees learned about differences in personal style and conflict resolution. The process was productive and the outcomes were positive.

New staff enter a 90-day orientation period in which training is tailored to a particular role in the organization. For instance, a new medical assistant would first work with a mentor to learn new clinical skills or improve existing ones. The health center also encourages "integration rotations" intended especially for administrative or lower-skilled staff. These new hires spend time in dental, pharmacy, and primary care; they may shadow a behavioral health provider or spend time in medical records to learn about all aspects of the health center. All new intake and reception staff are provided with the business cards for all clinicians in the health center so that individual phone extensions are immediately available to directly contact any provider. Case study participants advanced the opinion that training staff at all levels is important to successfully integrate care for patients.

Center leadership makes a concerted effort to regularly bring staff together. They do this by initiating a competition or contest and providing food for breakfast or lunch in culmination. Each year, the center sponsors a "Make a New Friend" event during which staff share a coffee break or have lunch with someone from another clinical area to learn about their respective roles.

Formal and Informal Communication Processes

Electronic Health Record

The software used to power Health Partners' EHR is Greenway Prime Suite, and the electronic dental record uses CyDental. It has been difficult to integrate these systems. Providers still need to open them separately but do have universal access such that dental can review medical clinical notes and vice versa.

Patient Engagement

The health center has placed laminated posters describing the relationship of oral health to systemic health in each of the primary care clinics at the health centers. This is an educational tool for patients and is a consistent prompt for providers to educate their patients on the importance of regular dental care.

Engagement With the Larger Community

The health center has a formal partnership with St. Rita's Medical Center. St. Rita's closed its dental services department and now provides a grant subsidy to the Lima health center to provide dental
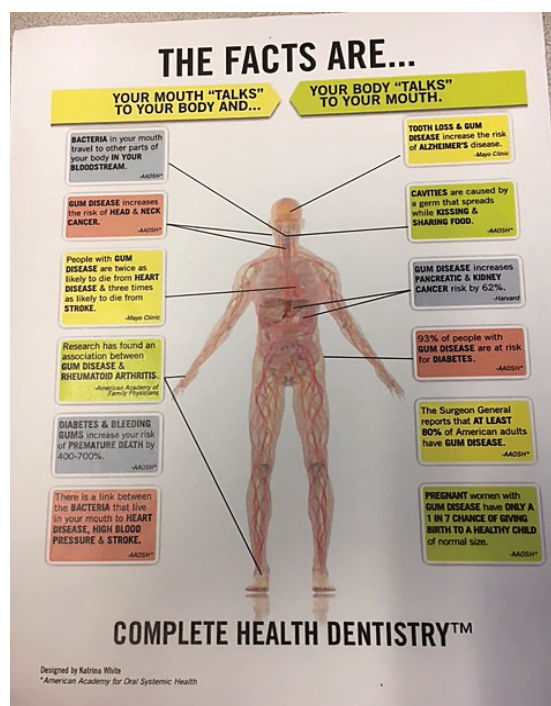
services to patients who arrive at the hospital's emergency department with a dental complaint.

St. Rita's Medical Center also owned a dental van that the health center now uses to provide sealants and preventive/prophylactic services to children in approximately 40 schools, mostly in Allen County. Some of the communities in which these schools are located have essentially no dental services available to the population. Children found through the mobile van program to be in need of follow-up care are referred to the dental clinics sponsored by Health Partners. In addition, dental outreach teams sponsored by the FQHC are providing some oral health services in schools using portable equipment.

The services provided on the van are supported by a number of small grants for sealant placement. Unfortunately, the targeted population is limited to children in second, third, sixth, and seventh grades. Children in other grades who may also need sealants are sometimes excluded from the program due to lack of funding.

Finance

Case study participants were asked about financial support for services at the FQHC, particularly for uninsured patients. Informants commented that health center leadership is committed to the importance of a provider "doing the right thing" for patients, and the finances to support that effort seem to follow. The health center receives revenue from patient services, its HRSA grant, and other public and private philanthropy to support patient care.

The State of Ohio participated in the Medicaid expansion enabled by the ACA. Adults who qualify for Medicaid are covered for certain dental services such as prophylaxis, restorative services including root canals, some crowns, and dentures every 10 years. Dental services that are out of scope or not covered by the Medicaid benefit are available to patients on a sliding fee scale. Laboratory fees for out-of-scope services must be paid by patients.

Whitman-Walker Health
Washington, DC

History and Background of the Organization
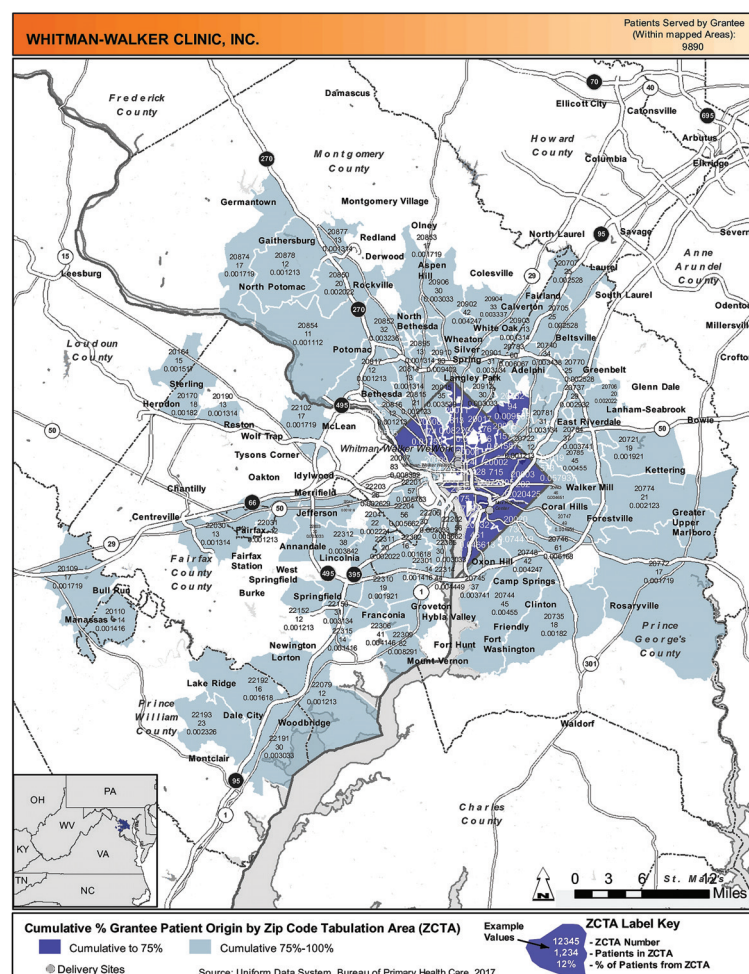
Whitman-Walker Health was founded in 1973 and became incorporated in 1978. In 2018, the organization celebrated its 40th anniversary serving the LGBTQ community and people living with HIV/AIDs in the greater Washington, DC, metropolitan area. The organization began as a medical clinic to serve gay men with sexually transmitted diseases and to provide peer support and substance use services for the population. Over time, the organization expanded to include a cohort of lesbian patients as well as a small group of transgender people.

In 2005, the organization began the transition from an AIDS service organization to a comprehensive community provider of primary care services, while continuing to serve its core patient groups. Whitman-Walker Health became an FQHC Look-Alike in 2007; it received full designation in 2012. The organization currently employs 270 people working in 2 main clinical health center sites and 3 support sites. As of 2018, the health center serves members of the LGBTQ community and people diagnosed with or at risk for HIV, including some with comorbid substance use or behavioral health disorders.

In the early years, the HIV epidemic—initially recognized in 1981 as especially occurring in the gay community—forced the organization to focus almost exclusively on those who were diagnosed with the virus. At that time, Whitman-Walker Health sponsored a food bank, provided housing services, and offered medical and dental services to HIV-positive patients. The organization sponsored a housing buddy program and offered legal services, helping people diagnosed with HIV to plan for eventual death and

the disposition of their estates. The services were mainly free to patients, although some funding for services was eventually provided by the Ryan White HIV/AIDS Program, which began in 1990. The program initially had a heavy inpatient/hospice focus, since once HIV converted to AIDS, it was almost universally deadly.

The advent of antiretroviral therapy in the late 1990s changed the service paradigm for those diagnosed with HIV. People were living longer with the disease, making it a chronic rather than a fatal diagnosis. By 2008, Whitman-Walker Health had changed its model of care delivery to better accommodate a population that was living with one or several chronic diseases. The organization focused on patient engagement and retention and provided a spectrum of services, including onsite HIV testing and, when possible, same-day consultation.

Whitman-Walker Health provides health services at 2 locations in DC—one in the northwest part of the city on 14th Street and the other in the southeast section of the city at the Max Robinson Center. The organization also provides legal services and insurance navigation on a daily basis for walk-in and scheduled patients at the WeWork Manhattan Laundry site in northwest DC. At the time of this case study, Whitman-Walker Health was in the process of redeveloping the former Elizabeth Taylor Medical Center, part of which will house health and wellness offerings as well as legal and public benefits services and administrative staff of the health center.

This case study was conducted at the new and expansive 42,000-square-foot main health center of Whitman-Walker Health in the northwest part of DC. This clinic, which represents substantial growth in capacity for the FQHC, is conveniently located near public transportation. Health center staff have been providing services in this location since May 2015. The building includes 7 floors of medical, dental, and behavioral health clinics, including a state-of-the-art 340B pharmacy on the ground floor with direct street access.

The pharmacy purchases and dispenses drugs for Medicaid-eligible patients (carve-in) and offers customized drug packaging for patients who need helping tracking medicine and dosage by time and

day of week. The pharmacy is open to the public. It also acts as a specialty pharmacy supplying culturally competent clinical consultations and specialty medications specific to the population's needs.

Services at the clinic sites include medical, dental, and behavioral/ mental health, psychiatry, outpatient substance use treatment, MAT, gynecology, HIV specialty care, endocrinology, aesthetic medicine, HIV testing and counseling, pre- and post-exposure prophylaxis, pharmacy, and other related services. The legal services offered include help with employment, housing, and other forms of discrimination; immigration; name and gender change; wills; powers of attorney; disability; and consumer rights litigation.

Patient Population

Approximately 400 patients visit the health center daily; patients may see one or multiple providers during a health center visit. The FQHC has approximately 18,000 patients, mostly adults aged 18 to 64 years (95.7%) in all service areas; about 10,000 of these are primary medical patients. In 2016, the health center served 1,300 transgender people in the DC area. The center does not provide pediatric services but does offer some services to people under the age of 18 who identify as LGBTQ.

Most patients do not have HIV; however, those with an HIV diagnosis account for approximately half of all patient visits to the health center annually. Many of the health center's patients have co-occurring mental health conditions such as anxiety, depression, bipolar disorder, and schizophrenia, and some have experienced complex trauma resulting in PTSD. These conditions require that staff be expert at provision of trauma-informed care.

HIV infection rates appear to be decreasing. In the past, the FQHC would see about 700 new cases annually; currently the annual rate is about 300. The reduced incidence is partly attributable to prophylactic treatments such as the daily PrEP pill, which is widely available for management of risk and prevention of infection. The FQHC provides HIV testing and counseling services on a walk-in basis and allows non-patients to access "morning after" prophylaxis on an as-needed basis through the pharmacy.

The LGBTQ population and the HIV community are reflective of the racial, ethnic, religious, and economic characteristics of the general population in Washington, DC. This population of patients is heterogeneous; two-thirds (66.2%) are from racial or ethnic minority groups, mainly Black/African American (47.6%). A proportion identify as Hispanic and there are also smaller ethnic groups such as the Amhara accessing services at the health center.

Specialized Approaches to Delivery of Health Services

Clinicians and therapists at the health center focus on harm reduction strategies rather than abstinence counseling, making selected therapies or preventive services more useful to the population. This applies to patients diagnosed with HIV, their partners, and anyone who abuses substances in addition to patients with mental health diagnoses, which may be co-occurring conditions.

Harm reduction is a reasonable approach to improving outcomes for patients who engage in behaviors that pose a health risk. The method acknowledges the importance of offering practical strategies to reduce health risk in light of a patient's difficulty in eliminating the harm-producing behavior. In the opinion of case study participants it is important that patients feel accepted by their providers and the harm reduction approach to service provision is well received. Providers are taught to ask patients how they can help and support the person. Over time, as trust between the provider and patient is established, the patient's willingness to see providers in other services areas within the FQHC also grows.

A portion of the HIV-positive patient population has a co-occurring opioid use disorder. The FQHC sponsors a MAT program in which patients are prescribed buprenorphine/naloxone, extended-release injectable naltrexone, or a related medication to ease withdrawal. Psychiatric prescribers originally managed this program at the FQHC, but it is now mainly managed by primary care clinicians. There are currently between 60 and 100 patients in the program. Providers must be trained and certified to provide this therapy, resulting in a limited number of providers who have Drug Addiction Treatment Act waivers issued by the US Drug Enforcement Administration. Clinical providers at Whitman-Walker Health have been very receptive to learning about buprenorphine/naloxone therapy and working with patients; consequently, provider uptake, especially among some of the younger, mid-level clinicians, has been excellent.

Case study participants commented that while it might be expected that the number of waivered providers in an organization would be the limiting factor in extending the MAT program to more patients, the limiting factor is actually an inadequate supply of behavioral health counseling providers to support the necessary therapy for patients in the program. Because behavioral health support is an important contributor to the success of MAT, the health center focuses on integrating both services for patients. However, behavioral health services are in such high demand that it is difficult to ensure sufficient capacity to meet the need.

The organization does not sponsor a methadone treatment program; there are many methadone clinics in the DC area, including at a nearby university. Case study participants expressed concern about a noticeable increase in drug use–related deaths in DC in recent months, mainly attributed to fentanyl-laced heroin. Another of the drugs of preference in the patient community is crystal methamphetamine.

Providers

Whitman-Walker Health currently has 25 medical providers and 10 nurses working in the primary care clinics; each medical team consists of 4 or 5 primary care providers with a nurse assigned to every 2 primary care providers. Each of the medical pods in the expansive health center is configured with 8 exam rooms, 2 of which are reserved for nursing activities that include, on an as-needed basis, patient education and other supportive services.

A behavioral health specialist is embedded with every primary care team, and there are usually 2 or more care navigators on each clinic floor. The behavioral health providers include licensed clinical social workers. Some of the FQHC's patients are in case management programs delivered by external community-based organizations. The health center does not currently have sufficient resources to incorporate this model for their patients. The center does have multiple care navigators and 1 peer support specialist who can respond to specific patient needs.

The health center in northwest DC has 3 dentists and 3 DHs providing services. The dental clinic in southeast DC has a single dentist. As many of the FQHCs in DC also provide dental services, patients do have some choice. Still, demand is very high, especially among those diagnosed with HIV.

At one time, the health center hosted a dental student externship program for fourth-year students from a nearby university's dental school, but currently much of that training occurs in the university-sponsored clinic. The health center hosts medical students in short clinical externships, which are in demand because students learn the special characteristics of providing services to LGBTQ patients. The clinic is also a rotation site for psychiatric residents, who are in the health center's clinics between 4 and 8 hours every week for a year. Master's-level behavioral health professionals also intern in the organization.

The health center recruits new staff in various ways but mainly uses the web service, Indeed. Many applicants express a desire to work at Whitman-Walker Health because of its organizational mission. The annual staff turnover rate is between 23% and 24%; the highest turnover rate is among behavioral health staff (22% to 25%). Many of these professionals come to the organization with bachelor's degrees and complete their master's or professional degrees while working at the health center. Once fully credentialed and licensed, these professionals have many opportunities to enter private counseling practices in the local area, which pay substantially more than health center positions.

Clinical professionals are more easily retained. Many initially come to the health center for the loan repayment opportunities or to gain additional clinical experience. Many stay because they become involved with the patient population and find the work satisfying. The dental staff includes some dentists who have left private practice in the community to find new opportunities to contribute. There are also new dental school graduates who appreciate having onsite mentors; many enjoy interacting with the patient population and having a meaningful impact on patient outcomes.

Efforts at Service Integration

Case study participants commented that integration of health care services is a logical approach to service delivery for a complex and chronic population of patients. One case study informant attributed efforts at integration in HIV service delivery organizations to the legacy of the Ryan White program, which supports not only primary care services but also a comprehensive array of health and social support services for those living with HIV, regardless of insurance status. The various components of the program constitute a comprehensive and inclusive array of services for men, women, and children, including medical, behavioral/mental, and dental health services along with a variety of social support services. The program has long encouraged innovative models of care delivery, providing funding not only for direct care but for planning and training as well. As a result, funded organizations develop programs using an integrated

model for care delivery, especially in outpatient and ambulatory care settings. It is a model that could easily be extended to a variety of patient groups.

In an effort to provide fully integrated care, Whitman-Walker Health offers an inclusive array of services. The path to services is mainly through primary care providers who effect referrals for dental and especially for administrative or lower-skilled staff. These new hires spend time in dental, pharmacy, and primary care; they may shadow a behavioral health provider or spend time in medical records to learn behavioral health consultations or for social supports. That said, due to capacity issues and unless the situation is emergent, the patient may experience a 2- to 3-week wait for an appointment in another clinical area.

The FQHC now requires that new patients establish with a primary care provider at the health center before scheduling other services, believing that primary care is the hub that best manages and monitors patients' well-being. It is expected that this requirement will better enable high-quality services informed by transdisciplinary input and feedback from the array of clinical disciplines at the health center.

Whitman-Walker Health makes an exception to this requirement for patients diagnosed with HIV, many of whom have long-established primary care provider relationships in the community. Some community-based organizations in DC (eg, Helping Individual Prostitutes Survive [HIPS], Mary's Center) focus on the special characteristics of HIV patient groups. However, several of these organizations are not as full service as Whitman-Walker Health, so the FQHC provides complementary capacity by offering dental and behavioral health care to mutual patients.

New patients who call to schedule dental or behavioral health services directly are informed that those services are limited to existing patients and to persons with HIV. If the caller is not HIV positive, he or she is informed of the requirement to first become a primary care patient of the clinic. If HIV positive, the person can be directly scheduled with the dental or behavioral health clinic.

Clinical staff at the FQHC are expert at working with HIV patients to manage viral loads. Dentists commented that they rarely see major issues in the oral cavity in those patients. Occasionally, a patient will present with thrush. However, clinicians remarked that they see few oral cancers in patients with HIV, though such diseases were typical when the epidemic first began. While they more closely monitor patients with HIV for HPV cancer markers, dental clinicians are diligent about performing a head and neck exam for all patients, regardless of HIV status. Overall, oral cancer occurrence in the patient population is rare.

Case study participants were asked about the impact of patients' use of crystal methamphetamine on their teeth. One provider commented that is was surprising how few of the patients exhibited classic "meth mouth" syndrome considering their drug preferences. Many patients still exhibit good oral hygiene

despite meth use; many also receive continuous oral health care services, which is probably helpful in maintaining oral health.

One of the goals of the FQHC's primary care mandate is to be more selective about use of services at the FQHC. Community demand for dental services is very high and continues to grow, so that the dental clinics at each of the 2 clinic sites are constantly busy. In early May, dentists were booking into July for patients needing restorative services.

Allowing patients from the community to access only dental services at the FQHC has a downstream impact on the availability of oral health services for the health center's primary care patients, creating long wait times for dental services. According to case study participants, the "thread of care" is disconnected when the patient is not receiving primary care at the health center. Case study participants hoped that, over time, as the new parameters requiring clients to be primary care patients take effect, more comprehensive information would be readily available to dental and behavioral health clinicians to inform their care decisions.

Behavioral health services are also in high demand; the FQHC cannot expand service capacity quickly enough. It is very difficult to hire a sufficient number of prescribing providers to meet the psychiatric medication needs of patients. While many of the primary care providers at the FQHC feel competent to prescribe and manage first-line therapies for depression or anxiety for patients who are relatively stable, these same providers prefer not to prescribe for more complex or complicated conditions. Primary care providers complete a behavioral/mental health screening and use the 2- and/or 9-item Patient Health Questionnaire (PHQ-2 and/or PHQ-9) with patients to screen for depression. Every patient is screened annually for alcohol and other substance use.

Processes Fostering Integration

Formal and Informal Communication Processes

Communication was described as the most essential tool to efficiently and effectively provide the range of health services needed by the health center's patients. According to case study participants, formal

communication mechanisms such as referral systems, clinical progress notes, and medication lists are important. However, these processes must be supplemented by ongoing informal, ad hoc exchanges between clinical providers, support staff, and administrative personnel.

Providers routinely effect warm handoffs to the dental clinic; support staff in the primary care clinic will call the dental clinic if a patient needs an urgent consultation or to refer the patient for services.

A medical provider might also send a patient directly to the dental clinic if, for instance, the provider is concerned about a mouth lesion that needs immediate appraisal. The same is true for behavioral health. The majority of behavioral health referrals at the FQHC are initiated by in-house primary care providers either through the formal referral process or through informal verbal exchanges between providers and other staff.

Staff Engagement With Organizational Mission and Training

The success of the health center is based in the commitment of the staff to the organization's mission and to the patient population. It is somewhat easier to find clinical providers who engage with the patient population than it is to find support staff who fully commit to the goals and objectives of the health center.

The most difficult workers to recruit and retain are those who fill positions requiring less training, such as medical assistants and administrative support staff. There are more of these positions at the FQHC than there are clinical positions. Differences in pay between what other community employers and the health center offer are critical for many. In addition, some staff working in these positions are not as committed to the organizational mission. The health center is making a concerted effort to improve the process it uses to interview job candidates so that those who are eventually hired will fit in at the clinic.

Training for the health center's workforce is an essential piece of the comprehensive care puzzle. Staff receive ongoing education related to pertinent health issues in the patient population. During the orientation period, new staff receive training in gender-affirming care with discussion of the specific needs of transgender people. Training modules include interactive sessions using direct patient feedback. The FQHC also sponsors training in behavioral health diagnoses, including depression. The training also directly addresses issues of personal bias that might affect exchanges with patients. This is an important part of staff education because it helps the workforce to acknowledge their preconceptions and prejudices and work through potential interactions with diverse patient groups.

Electronic Health Record

Whitman-Walker Health began using eClinicalWorks as its EHR in 2008 and Open Dental in 2012. Behavioral health progress notes reside in a separate module in eClinicalWorks. At the time of these case studies, eClinicalWorks was expected to introduce a dental module with a seamless interface to the medical record, and Whitman-Walker Health was planning to transition the dental record to that software. The EHR is used by all providers as a tool for consultation with others providers and for management of patient services.

Patient Engagement

Whitman-Walker Health provides pre- and post-exposure prophylaxis for people who are at risk for acquiring HIV; the organization prides itself on gender-affirming care and on its response to newly diagnosed patients, who are provided with services on an emergent basis. The health center offers HIV testing to anyone from the community in a confidential clinic setting. Whitman-Walker Health also offers testing as an outreach service.

Whitman-Walker Health staff engage in ongoing outreach to members of the HIV community who have fallen out of care. The health center has numerous sources of information about where patients might be living, and outreach workers, including community health workers (CHWs), make a concerted effort to find these patients and re-engage them with medical services. The center's CHWs work with medical providers to identify patients who have failed to show for follow-up services. The CHWs have a very high success rate culling past records and working with other service and support agencies in the DC area to locate patients. If phlebotomy trained, the CHWs can provide a number of services when they locate patients, including blood draws in patients' homes and even in the cars in which patients may be living.

The FQHC, like many similar clinics, struggles with its patients' no-show rates. The clinic now schedules appointments only 2 weeks in advance. A patient call list, which is managed by schedulers in a phone center, is compiled. Newly identified/diagnosed HIV patients are immediately placed on the call list and given appointment priority.

Daily clinical schedules are designed to accommodate walk-in patients; clinic staff recognize the need for these services in the population. The clinic designates on-call providers on a rotating basis to see walk-in patients. Each day, 1 or 2 providers are allotted on-call slots in their schedules—usually the first appointment in the morning and the first after lunch—to accommodate urgent or emergent care needs.

The organization has a call center that triages patient need during clinic hours. After hours, the phone is answered by a triage nurse, who determines if the patient has an emergent issue and then effects

appropriate referrals. All triage notes are scanned and uploaded so that providers are alerted to patient calls and can respond accordingly.

Engagement With the Larger Community

Whitman-Walker Health has an innovative arrangement with the Fire and Emergency Medical Services (EMS) Department in Washington, DC, which is the local 911 system. DC has one of the highest per capita EMS call volumes in the US. EMS instituted a program called Right Care, Right Now that is designed to triage 911 callers to the most appropriate and most "responsible" level of care. If a caller does not have

a medical need that would necessitate immediately sending an ambulance for transport to an inpatient facility or hospital emergency department, the caller is connected with a triage nurse. This nurse then refers the patient to the most appropriate medical care in the community, usually a community health clinic or urgent care center.

Whitman-Walker Health accepts referrals from this program on a regular basis. Case study participants described a typical scenario to illustrate the mechanics of the program. A patient with a concern about blood pressure would be referred to the FQHC and told to use Uber or a taxi for transportation to the health center. The patient would be seen on an emergent basis to address the health concern. Participation in the program requires some scheduling flexibility at participating health centers in order to accommodate patients with acute concerns, but it has proven to be beneficial on many fronts. Right Care, Right Now has resulted in significant cost savings for providers and insurers throughout DC from reduced emergency department and medical transport use.

Funding for Services

Whitman-Walker Health is an anomaly among FQHCs in that about 30% of its patient population is commercially insured. The LGBTQ and HIV populations include people from all sociodemographic and income groups in DC. Thus, some patients are in better economic circumstances than others; some are employed by companies that supply health insurance, while others purchase insurance through the marketplace. Medicaid-eligible patients in Washington, DC are fortunate. The District's Medicaid program provides a comprehensive dental benefit for adults that includes even dental implants in some cases. DC is second only to Massachusetts in the percentage of the population with health insurance.

Approximately 30% of the patient population is insured by a commercial carrier; 12% of patients are covered by Medicare; about 3% are covered by the DC Healthcare Alliance; and the remainder are Medicaid eligible. The organization employs 11 insurance navigators to help people maintain coverage and to enroll or re-enroll in public insurance programs. Ryan White funds fill the financial gap for patients

who qualify; many of the Ryan White–eligible patients live in Virginia and are older, Medicare-eligible patients. Patients who are covered under Part C of the program are largely from Virginia and Maryland, and those covered under Part A are mainly DC residents.

The DC Healthcare Alliance is a managed care plan sponsored by the District's government for low-income people who are otherwise ineligible for Medicare or Medicaid. In addition, another District-sponsored program, Cover All DC, is designed for any person who does not otherwise qualify for public, private, or employer-based insurance programs or the DC Healthcare Alliance program. This group includes people who do not meet citizenship requirements or do not have eligible immigration status. Cover All DC is more limited than the DC Healthcare Alliance program. Although there is a comprehensive medical benefit, enrollees have a very limited dental benefit and essentially no behavioral health coverage, with the exception of minimal coverage for some medications used to manage behavioral health diagnoses. Only a few of Whitman-Walker Health's patients are covered by this program. Other FQHCs within the District and its environs focus more exclusively on the needs of refugees and undocumented immigrants. All services provided at the FQHC to Medicaid-eligible patients are reimbursed under negotiated PPS rates. The dental PPS rates include both a preventive rate and a restorative rate. Multiple services provided in the same clinical area are subject to a threshold rate; however, same-day services provided by different clinical disciplines can still be billed separately.

Three managed care companies are contracted with the District's Medicaid program, and Whitman-Walker Health participates with 2 of them. Because many in the HIV population are exempted from enrollment in managed care, services to that population are provided on a fee-for-service basis through traditional Medicaid channels. The state provides a wraparound payment mechanism to adjust for differences between the managed care reimbursement rate and the PPS rate. Case study informants commented that this is not yet a perfect system, with some payment delays experienced under managed care administration that did not occur when services were directly billed to Medicaid. These processing delays also result in delays in wraparound payments due to the health center, the amounts of which can sometimes be appreciable.

Appendix B

Case Studies of Safety Net Organizations That Integrate Oral, Mental, and Behavioral Health Care Service Delivery

Case study interviews conducted by:
The Oral Health Workforce Research Center
The Center for Health Workforce Studies
University at Albany, School of Public Health
1 University Place, Suite 220
Rensselaer, New York 12144

Contact: Margaret Langelier (mlangelier@albany.edu)

Thank you for agreeing to participate in these case studies of safety net organizations providing integrated oral, mental, and behavioral health services. Your program was selected for participation in this project because of its innovative approach to service delivery for patients with multiple health care needs. This case study will include an onsite visit to the clinic site where services are provided. Researchers will conduct individual or group interviews with as many staff in your organization as possible, including executive/administrative staff, clinical staff, and others from collaborating organizations (eg, community-based service providers), when appropriate. The interviews will be scheduled to accommodate clinical schedules and minimize interruptions to service delivery.

Case Study of Safety Net Organizations That Integrate Oral, Mental, and Behavioral Health Care Service Delivery

This case study is being conducted to inform a review of strategies to integrate oral health, behavioral health, and primary care service delivery to improve access to these services and health outcomes for populations with mental illness or substance use disorders. The case study will be conducted by a team from the Oral Health Workforce Research Center (OHWRC) at the Center for Health Workforce Studies (CHWS) at the University at Albany in New York.

The work is funded by the National Center for Health Workforce Analysis within the US Health Resources and Services Administration (HRSA) under a cooperative agreement for OHWRC. This interview is voluntary and, with consent of participants, will take approximately 30 minutes to 1 hour to complete. If this interview is conducted in a group, it will take approximately 2 hours to complete.

Although the following questions are designed to guide the interview process, only some of the questions may be asked depending on the time allotted for the interview. A report of key findings from the interviews will be compiled when all interviews are complete. The report will provide no information that could be specifically linked to an individual interview participant. Any personal information provided during the interview will remain confidential.

The final report will include a summary chapter describing common themes compiled from all case studies conducted for the project. The project anticipates case studies of at least 6 organizations across the US.

A report appendix will contain specific briefs individually describing each of the organizations participating in the case studies. These briefs will cover topics including organizational sponsorship and financing, clinical and administrative staffing of programs of interest, service delivery models that foster integration of health services, innovative use of health workforce including clinical and nonclinical personnel, and outcomes measures, when available. You will have the opportunity to review the case study brief describing your program prior to its inclusion in the final publication.

Do you have any questions or concerns about this interview before we begin to talk? Please tell us at any point if you wish to or must discontinue this interview.

Questions

The Program and Its Partners

1. Please describe this organization, including its service focus and sources of funding. Include some discussion of its history and organizational evolution.

2. What is your current role in the organization?

3. What types of health/clinical services does this organization offer to patients?

4. Are these clinical services co-located in the same building? Are they located nearby or at a distance from other primary health, oral health, or behavioral health services offered by clinical providers affiliated with this organization?

5. Are these services provided at multiple locations throughout the catchment area?

6. Is this organization certified as a patient-centered medical home or designated as a health home according to state or national health system specifications?

7. Describe the physical configuration of the various health care clinics. Do all patients share a common waiting area, or does each clinical specialty area have separate waiting room space?

The Patient Population

8. Describe any special characteristics of the organization's patient populations. Are there vulnerable patient groups that might especially benefit from health care service integration efforts? What unmet service needs among this population suggested the necessity for integrating services?

9. Are there particular characteristics of your patient population (eg, language or culture) that affect patients' perceptions of the importance or relevance of oral or behavioral health services? If so, how do providers address those challenges?

10. Do behavioral health patients or those with substance use disorders have oral health care needs that are distinct from other population groups?

11. Do any of these special characteristics make delivery of services especially difficult (eg, behavior, dementia, anxiety, etc)?

12. Are there formal referral processes in place for patients in need of more extensive treatment services than the organization can provide? Is patient referral problematic? What are current practices for making intra-organizational referrals? For inter-organizational referrals? For tracking results of referrals?

13. Does the organization have an established protocol for following patients to determine if they receive recommended treatments from other clinical disciplines?

14. Do patients receive periodic follow-up visits for behavioral and/or oral health needs?

15. How is patient privacy, particularly related to mental health diagnoses, protected when referrals are made both internally and/or to external health care provider systems?

16. How are patients made aware of the availability of oral or behavioral health services within the organization?

17. Does the organization use clinical pathways for management of chronic illnesses that include behavioral/mental health or oral health guidance?

18. Please summarize the insurance mix of the patient population. How do health insurance benefits affect service provision (eg, only threshold services can be billed, service pre-approval requirements, etc)?

Providers

19. What clinical activities are linked to efforts at integration of health services (eg, use of depression screening instrument, oral health screenings by primary care physician, questions on health history about last dental exam, etc)?

20. How are providers trained to integrate oral health or behavioral health screening and referral activities into patient encounters?

21. Is there any special knowledge or training that is required of clinical providers in your organization relative to treating a patient with a behavioral health or substance use disorder?

22. Which clinical providers prescribe psychiatric medications for patients? Are primary care providers comfortable with providing more common medications for depression, for instance? Do these clinicians have access to a psychiatrist for guidance on management of psychiatric medications?

23. Where do providers receive training? Are there any continuing education or in-service learning opportunities at this organization relative to the oral health or behavioral or mental health needs of patients?

24. Some organizations embed a behavioral health specialist in all health care delivery teams. Is this strategy used by your organization?

25. How do dentists promote primary care or behavioral health services? How do primary care and mental health providers promote oral health services?

26. Do you use patient navigators or case managers to link patients to services? How do these personnel function in relation to the clinical staff?

27. What are the qualifications to act as a case manager? Do you provide in-house training for this role? What are your educational or experience requirements for these workers? Do these workers receive any special training in oral or behavioral health?

28. How long, on average, do case managers typically work with a patient? Are there any special attributes of your care management processes (eg, team meetings) that allow for shared planning for patients across clinical disciplines?

The Electronic Health Record

29. Does this organization use an electronic health record (EHR)? If so, are oral health services documented within the patient's medical record or is there a separate dental record? Is there an oral health template in the EHR for charting? How are mental health services documented? If there is a separate dental record, does it require a different sign-on than the medical record?

30. Can any clinical provider access the medical histories and medication lists for patients?

31. Is the mental health information for a patient accessible to oral health providers in the organization?

32. Is there a mechanism within the EHR to effect and/or track referrals to other clinical providers within the organization?

Community Partners/Collaborators

33. Does this organization collaborate with any other community-based organizations or programs to provide clinical or social services to common patients? If so, does this collaboration include a mechanism for bidirectional referral? For care coordination?

34. Does your organization and/or the collaborating entity have a staff person who acts as a liaison between the provider entities?

Other Topics of Interest

35. Does this organization or a collaborating agency use a mobile van to provide any services to the patient population? If so, what services are provided? And how frequently?

36. How are the services provided by the program funded (eg, through grant funding, Medicaid reimbursement, third-party billing, etc)? Has the state in which you are located transitioned its Medicaid program to managed care administration? If so, how does this affect efforts at service integration?

37. Are there any scope-of-practice regulations, especially for social workers or dental hygienists, that impact the services delivered or alter the process for delivering services (eg, a requirement for prior dental diagnosis and treatment planning, limited prescriptive authority, or issues with reimbursement for services)?

38. Does the program collect any data to describe outcomes (eg, program participation rates, demographic characteristics of patients served, completion of dental treatment plans, etc)?

39. Is there anything about this program that has not been addressed in this interview that you think is important to this discussion?

If you have any questions about this interview at any time, please contact me (Margaret Langelier) at mlangelier@albany.edu or by phone at (518) 402-0250.

Appendix C

LITERATURE REVIEW

This project sought to identify critical components for integration of services within FQHCs in order to help other providers in their efforts at integration. The protocol for this literature review included an extensive search for available research on the topic; the PubMed search engine was used almost exclusively. The search terms included the following combinations: oral health and marginalized groups, oral health and primary care, mental health and primary care, and integration and FQHC and dental. Researchers encountered various articles by reviewing citations/references of articles in review. In total, 14 relevant documents were found, 11 of which were peer-reviewed journal articles. The remaining documents included a summary report of a 4-year behavioral integration project and 2 additional reports published by the National Association of Community Health Centers and the Network for Oral Health Access.

Various documents were used to provide background and confirm the connection between poor oral health and poor behavioral health. Kisely (2016)[12] recognizes the associative nature of poor oral health and poor mental health. The article acknowledges that half of all dental patients experience anxiety. Conversely, people with mental illness, particularly severe mental illness, are at greater risk of oral health problems. Morgan et al (2012)[13] confirm this association by reviewing 12 oral health determinants within their Boston study population. They found a high burden of dental disease among those living with intellectual and developmental disabilities. Heaton et al (2013),[14] similarly, found a high burden and unmet need in a separate study population. Nguyen et al (2018)[15] found an association between dental, general, and mental health status in their sample. In fact, among patients reporting acute dental need, 54% reported the presence of a mental illness or receipt of mental health treatment, compared with 38% of patients without an acute dental need. Finally, Allareddy et al (2014)[16] analyzed the utilization of hospitals as dental service providers by those with mental health conditions. They found this trend to be most prevalent among patients with graver illnesses and among older patients.

Many documents recognized success in integration. Brya and Linkins, writing for Desert Vista Consulting, LLC (2015),[17] found that among the 4 partners in a 4-year program to advance integrated behavioral health in select California locations, goal setting was a common factor among successful integration strategies. In addition to these strategies, the report also highlights several themes to be addressed by prospective integration sites, including enhanced quality improvement and quality assurance, increased provider productivity, neutral financial impact, reduced patient complaints, improved provider satisfaction and retention, increased competitiveness and success in provider recruitment, and promotion of clinic mission (responsiveness to community needs). Another study by Haddad et al (2015)[18] focused on specific health outcomes in successfully integrated FQHCs. The authors found that when buprenorphine was prescribed by primary care physicians rather than psychiatric specialists, patients

reported longer maintenance of buprenorphine programs. Jones et al (2012)[19] found in their rural Oregon study that among those living with HIV/AIDS, integrated health services (via behavioral health case managers and dental clinics) were successful in increasing access to oral health care. Stevens and colleagues (2010)[20] conducted an audit of an oral health care integration initiative within an inpatient psychiatric population and found an overall improvement in the perception of oral health among patients following integration.

Other articles identify specific integration strategies being used by health care providers. Lardiere and colleagues, writing for the National Association of Community Health Centers (2010),[21] recognize several important components of integrated care, including services that are co-located onsite, good communication and coordination among behavioral health and primary care providers, use of behavioral health treatment plans, shared problem lists and medication and laboratory results, and joint decision making by behavioral health and medical providers about patient treatment. In another report, the National Network for Oral Health Access (2012)[22] examined barriers to success. The most frequently cited barriers were lack of infrastructure for co-location and lack of integration of electronic health records.

DiGioacchino DeBate et al (2006)[23] reviewed the readiness of dental hygiene providers to integrate services. The study found that only 51.6% of respondents considered 5 criterion-specific behaviors (including, for example, assessing dental patients for oral cues of disordered eating) to be easy to complete. Staff readiness for integration was determined to be low.

Zeidler Schreiter and colleagues (2013)[24] discuss the psychiatric consultation service model for integrated care, which is proven to be effective in increasing access to care; however, they do not investigate the effectiveness of routine collaboration between the health providers. Finally, a study by Manoleas (2008)[25] analyzes integration of behavioral health care with primary health care specifically for Latino patients. This study discusses the importance of considering subgroups within the larger marginalized group in order to best implement integration of health care services.

Major limitations exist within the current research, including a limited survey sample that resulted in a nonrepresentative sample,[22] recall bias,[16] and resulting in incomplete data (eg, not being able to determine the severity of mental illness),[14,16] and nongeneralizability.[13]

Haddad et al (2015)[18] noted specific limitations: First, the study's observational and retrospective nature does not determine causality or rule out the presence of endogeneity and selection effects; second, the composite quality health care indicator (QHI) score, though adapted from a similar study of HIV-infected patients, has not been validated for primary care patients. Last, Stevens et al's audit[20] suffers from potential limitations due to the way the data were sourced, with mental health workers conducting the screening as opposed to dental staff performing physical exams.

Despite these limitations, the research suggests that integrated health care services improve access to health care and improve health outcomes for patient populations. More research is needed to determine the lasting impact of integrated health care on both patients and providers.

References

REFERENCES

1. Doyle PE, Longley AJ, Brown PS. Dental–mental connection. *Dimens Dent Hyg.* 2012;10(11):19-20, 22.

2. Kisely S, Baghaie H, Lalloo R, Siskind D, Johnson NW. A systematic review and meta-analysis of the association between poor oral health and severe mental illness. *Psychosom Med*. 2015;77(1):83-92.

3. Naorungroj S, Slade GD, Beck JD, et al. Cognitive decline and oral health in middle-aged adults in the ARIC study. *J Dent Res*. 2013;92(9):795-801.

4. Wright WA, Gorman JM, Odorzynski M, Peterson MJ, Clayton C. Integrated pharmacies at community mental health centers: medication adherence and outcomes. *J Manag Care Spec Pharm.* 2016;22(11): 1330-1336.

5. 2017 Health Center profile: Health Center Program Grantee profiles. Health Resources and Services Administration website. https://bphc.hrsa.gov/uds/datacenter.aspx?q=d. Accessed November 6, 2018.

6. Valentijn PP, Schepman SM, Opheij W, Bruijnzeels MA. Understanding integrated care: a comprehensive conceptual framework based on the integrative functions of primary care. *Int J Integr Care.* 2013;13:e010.

7. Heath B, Wise Romero P, Reynolds K. *A Review and Proposed Standard Framework for Levels of Integrated Healthcare.* Washington, DC: SAMHSA-HRSA Center for Integrated Health Solutions; March 2013. https://www.integration.samhsa.gov/integrated-care-models/A_Standard_Framework_for_ Levels_of_Integrated_Healthcare.pdf. Accessed November 6, 2018.

8. Doherty WJ, McDaniel SH, Baird MA. Five levels of primary care/behavioral healthcare collaboration. *Behav Healthc Tomorrow*. 1996;5(5):25-27.

9. What is TIC? Trauma Informed Care Project website. http://www.traumainformedcareproject.org. Accessed November 6, 2018.

10. Canadian Paediatric Society. Harm reduction: an approach to reducing risky health behaviours in adolescents. *Paediatr Child Health*. 2008;13(1):53-56.

11. Albuquerque Health Care for the Homeless. *Effects of Homelessness* fundraising brochure.

12. Kisely S. No mental health without oral health. *Can J Psychiatry*. 2016;61(5):277-282.

13. Morgan JP, Minihan PM, Stark PC, et al. The oral health status of 4,732 adults with intellectual and developmental disabilities. *J Am Dent Assoc.* 2012;143(8):838-846.

14. Heaton LJ, Mancl LA, Grembowski D, Armfield JM, Milgrom P. Unmet dental need in community-dwelling adults with mental illness: results from the 2007 Medical Expenditure Panel Survey. *J Am Dent Assoc.* 2013;144(3):e16-e23.

15. Nguyen VH, Lin SC, Cappelli DP, Nair S. The association between dental, general, and mental health status among underserved and vulnerable populations served at health centers in the US. *J Public Health Dent.* 2018;78(1):41-48.

16. Allareddy V, Lee MK, Da Silva JD, Rampa S, Allareddy V, Nalliah RP. Prevalence estimates and outcomes of mental health conditions in those hospitalized owing to dental conditions. *Oral Surg Oral Med Oral Pathol Oral Radiol.* 2014;118(3):300-308.

17. Brya JJ, Linkins KW. *Integrated Behavioral Health Program Case Studies: Final Report.* Scottsdale, AZ: Desert Vista Consulting, LLC; March 2010. http://www.ibhpartners.org/wp-content/uploads/2015/12/IBHPCaseStudiesFINAL.pdf. Accessed November 6, 2018.

18. Haddad MS, Zelenev A, Altice FL. Buprenorphine maintenance treatment retention improves nationally recommended preventive primary care screenings when integrated into urban federally qualified health centers. *J Urban Health*. 2015;92(1):193-213.

19. Jones J, Mofidi M, Bednarsh H, Gambrell A, Tobias CR. Increasing access to oral health care for people living with HIV/AIDS in rural Oregon. *Public Health Rep*. 2012;127(suppl 2):65-72.

20. Stevens T, Spoors J, Hale R, Bembridge H. Perceived oral health needs in psychiatric in-patients: impact of a dedicated dental clinic. *The Psychiatrist*. 2010;34(12):518-521.

21. Lardiere MR, Jones E, Perez M. *NACHC 2010 Assessment of Behavioral Health Services in Federally Qualified Health Centers.* Bethesda, MD: National Association of Community Health Centers; January 2011. http://www.nachc.org/wp-content/uploads/2015/06/BHReport.pdf. Accessed November 6, 2018.

22. National Network for Oral Health Access. *Oral Health and the Patient-Centered Health Home: Action Guide*. Denver, CO: National Network for Oral Health Access; 2012. http://www.nnoha.org/nnoha-content/uploads/2013/09/PCHHActionGuide02.12_final.pdf. Accessed November 6, 2018.

23. DiGioacchino DeBate R, Plichta SB, Tedesco LA, Kerschbaum WE. Integration of oral health care and mental health services: dental hygienists' readiness and capacity for secondary prevention of eating disorders. *J Behav Health Serv Res.* 2006;33(1):113-125.

24. Zeidler Schreiter EA, Pandhi N, Fondow MDM, et al. Consulting psychiatry within an integrated primary care model. *J Health Care Poor Underserved.* 2013;24(4):1522-1530.

25. Manoleas P. Integrated primary care and behavioral health services for Latinos: a blueprint and research agenda. *Soc Work Health Care*. 2008;47(4);438-454.

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